

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE August 12, 1958

Operator El Paso Natural Gas		Lease Huerfano 99 (D)	
Location 990N, 1650W; 2-26-10		County San Juan	State New Mexico
Formation Dakota		Pool Undesignated	
Casing: Diameter 5-1/2	Set At: Feet 6933	Tubing: Diameter 2"	Set At: Feet 6857
Pay Zone: From 6816	To 6908	Total Depth: 6936 c/o 6910	Shut-in 8/5/58
Stimulation Method Sand Oil Fra.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75	Choke Constant: C 12.365		5-1/2 liner 5573 - 6933	
Shut-In Pressure, Casing, PSIG 1269 (G)	- 12 - PSIA 1281	Days Shut-In 7	Shut-In Pressure, Tubing, PSIG 1631 (D)	- 12 - PSIA 1643
Flowing Pressure: P, PSIG 192	- 12 - PSIA 204		Working Pressure: Pw, PSIG Calc.	- 12 - PSIA 430
Temperature: T, F 73	n = .75		Fpv (From Tables) 1.023	Gravity .720

Initial SIPT (G) = 1245 psig

Packer at 6180

Final SIPC (G) = 1275 psig

CHOKE VOLUME = $Q \cdot C \times P_1 \times F_1 \times F_g \times F_{pv}$

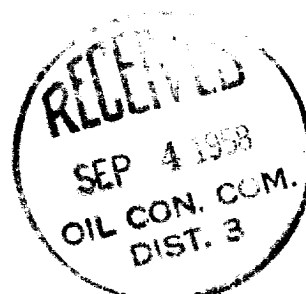
$$Q = 12.365 \times 204 \times .9877 \times .9129 \times 1.023 = 2327 \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{2699449}{2514549} \right)^n$$

$$(1.0735)^{.75} (2327) = (1.0547) (2327)$$

$$A_{of} = 2454 \text{ MCF/D}$$

TESTED BY Frank ClarkWITNESSED BY Fred CookChecked By R. R. Davis

Lewis D. Galloway
L. D. Galloway