

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE JULY 3, 1972

Operator El Paso Natural Gas Company		Lease Sunray E No. 4	
Location 1500/N. 1840/E, Sec. 9, T 30N, R 10W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Undesignated	
Casing: Diameter 2.875	Set At: Feet 3144	Tubing: Diameter No Tubing	Set At: Feet
Pay Zone: From 3082	To 3110	Total Depth: 3144	Shut In 6-23-72
Stimulation Method S.W.F.		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches 0.750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 915	+ 12 = PSIA 927	Days Shut-In 10	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 88	+ 12 = PSIA 100		Working Pressure: Pw PSIG Calculated	+ 12 = PSIA	
Temperature: T = 59 °F	n = 1.0010		Fpv (From Tables) 1.007	Gravity .635	Fg = .9721

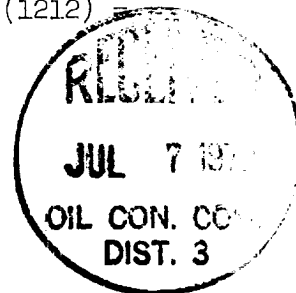
$$\text{CHOKE VOLUME} = Q = C \times P_1 \times F_1 \times F_g \times F_{pv}$$

$$Q = (12.365)(100)(1.0010)(.9721)(1.007) = \underline{1212} \text{ MCF/D}$$

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

$$Aof = \left(\frac{859329}{843200} \right)^n = (1.0191)^{.85} (1212) = (1.0162)(1212)$$

$$Aof = \underline{1231} \text{ MCF/D}$$

TESTED BY D. Norton

WITNESSED BY _____

J. A. Jones
J. A. Jones