

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 6, 1975

Operator El Paso Natural Gas Company		Lease San Juan 28-7 Unit #211	
Location 1580/N, 825/W, Sec 22, T 27 N, R 7 W		County Rio Arriba	State New Mexico
Formation Chacra		Pool Undes.	
Casing: Diameter 2.875	Set At: Feet 4176'	Tubing: Diameter No tubing	Set At: Feet ---
Pay Zone: From 3968	To 3999	Total Depth: PBT 4176' 4166	Shut In 7-17-75
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 1032	+ 12 = PSIA 1044	Days Shut-In 20	Shut-In Pressure, Tubing PSIG No tubing	+ 12 = PSIA ---	
Flowing Pressure: P PSIG 34	+ 12 = PSIA 46		Working Pressure: Pw PSIG Calculated	+ 12 = PSIA 61	
Temperature: T = 63 °F	n = Ft = .9971		Fpv (From Tables) 1.004	Gravity .665	Fg = .9498

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

$$Q = 12.365(46)(.9971)(.9498)(1.004) = 541 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1089936}{1086215} \right)^n = 541(1.0034)^{.75} = 541(1.0026)$$

$$Aof = 542 \text{ MCF/D}$$

Note: The well unloaded a medium fog of water after the first 6 min of test. During the test 86.96 MCF of gas was vented to atmosphere.

TESTED BY Norton

WITNESSED BY

Dary W. Bink
Well Test Engineer

