

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE September 15, 1977

Operator El Paso Natural Gas Company		Lease Roclofs #3-A	
Location NW 15-29-08		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco Ext.	
Casing: Diameter 4 1/2	Set At: Feet 5595'	Tubing: Diameter 1 1/4	Set At: Feet 3038'
Pay Zone: From 3008	To 3052	Total Depth: 3038	Shut In 8-26-77
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 985	+ 12 = PSIA 997	Days Shut-In 20	Shut-In Pressure, Tubing PSIG 981	+ 12 = PSIA 995	
Flowing Pressure: P PSIG 185	+ 12 = PSIA 197		Working Pressure: P _w PSIG 190	+ 12 = PSIA 202	
Temperature: T = 61 °F	F _t = .9990	n = .85	F _{pv} (From Tables) 1.020	Gravity .680	F _g = .9393

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

$$Q = 12.365(197)(.9990)(.9393)(1.020) = \underline{2331} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{994009}{953205} \right)^n = 2331(1.0428)^{.85} = 2331(1.0363)$$

$$Aof = \underline{2416} \text{ MCF/D}$$

Note: Well vented 449 MCF of gas during test.

TESTED BY John Easley

WITNESSED BY _____


Well Test Engineer