

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE August 22, 1977

Operator El Paso Natural Gas Company		Lease Barnes #6-A	
Location SE 23-32-11		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 4 1/2"	Set At: Feet 5952'	Tubing: Diameter 1 1/4"	Set At: Feet 3281'
Pay Zone: From 3204'	To 3244'	Total Depth: 5952'	Shut In 8-7-77
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 793	+ 12 = PSIA 805	Days Shut-In 15	Shut-In Pressure, Tubing PSIG 193	+ 12 = PSIA 205	
Flowing Pressure: P PSIG 97	+ 12 = PSIA 109		Working Pressure: P _w PSIG 100	+ 12 = PSIA 112	
Temperature: T = 62 °F	n = .85		F _{pv} (From Tables) 1.009	Gravity .650	F _g = .9608

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

$$Q = 12.365(109)(.9981)(.9608)(1.009) = \underline{1304} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{648025}{635481} \right)^n = 1304 (1.0197)^{.85} = 1304(1.0168)$$

$$Aof = \underline{1327} \text{ MCF/D}$$

Note: Well vented 203 MCF of dry gas to atmosphere during test.

TESTED BY D. Wright

WITNESSED BY _____

C. R. Wagner
Well Test Engineer

