

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 13, 1975

Operator El Paso Natural Gas Company		Lease Howell F #2 (PC)	
Location 1760/S, 1450/E, Sec. 1, T27N, R8W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool So. Blanco	
Casing: Diameter 2.875	Set At: Feet 3496'	Tubing: Diameter No Tubing	Set At: Feet --
Pay Zone: From 3369'	To 3424'	Total Depth: PBD 3496' 3485'	Shut In 7-22-75
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 815	+ 12 = PSIA 827	Days Shut-In 7	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA ---	
Flowing Pressure: P PSIG 67	+ 12 = PSIA 79		Working Pressure: P _w PSIG Calculated	+ 12 = PSIA 101	
Temperature: T = 65 °F	n = F _t = .9952		F _p (From Tables) 1.007	Gravity .639	F _g = .9690

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

$$Q = (12.365) (79) (.9952) (.9690) (1.007) = \underline{\quad 949 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{683929}{673728} \right)^n = (949) (1.0151)^{.85} = (949) (1.0128)$$

$$Aof = \underline{\quad 961 \quad} \text{ MCF/D}$$

Note: Well blew 151.97 MCF dry gas to the atmosphere during the test.

TESTED BY Johnson

WITNESSED BY _____

Charles W. Dein
Well Test Engineer

