

EL PASO NATURAL GAS COMPANY OPEN FLOW TEST DATA

DATE October 4, 1977

Operator El Paso Natural Gas Company		Lease Roelofs A #3-A	
Location Unit J Sec. 9-T29N-R8W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco Ext.	
Casing: Diameter 7.000	Set At: Feet 3436'	Tubing: Diameter 1.660	Set At: Feet 3160'
Pay Zone: From 3158	To 3182'	Total Depth: 3436'	Shut In 9-11-77
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 1065	+ 12 = PSIA 1077	Days Shut-In 23	Shut-In Pressure, Tubing PSIG 1065	+ 12 = PSIA 1077	
Flowing Pressure: P PSIG 147	+ 12 = PSIA 159		Working Pressure: P _w PSIG 153	+ 12 = PSIA 165	
Temperature: T = 60 °F	n = 1.000		F _{pv} (From Tables) 1.014	Gravity .650	F _g = .9608

CHOKE VOLUME = Q = C x P_i x F_t x F_g x F_{pv}

$$Q = 12,365 (159) (1.000) (.9608) (1.014) = \underline{1915} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1159929}{1132704} \right)^n = 1915 (1.0240)^{.85} = 1915 (1.0204)$$

$$Aof = \underline{1954} \text{ MCF/D}$$

Note: Well blew dry gas throughout test.
Well vented 349 MCF of gas to atmosphere.

TESTED BY R. Headrick

WITNESSED BY _____

C. R. Wagner
Well Test Engineer

