

OPEN FLOW TEST DATA

DATE: September 13, 1977

Operator El Paso Natural Gas Company		Lease Storey A #1-A	
Location NW 35-32-11		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco Ext.	
Casing: Diameter 4 1/2	Set At: Feet 5749'	Tubing: Diameter 1 1/4	Set At: Feet 3173'
Pay Zone: From 3108	To 3158	Total Depth: 3173'	Shut In 8-50-77
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches 0.750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 792	+ 12 = PSIA 804	Days Shut-In 14	Shut-In Pressure, Tubing PSIG 792	+ 12 = PSIA 804	
Flowing Pressure: P PSIG 133	+ 12 = PSIA 145		Working Pressure: P _w PSIG 620	+ 12 = PSIA 632	
Temperature: T = 55 °F	n = 1.048		F _{pv} (From Tables) 1.013	Gravity 0.650	F _g = 0.9608

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

$$Q = (12.265) (145) (1.0048) (0.9608) (1.013) = 1753 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{646416}{246992} \right)^n = (1753) (2.6172)^{.85} = (1753) (2.2655)$$

$$Aof = 3971 \text{ MCF/D}$$

Note: The well blew dry gas throughout the test and the well produced 233 MCF of gas during the test.

TESTED BY Dave Wright

WITNESSED BY _____

H.E. 12274/11/77
Well Test Engineer