

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE August 11, 1965.

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 97.	
Location 1000'S, 1000'W, Section 31, T-27-N, R-5-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7628	Tubing: Diameter 2.375	Set At: Feet 7533
Pay Zone: From 7316	To 7537	Total Depth: 7628	Shut In 8-1-65
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, 2491 PSIG	+ 12 = PSIA 2503	Days Shut-In 10	Shut-In Pressure, Tubing 1105 PSIG	+ 12 = PSIA 1117	
Flowing Pressure: P 205 PSIG	+ 12 = PSIA 217		Working Pressure: P <sub>w</sub> 775 PSIG	+ 12 = PSIA 787	
Temperature: T = 78 °F	F <sub>t</sub> = .9831	n = .75	F <sub>pv</sub> (From Tables) 1.020	Gravity .670	F <sub>g</sub> = .9463

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

$$Q = (12.365) (217) (.9831) (.9463) (1.020) = \underline{2,546} \text{ MCF/D}$$

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

$$A_{of} = \left( \frac{6,265,009}{5,645,640} \right)^n = (1.1097)^{.75} (2,546) = (1.0812) (2,546) =$$

$$A_{of} = \underline{2,753} \text{ MCF/D}$$

NOTE: Well blew down 3 minutes after opening. 5 minutes later started unloading a solid stream of water and a small amount of distillate. This lasted for 15 minutes, then throughout remainder of test well blew and heavy black water.

TESTED BY Dan Roberts.  
CHECKED BY W. D. Dawson.

RECEIVED  
AUG 18 1965  
OIL CON. COM.  
Lewis D. Galloway