

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE April 27, 1973

Operator El Paso Natural Gas Company		Lease Grambling "C" No. 10	
Location 925'S, 810'W, Section 12, T30N, R10W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco Ext.	
Casing: Diameter 5.500	Set At: Feet 3434	Tubing: Diameter 2-3/8"	Set At: Feet 3343
Pay Zone: From 3266	To 3330	Total Depth: 3434	Shut In 4-20-73
Stimulation Method SWF		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 940	+ 12 = PSIA 952	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 795	+ 12 = PSIA 807	
Flowing Pressure: P PSIG 80	+ 12 = PSIA 92		Working Pressure: P _w PSIG 209	+ 12 = PSIA 221	
Temperature: T = 64 °F	F _t = .9962	n = .85	F _p (From Tables) 1.007	Gravity .635 F _g = .9721	

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

$$Q = 12.365 \times 92 \times .9962 \times .9721 \times 1.007 = \underline{1109} \text{ MCF/D}$$

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

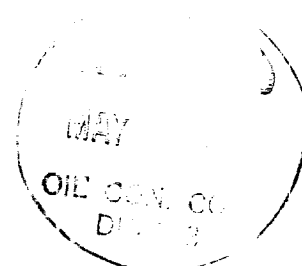
NOTE: After 5 minutes well unloaded column of water 100' high for 2 minutes then produced light spray of water throughout rest of test.

$$Aof = Q \left(\frac{906304}{857463} \right)^n = (1109)(1.0570)^{.85} = (1109)(1.0482)$$

$$Aof = \underline{1162} \text{ MCF/D}$$

TESTED BY Roger Hardy

WITNESSED BY _____



William D. Welch
William D. Welch, Well Test Engineer