

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE September 13, 1967

Operator El Paso Natural Gas Company		Lease Grambling No. 3 (OWO)	
Location 990'S, 1650'W, Sec. 22, T-29-W, R-9-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 4641	Tubing: Diameter 2.375	Set At: Feet 4521
Pay Zone: From 3814	To 4574	Total Depth: 4641	Shut In 9-6-67
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, PSIG 772	+ 12 = PSIA 784	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 768	+ 12 = PSIA 780	
Flowing Pressure: P PSIG 213	+ 12 = PSIA 225		Working Pressure: Pw PSIG 559	+ 12 = PSIA 571	
Temperature: T = 72 °F	Ft = .9837	n = .75	Fpv (From Tables) 1.020	Gravity .640	Fg = .9682

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

$$Q = (12.365)(225)(.9837)(.9682)(1.020) = \underline{2716} \text{ MCF/D}$$

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

$$Aof = \left(\frac{614656}{288615} \right)^n = (2716)(2.1296)^{.75} = (2716)(1.7629)$$

NOTE: The well produced clear gas for the entire test period.

$$Aof = \underline{4788} \text{ MCF/D}$$

TESTED BY J. B. Goodwin
 CHECKED
 WITNESSED BY A. J. Loleit

RECEIVED
 SEP 16 1967
 OIL CON. COM.
 DIST. 3
H. L. Kendrick
 H. L. Kendrick