

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE May 20, 1968

Operator El Paso Natural Gas Company		Lease Roelofs A No. 1 (OWHO)	
Location 1650'S, 990'W, Sec. 10, T-29-N, R-8-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5439	Tubing: Diameter 2.375	Set At: Feet 5230
Pay Zone: From 4682	To 5374	Total Depth: 5443	Shut In 5-13-68
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 815	+ 12 = PSIA 827	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 815	+ 12 = PSIA 827	
Flowing Pressure: P PSIG 235	+ 12 = PSIA 247		Working Pressure: Pw PSIG 689	+ 12 = PSIA 701	
Temperature: T = 67 °F	n = Ft = .9933		Fpv (From Tables) 1.023	Gravity .650	Fg = .9608

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

$$Q = (12.365)(.247)(.9933)(.9608)(1.023) = 2982 \text{ MCF/D}$$

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

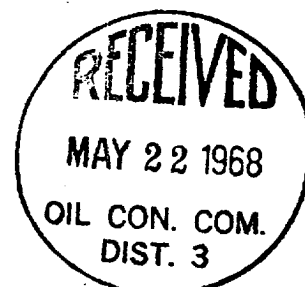
$$Aof = \left( \frac{683929}{192528} \right)^n = (2982)(3.5523)^{.75} = (2982)(2.5875)$$

NOTE: The well produced a very light fog of H<sub>2</sub>O and distillate throughout the test period.

$$Aof = 7716 \text{ MCF/D}$$

TESTED BY CRW

CHECKED BY T. B. Grant



H. L. Kendrick