

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE March 15, 1966

Operator El Paso Natural Gas Company		Lease Harrington No. 1 (OWWO)	
Location 990'S, 800'W, Section 31, T-27-N, R-7-W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool South Blanco	
Casing: Diameter 2.875	Set At: Feet 2225	Tubing: Diameter No Tubing	Set At: Feet -
Pay Zone: From 2114	To 2158	Total Depth: 2225	Shut In 3-08-66
Stimulation Method Sand Water Frac		Flow Through Casing Calc.	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 352	+ 12 = PSIA 364	Days Shut-In 7	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 104	+ 12 = PSIA 116	Working Pressure: Pw PSIG Calc.	+ 12 = PSIA 138		
Temperature: T = 62 °F	F _t = .9981	n = .85	F _{pv} (From Tables) 1.010	Gravity .655	F _g = .9571

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

$$Q = (12.365) (116) (.9981) (.9571) (1.010) = \underline{1384} \text{ MCF/D}$$

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

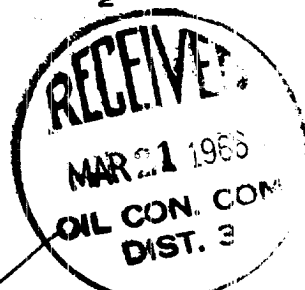
$$Aof = \left(\frac{132,496}{113,452} \right)^n = (1.1678)^{.85} (1384) = (1.1410) (1384)$$

NOTE: Blew Medium Fog H₂O entire test.

$$Aof = \underline{1579} \text{ MCF/D}$$

TESTED BY Jesse B. GoodwinCHECKED BY Tom B. Grant

WITNESSED BY



J. L. Kendrick
J. L. Kendrick