

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE February 2, 1965

Operator El Paso Natural Gas Company		Lease San Juan Unit 32-9 No. 20 (OWWO)	
Location 990'N, 990'E, Section 18, T-31-N, R-9-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5873	Tubing: Diameter 2.375	Set At: Feet 21
Pay Zone: From 5300	To 5830	Total Depth: 5873	Shut In 12-17-64
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches 0.75		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 902	+ 12 = PSIA 914	Days Shut-In 47	Shut-In Pressure, Tubing PSIG 901	+ 12 = PSIA 913	
Flowing Pressure: P PSIG 313	+ 12 = PSIA 325		Working Pressure: P _w PSIG 706	+ 12 = PSIA 718	
Temperature: T = 63 °F F _t = .9971		n = .75	F _{pv} (From Tables) 1.014	Gravity .660	F _g = .9535

2.750" orifice plate in 4" meter run. Static = 136 psig. Differential = 6.35 roots.

CHOKE VOLUME = Q = C × P_i × F_i × F_g × F_{pv}

Volume calculated by orifice meter

$$Q = (167.76)(3.85)(6.35)(.9971)(.9535)(1.014) = \underline{3954} \text{ MCF/D}$$

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

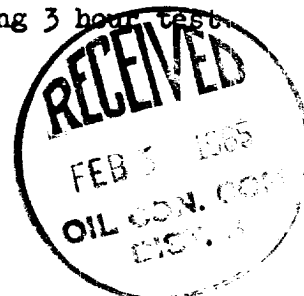
$$Aof = \left(\frac{835,396}{319,872} \right)^n = (3954) (2.6116)^{.75} = (3954) (2.0544)$$

$$Aof = \underline{8123} \text{ MCF/D}$$

NOTE: Well made 4 barrels oil during 3 hour test

TESTED BY C. R. Wagner

WITNESSED BY Ron Headrick



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