

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE May 28, 1968

Operator El Paso Natural Gas Company		Lease Vandewart No. 1 (MV) (OWWO)	
Location SW Sec. 12, T-29-N, R-8-W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5472	Tubing: Diameter 2" non EUE 467 2.375	Set At: Feet 4726 TD = 5193
Pay Zone: From 4744	To 5429	Total Depth: 5472	Shut In 5-21-68
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 879	+ 12 = PSIA 891	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 873	+ 12 = PSIA 885	
Flowing Pressure: P _s PSIG 255	+ 12 = PSIA 267		Working Pressure: P _w PSIG 811	+ 12 = PSIA 823	
Temperature: T = 68 °F	F _t = .9924	n = .75	F _{pv} (From Tables) 1.030	Gravity .706	F _g = .9225

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

$$Q = (12.365)(267)(.9924)(.9225)(1.030) = \underline{3113} \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{793881}{116552} \right)^n = (3113)(6.8113)^{.75} = (3113)(4.2162)$$

NOTE: Liquid came to surface after 5 minutes and continued to produce as a light fog once each 30 seconds for the 3 hour test period.

$$A_{of} = \underline{13,125} \text{ MCF/D}$$

TESTED BY G. A. LippmanChecked
WITNESSED BY T. G. Grant

H. L. Kendrick
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