

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE 9-8-66

Operator El Paso Natural Gas Company		Lease San Juan 28-6 Unit No. 121	
Location 1700'N, 1550'E, Sec. 15, T-28-N, R-6-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7916	Tubing: Diameter 2.375	Set At: Feet 7812
Pay Zone: From 7763	To 7856	Total Depth: 7916	Shut In 9-1-66
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 2532	+ 12 = PSIA 2544	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 2510	+ 12 = PSIA 2522	
Flowing Pressure: P PSIG 304	+ 12 = PSIA 316		Working Pressure: P _w PSIG 1030	+ 12 = PSIA 1042	
Temperature: T = 74 °F	F _t = .9868	n = .750	F _{pv} (From Tables) 1.027	Gravity .634	F _g = .9759

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

$$Q = (12.365)(316)(.9868)(.9759)(1.027) = \underline{3864} \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{6471936}{5386172} \right)^n = (3864)(1.2015)^{.75} = (3864)(1.2015)^{.75}$$

$$A_{of} = \underline{4434} \text{ MCF/D}$$

NOTE: Heavy slug of oil to surface in 2 minutes.
Medium fog distillate for 30 min. diminishing
to light fog for remainder of test.

TESTED BY D. NortonCHECKED BY T. B. GrantCALCULATED BY H. E. McNally

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