

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE November 15, 1960

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 49 (MV)	
Location 1090'N, 800'E, 18-27N-5W		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 7-5/8"	Set At: Feet 3549	Tubing: Diameter 2"	Set At: Feet 5627
Pay Zone: From 5480	To 5608	Total Depth: 5715 c/o 5672	Shut In 11-6-60
Stimulation Method Sand/Water Frec.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365		5-1/2" Liner from 3490 to 5710 Guiberson "Shorty" Pkr. at 3575'	
Shut-In Pressure, Casing, (PC) 1060	PSIG	+ 12 = PSIA 1072	Days Shut-In 9	Shut-In Pressure, Tubing (MV) 1093	PSIG + 12 = PSIA 1097
Flowing Pressure: P 226	PSIG	+ 12 = PSIA 238		Working Pressure: Pw (Calc) 478	PSIG + 12 = PSIA 478
Temperature: T 61 °F	Ft. .9990	n = 0.750		Fpv (From Tables) 1.024	Gravity 0.679 Fg = .9427

Initial SIPT (P) = 1060 psig

Final SIPC (P) = 1062 psig

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

$$Q = (12.365)(238)(.9990)(.9427)(1.024) = \underline{2838} \text{ MCF/D}$$

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

$$Aof = \left(\frac{1,203,409}{974,925} \right)^n = (1.2343)^{.75} (2838) = (1.1710)(2838)$$

$$Aof = \underline{3323} \text{ MCF/D}$$

TESTED BY R. F. Headrick

WITNESSED BY _____

Checked by W. D. Dawson

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