

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE 8-31-66

Operator El Paso Natural Gas Company		Lease Ludwick No. 9 (PC) (OWWO)	
Location 1090'S, 939'W, Sec. 29, T-30-N, R-10-W		County San Juan	State New Mexico
Formation Pictured Cliff		Pool Aztec	
Casing: Diameter 7.625	Set At: Feet 4460	Tubing: Diameter No Tubing	Set At: Feet -----
Pay Zone: From 2482	To 2509	Total Depth: 5107	Shut In 8-15-66
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750	Choke Constant: C 12.365		Baker Model "D" Packer set at 2567	
Shut-In Pressure, Casing, PSIG 335 (PC)	+ 12 = PSIA 347	Days Shut-In 7	Shut-In Pressure, Tubing, PSIG 335 (MV)	+ 12 = PSIA 347 (MV)
Flowing Pressure: P, PSIG 143	+ 12 = PSIA 155		Working Pressure: P _w , PSIG Calc	+ 12 = PSIA 155
Temperature: T = 63 °F	n = .85		F _{pv} (From Tables) 1.015	Gravity .675
F _t = .9971				F _g = .9427

ISIPT (MV) = 335 psig

PSIPT (MV) = 336 psig

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

$$Q = (12.365)(155)(.9971)(.9427)(1.015) = 1829 \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{120409}{96384} \right)^n = (1829)(1.2492)^{.85} = (1829)(1.2082)$$

$$A_{of} = 2210 \text{ MCF/D}$$



TESTED BY J. B. Goodwin

CHECKED
WITNESSED BY T. B. Grant

CALCULATED BY H. E. McAnally

H. L. Kendrick