

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE November 8, 1967

Operator El Paso Natural Gas Company		Lease San Juan 28-7 Unit No. 145	
Location 900'S, 1600'W, Sec. 10, T-27-N, R-7-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7680	Tubing: Diameter 2.375	Set At: Feet 7406
Pay Zone: From 7446	To 7624	Total Depth: 7680	Shut In 10-31-67
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 2245	+ 12 = PSIA 2257	Days Shut-In 8	Shut-In Pressure, Tubing PSIG 2493	+ 12 = PSIA 2505	
Flowing Pressure: P PSIG 281	+ 12 = PSIA 293		Working Pressure: P _w PSIG 1020	+ 12 = PSIA 1032	
Temperature: T = 85 °F	n = F _t = .9768		F _{pv} (From Tables) 1.026	Gravity .670	F _g = .9463

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

$$Q = (12.365)(293)(.9768)(.9463)(1.026) = 3436 \text{ MCF/D}$$

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

$$Aof = \left(\frac{6275025}{5210001} \right)^n = (3436)(1.2044)^{.75} = (3436)(1.1497)$$

$$Aof = 3950 \text{ MCF/D}$$

NOTE: The well unloaded a heavy fog during the first four minutes of the test period then unloaded a heavy spray of distillate, water, drilling mud and frac sand for 15 min. The well blew a medium fog of distillate and water for remainder of test.



TESTED BY Norton

CHECKED
WITNESSED BY T. B. Grant

CALCULATED BY A. J. Loleit

H. L. Kendrick
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