

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 5-28-71

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit No. 129	
Location 1550'N, 810'W, S 26, T27N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7798	Tubing: Diameter 1.990	Set At: Feet 7726
Pay Zone: From 7474	To 7732	Total Depth: 7798	Shut In 5-20-71
Stimulation Method S W F		Flow Through Casing XXX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2557	+ 12 = PSIA 2569	Days Shut-In	Shut-In Pressure, Tubing PSIG 2313	+ 12 = PSIA 2325	
Flowing Pressure: P PSIG 287	+ 12 = PSIA 299		Working Pressure: P _w PSIG 551	+ 12 = PSIA 563	
Temperature: T = 65 °F	n = Ft = .9952		F _{pv} (From Tables) 1.028	Gravity .655	F _g = .9571

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

$$Q = 12.365 \times 299 \times .9952 \times .9571 \times 1.028 = 3620 \text{ MCF/D}$$

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

Note: The well produced a light fog of distillate and water for the first 12 min. and then produced a very light fog of distillate and water throughout the remainder of the test.

$$Aof = \left(\frac{6599761}{6282792} \right)^n = (362)(1.0504)^{.75} = (3620)(1.0376)$$

$$Aof = 3756 \text{ MCF/D}$$

TESTED BY T. D. Norton

WITNESSED BY



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