

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

Well Completion

DATE 12-21-66

Operator El Paso Natural Gas Company		Lease Turner Hughes No. 17 (NM)	
Location 14-30W, 30N, Sec. 10, T-27-N, R-9-W		County San Juan	State New Mexico
Formation Bakota		Pool Basin	
Casing: Diameter 3.500	Set At: Feet 6811	Tubing: Diameter 2.375	Set At: Feet 6896
Pay Zone: From 650	To 6734	Total Depth: 6829	Shut In 12-14-66
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365		Baker Model "F" Packer set at 4665	
Shut-In Pressure, Casing, (MW) 975	PSIG + 12 = PSIA	Days Shut-In (MW) 7	Shut-In Pressure, Tubing 2051	PSIG + 12 = PSIA	2063
Flowing Pressure: P 200	PSIG + 12 = PSIA	Working Pressure: P _w Calc.	PSIG + 12 = PSIA	443	
Temperature: T = 77 °F	F _t = .9840	n = .75	F _{pv} (From Tables) 1.020	Gravity .675	F _g = .9427

ISIPT (MW) = 980 psig

FSIPC (MW) = 982 psig

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

$$Q = (12.365)(212)(.9840)(.9427)(1.020) = 2480 \text{ MCF/D}$$

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

$$Aof = \left(\frac{4255969}{4058833} \right)^n = (2480)(1.0435)^{.75} = 2480(1.0362)$$

$$Aof = 2570 \text{ MCF/D}$$

NOTE: A heavy white spray of distillate and water blew at beginning of test; at end of two minutes and continuing for several seconds a yellow-green distillate blew. From two hours and twenty-five minutes to two hours and thirty-five minutes the spray decreased considerably then gradually increased to what it was at the beginning of test. At the end of the test the odor of distillate was not as great as at the beginning of the test.

TESTED BY A. J. Iolait

WITNESSED BY W. E. McAnally

H. L. Kendrick
H. L. Kendrick

