

OCC

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 1/12/73

Operator EL PASO NATURAL GAS COMPANY		Lease Vaughn #19 (PC)	
Location 1500/N, 1800/E, Sec. 27, T26N, R6W		County Rio Arriba	State NM
Formation Pictured Cliffs		Pool So. Blanco	
Casing: Diameter 2.875	Set At: Feet 3105	Tubing: Diameter No tubing	Set At: Feet
Pay Zone: From 3025	To 3037	Total Depth: 4028	Shut In 12/18/72
Stimulation Method SWF		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, 942	PSIG	+ 12 = PSIA 954	Days Shut-In 25	Shut-In Pressure, Tubing No tubing	PSIG
Flowing Pressure: P 163	PSIG	+ 12 = PSIA 175	Working Pressure: P _w Calculated	PSIG	+ 12 = PSIA 221
Temperature: T = 60 °F	F _t = 1.000	n = .85	F _{pv} (From Tables) 1.018	Gravity .675	F _g = .9427

$$\text{CHOKE VOLUME} = Q = C \times P_f \times F_t \times F_g \times F_{pv}$$

$$Q = (12.365)(175)(1.000)(.9427)(1.018) = \underline{2077} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{910116}{861275} \right)^n = (2077)(1.0567)^{.85} = (2077)(1.0480)$$

$$Aof = \underline{2176} \text{ MCF/D}$$

NOTE: Well produced a heavy fog of distillate and water initially, but decreased to a light fog by end of test. Well unloaded frac sand throughout test.

TESTED BY J. Jones

WITNESSED BY _____

J. Jones
J. A. Jones
Well Test Engineer

