

0001

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 12/4/72

Operator EL PASO NATURAL GAS COMPANY		Lease Mudge #40	
Location 1670/S, 800/W, Sec. 10, T31N, R11W		County San Juan	State NM
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 2.875	Set At: Feet 2873	Tubing: Diameter No tubing	Set At: Feet
Pay Zone: From 2716	To 2750	Total Depth: 2873	Shut In 11/27/72
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, PSIG 792	+ 12 = PSIA 804	Days Shut-In 7	Shut-In Pressure, Tubing PSIG No tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 118	+ 12 = PSIA 130	Working Pressure: P _w PSIG Calculated	+ 12 = PSIA 161		
Temperature: T = 66 °F	F _t = .9943	n = .85	F _{pv} (From Tables) 1.011	Gravity .635	F _g = .9721

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

$$Q = 12.365 \times 130 \times .9943 \times .9721 \times 1.011 = \underline{1571} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{646416}{620495} \right)^n = (1571)(1.0418)^{.85} = (1571)(1.0354)$$

$$Aof = \underline{1626} \text{ MCF/D}$$

NOTE: Blew clear gas

TESTED BY Jesse B. Goodwin

WITNESSED BY _____

William D. Welch

William D. Welch
Well Test Engineer

