

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE September 7, 1978

Operator El Paso Natural Gas Company		Lease S.J. 27-4 Unit #121 (CWWO)	
Location NE 18-27-04		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool So. Blanco	
Casing: Diameter 4.500	Set At: Feet 6104'	Tubing: Diameter 1 1/4	Set At: Feet 3755'
Pay Zone: From 3678'	To 3793'	Total Depth: 6104'	Shut In 8-15-78
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 1047	+ 12 = PSIA 1059	Days Shut-In 23	Shut-In Pressure, Tubing PSIG 1042	+ 12 = PSIA 1054	
Flowing Pressure: P PSIG 115	+ 12 = PSIA 127		Working Pressure: P _w PSIG 140	+ 12 = PSIA 152	
Temperature: T = 61°F	n = Ft = .9990		Fpv (From Tables) 1.012	Gravity .670	Fg = .9463

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

$$Q = 12.365(127)(.9990)(.9463)(1.012) = \underline{1502} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1121481}{1098377} \right)^n = (1.0210)^{.85} = (1502) = (1.0179)(1502)$$

$$Aof = \underline{1529} \text{ MCF/D}$$

Note: The well produced dry gas throughout test and vented 175 MCF gas.

TESTED BY Mel Wileman

WITNESSED BY _____

L.R. Wagner
 Well Test Engineer

