

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE June 28, 1978

Operator El Paso Natural Gas Company		Lease Neil #3-A (PC)	
Location NW 15-31-11		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5297'	Tubing: Diameter 1 1/4	Set At: Feet 2657'
Pay Zone: From 2610	To 2659	Total Depth: 5297'	Shut In 6-14-78
Stimulation Method Sandwater Frac		Flow Through Casing XXX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 850	+ 12 = PSIA 862	Days Shut-In 14	Shut-In Pressure, Tubing PSIG 848	+ 12 = PSIA 860	
Flowing Pressure: P PSIG 230	+ 12 = PSIA 242		Working Pressure: P _w PSIG 235	+ 12 = PSIA 247	
Temperature: T = 61 °F	F _t = .9990	n = .85	F _{pv} (From Tables) 1.026	Gravity .670	F _g = .9463

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

$$Q = 12.365(242)(.9990)(.9463)(1.026) = \underline{2902} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{743044}{682035} \right)^n = (1.0895)^{.85} = (2902) = (1.0755)(2902)$$

$$Aof = \underline{3121} \text{ MCF/D}$$

Note: Well blew dry gas throughout test.
Well vented 311 MCF to the atmosphere during test.

TESTED BY D. Wright

WITNESSED BY _____

C.R. Wagner
Well Test Engineer