

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE April 11, 1978

Operator El Paso Natural Gas Company		Lease Neil #7-A	
Location NW 33-32-11		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4 1/2	Set At: Feet 5642'	Tubing: Diameter 2 3/8	Set At: Feet 5540'
Pay Zone: From 4461	To 5601'	Total Depth: 5642' PBTD 5625	Shut In 4-4-78
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG --	+ 12 = PSIA --	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 735	+ 12 = PSIA 747	
Flowing Pressure: P PSIG 250	+ 12 = PSIA 262		Working Pressure: P _w PSIG Calc.	+ 12 = PSIA 523	
Temperature: T = 66 °F	F _t = .9943	n = .75	F _p (From Tables) 1.025	Gravity .650	F _g = .9608

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

$$Q = 12.3650 \times (262) \times (.9943) \times (.9608) \times (1.025) \underline{\hspace{1cm}} 3172 \underline{\hspace{1cm}} \text{MCF/D}$$

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

$$Aof = Q \left(\frac{558009}{284480} \right)^n = (1.9636)^{.75} (3172) = (1.6588) (3172) \underline{\hspace{1cm}} 5262 \underline{\hspace{1cm}} \text{MCF/D}$$

$$Aof = \underline{\hspace{1cm}} 5262 \underline{\hspace{1cm}} \text{MCF/D}$$

Note: Well blew heavy fog of water first 45 min., & then a light fog of water rest of test. Well vented 306 MCF of gas to the atmosphere.

TESTED BY D. Wright

WITNESSED BY _____

C. R. Hager
Well Test Engineer