

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE April 18, 1978

Operator El Paso Natural Gas Company		Lease Neil #7-A	
Location NW 33-32-11		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 4 1/2	Set At: Feet 5642'	Tubing: Diameter 1 1/4	Set At: Feet 2965'
Pay Zone: From 2880	To 2944	Total Depth: PBT 5642 5625	Shut In 4-4-78
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 993	+ 12 = PSIA 1005	Days Shut-In 14	Shut-In Pressure, Tubing PSIG 1002	+ 12 = PSIA 1014	
Flowing Pressure: P PSIG 273	+ 12 = PSIA 285		Working Pressure: P _w PSIG 283	+ 12 = PSIA 295	
Temperature: T = 60 °F	F _t = 1.000	n = .85	F _{pv} (From Tables) 1.031	Gravity .670	F _g = .9463

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

$$Q = 12.365(285)(1.000)(.9463)(1.031) = \underline{\quad 3438 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1028196}{941171} \right)^n = (1.0925)^{.85} = (3438) = (1.0781)(3438)$$

$$Aof = \underline{\quad 3707 \quad} \text{ MCF/D}$$

Note: Well blew dry gas throughout test.
Well vented 379 MCF to the atmosphere during test.

TESTED BY D. Wright

WITNESSED BY _____

C. R. Hagood
Well Test Engineer