

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE 10-2-78

Operator Northwest Production Corp.		Lease Jicarilla 152 W #4-A (PC)	
Location NW 5-26-5		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool So. Blanco	
Casing: Diameter 4.500	Set At: Feet 5856'	Tubing: Diameter 1 1/4	Set At: Feet 3261'
Pay Zone: From 3160	To 3206	Total Depth: 5856'	Shut In 9-2-78
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 963	+ 12 = PSIA 575	Days Shut-In 30	Shut-In Pressure, Tubing PSIG 965
Flowing Pressure: P PSIG 233	+ 12 = PSIA 245	Working Pressure: Pw PSIG 244	+ 12 = PSIA 256
Temperature: T = 61 °F	Ft = .9990	Fpv (From Tables) 1.026	Gravity .670
n = .85		Fg = .9463	

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

$$Q = 12.365 (245) (.9990) (.9463) (1.026) = 2938 \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{954529}{888993} \right)^n = (1.0737)^{.85} = (2938) = (1.0623) (2938)$$

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

Note: Well blew dry gas throughout test and vented 322 MCF.

TESTED BY R. Hardy

WITNESSED BY

C. R. Hagan  
Well Test Engineer