

OPEN FLOW TEST DATA

DATE June 14, 1977

Operator <u>Northwest Production Corp.</u>		Well No. <u>Alcarilla 1230 #24</u>	
Location <u>NE 7-25-04</u>		County <u>Rio Arriba</u>	State <u>New Mexico</u>
Formation <u>Pictured Cliffs</u>		Pool <u>So. Blanco</u>	
Casing: Diameter <u>2 7/8</u>	Set At: Feet <u>3445'</u>	Tubing: Diameter <u>T/C</u>	Set At: Feet <u>--</u>
Pay Zone: From <u>3326</u>	To <u>3397</u>	Total Depth: <u>3445</u>	Shut In <u>6-7-77</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing <u>XX</u>	Flow Through Tubing <u></u>

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12.365</u>		Completion <u>Tubingless Completion</u>	
Shut-In Pressure, Casing, PSIG <u>878</u>	+ 12 = PSIA <u>890</u>	Days Shut-In <u>7</u>	Shut-In Pressure, Tubing PSIG <u>--</u>	+ 12 = PSIA <u>--</u>	
Flowing Pressure: P PSIG <u>20</u>	+ 12 = PSIA <u>32</u>		Working Pressure: Pw PSIG <u>Calc.</u>	+ 12 = PSIA <u>44</u>	
Temperature: T = <u>53</u> °F	n = <u>1.007</u>		Fpv (From Tables) <u>1.004</u>	Gravity <u>.670</u>	Fg = <u>.9463</u>

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

$$Q = 12.365(32)(1.007)(.9463)(1.004) = \underline{379} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{792100}{790419} \right)^n = 379(1.0021)^{.85} = 379(1.0018)$$

$$Aof = \underline{380} \text{ MCF/D}$$

Note: Well blew dry gas throughout test.
Vented 56 MCF of gas to atmosphere.

TESTED BY Hardy

WITNESSED BY _____

C.R. Wagner
Well Test Engineer