

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE July 18, 1978

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Neil #9-A (PC)</u>	
Location <u>NW 4-31-11</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>Pictured Cliffs</u>		Pool <u>Blanco</u>	
Casing: Diameter <u>4.500</u>	Set At: Feet <u>5589'</u>	Tubing: Diameter <u>1 1/4</u>	Set At: Feet <u>2987'</u>
Pay Zone: From <u>2894</u>	To <u>2966'</u>	Total Depth: <u>5589'</u>	Shut In <u>7-2-78</u>
Stimulation Method <u>Sandwater Frac</u>		Flow Through Casing <u>XX</u>	Flow Through Tubing

Choke Size, Inches <u>.750</u>		Choke Constant: C <u>12.365</u>			
Shut-In Pressure, Casing, PSIG <u>898</u>	+ 12 = PSIA <u>910</u>	Days Shut-In <u>16</u>	Shut-In Pressure, Tubing PSIG <u>904</u>	+ 12 = PSIA <u>916</u>	
Flowing Pressure: P PSIG <u>383</u>	+ 12 = PSIA <u>395</u>		Working Pressure: P _w PSIG <u>402</u>	+ 12 = PSIA <u>414</u>	
Temperature: T = <u>67</u> °F	n = <u>.85</u>		F _{pv} (From Tables) <u>1.041</u>	Gravity <u>.670</u>	F _g = <u>.9463</u>

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

$$Q = 12.365(395)(.9933)(.9463)(1.041) = \underline{4779} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{839056}{667660} \right)^n = (1.2567)^{.85} = (4779) = (1.2144)(4779)$$

$$Aof = \underline{5804} \text{ MCF/D}$$

Note: Well blew dry gas throughout test.
Well vented 487 MCF to the atmosphere during the test.

TESTED BY D. Wright

WITNESSED BY _____

C.R. Wagner
Well Test Engineer

