

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE July 10, 1978

Operator <b>El Paso Natural Gas Company</b>		Lease <b>Neil #9-A (MV)</b>	
Location <b>NW 4-31-11</b>		County <b>San Juan</b>	State <b>New Mexico</b>
Formation <b>Mesa Verde</b>		Pool <b>Blanco</b>	
Casing: Diameter <b>4.500</b>	Set At: Feet <b>5589'</b>	Tubing: Diameter <b>2 3/8"</b>	Set At: Feet <b>5408'</b>
Pay Zone: From <b>5030</b>	To <b>5507'</b>	Total Depth: <b>5589'</b>	Shut In <b>7-2-78</b>
Stimulation Method <b>Sandwater Frac</b>		Flow Through Casing	Flow Through Tubing <b>XX</b>

Choke Size, Inches <b>.750</b>		Choke Constant: C <b>12.3650</b>			
Shut-In Pressure, Casing, PSIG <b>-</b>	+ 12 = PSIA <b>--</b>	Days Shut-In <b>8</b>	Shut-In Pressure, Tubing PSIG <b>550</b>	+ 12 = PSIA <b>562</b>	
Flowing Pressure: P PSIG <b>240</b>	+ 12 = PSIA <b>252</b>		Working Pressure: P <sub>w</sub> PSIG <b>Calc.</b>	+ 12 = PSIA <b>497</b>	
Temperature: T = <b>71°F</b>	F <sub>t</sub> = <b>.9896</b>	n = <b>.75</b>	F <sub>pv</sub> (From Tables) <b>1.023</b>	Gravity <b>.650</b>	F <sub>g</sub> = <b>.9608</b>

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

$$Q = 12.365(252)(.9896)(.9608)(1.023) = \underline{\quad 3031 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{302500}{55491} \right)^n = (5.4513)^{.75} = (3031) = (3.5676)(3031)$$

$$Aof = \underline{\quad 10,813 \quad} \text{ MCF/D}$$

Note: Well blew heavy fog of water throughout test. Well vented 303 MCF to the atmosphere during test.

TESTED BY D. Wright

WITNESSED BY \_\_\_\_\_

*C. R. Hager*  
Well Test Engineer