

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE February 22, 1978

Operator El Paso Natural Gas Company		Lease Newberry #12 (QWWO)	
Location <u>3/</u> NE 4-43-12		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 5 1/2	Set At: Feet 7289'	Tubing: Diameter 1 1/4	Set At: Feet 5116'
Pay Zone: From 4846	To 5086	Total Depth: 7289'	Shut in 1-28-78
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 616	+ 12 = PSIA 628	Days Shut-In 25	Shut-In Pressure, Tubing PSIG 616	+ 12 = PSIA 628	
Flowing Pressure: P PSIG 32	+ 12 = PSIA 44		Working Pressure: P _w PSIG 278	+ 12 = PSIA 290	
Temperature: T = 57 °F	F _t = 1.003	n = .75	F _{pv} (From Tables) 1.004	Gravity .670	F _g = .9463

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

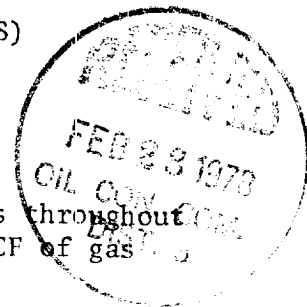
$$Q = 12.365(44)(1.003)(.9463)(1.004) = 518 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{394384}{310284} \right)^n = (518)(1.2710)^{.75} = (1.1971)(518)$$

$$Aof = 620 \text{ MCF/D}$$

Note: Well blew dry gas throughout test. Well vented 61 MCF of gas during test.

TESTED BY D. Wright

WITNESSED BY _____

C. R. Wagner
Well Test Engineer