

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE March 29, 1979

Operator El Paso Natural Gas Company		Lease Riddle B #1-A (mv)	
Location SE 27-30-10		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5302'	Tubing: Diameter 2 3/8	Set At: Feet 5249'
Pay Zone: From 4148'	To 4788'	Total Depth: 5302'	Shut In 3-22-79
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches 0.750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG --	+ 12 = PSIA --	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 608	+ 12 = PSIA 620	
Flowing Pressure: P PSIG 251	+ 12 = PSIA 263	Working Pressure: P _w PSIG Calculate	+ 12 = PSIA 512		
Temperature: T = 72 °F	F _t = 0.9887	n = .75	F _{pv} (From Tables) 1.022	Gravity 0.670	F _g = 0.9463

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

$$Q = (12.365) (263) (0.9887) (0.9463) (1.022) = \underline{3110} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{384400}{122256} \right)^n = (3110) (3.1442)^{.75} = (3110) (2.3612)$$

$$Aof = \underline{9779} \text{ MCF/D}$$

Note: Well blew light fog of water throughout test. Well vented 317 MCF of gas to the atmosphere.

TESTED BY Ron Headrick

WITNESSED BY _____

C.R. Hagan
Well Test Engineer