

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE October 24, 1974

Operator El Paso Natural Gas Company		Lease Heaton #1 (MV) (OWWO)	
Location 990/N, 900/E, Sec. 28, T31N, R11W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 5.500	Set At: Feet 7106'	Tubing: Diameter 1.660	Set At: Feet 4880'
Pay Zone: From 4698'	To 4928'	Total Depth: COTD 7106' 6520'	Shut In 9-28-74
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 420	+ 12 = PSIA 432	Days Shut-In 26	Shut-In Pressure, Tubing PSIG 420	+ 12 = PSIA 432	
Flowing Pressure: P PSIG 114	+ 12 = PSIA 126		Working Pressure: P _w PSIG 142	+ 12 = PSIA 154	
Temperature: T = 68 °F	F _t = 0.9924	n = .75	F _{pv} (From Tables) 1.012	Gravity 0.671	F _g = 0.9456

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

$$Q = 12.365(126)(0.9924)(0.9456)(1.012) = \underline{1480} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{186624}{162908} \right)^n = 1480(1.1456)^{.75} = 1480(1.1073) = 1638 \text{ MCF/D}$$

$$Aof = \underline{1638} \text{ MCF/D}$$

Note: The well produced a dry gas flow.

TESTED BY F. Johnson

WITNESSED BY _____

Loren W. Fothergill
 Loren W. Fothergill
 Well Test Engineer