

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 27, 1975

Operator El Paso Natural Gas Company		Lease Howell D #1-A	
Location 1750'N, 950'W, Sec. 28, T31N, R8W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 6075'	Tubing: Diameter 2.375	Set At: Feet 6007'
Pay Zone: From 5284'	To 6012'	Total Depth: PBT 6075' 6059'	Shut In 8-12-75
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Plate Choke Size, Inches 4" M.R. 2.500" plate	Plate Choke Constant: C 32.64	Well tested through 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 600	+ 12 = PSIA 612	Days Shut-In 15	Shut-In Pressure, Tubing PSIG + 12 = PSIA 290 302
Flowing Pressure: P PSIG M.R. 40 W.H. 131	+ 12 = PSIA M.R. 52 W.H. 143	Working Pressure: Pw PSIG 500	+ 12 = PSIA 512
Temperature: T = 67 °F Ft = .9933	n = 0.75	Fpv (From Tables) 1.004	Gravity .660 Fg = 1.231

CHOKE VOLUME = Q = C x P_i x F_i x F_g x F_{pv}

Q = Calculated from meter readings

= 1704 MCF/D

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

$$Aof = \left(\frac{374544}{112400} \right)^n = (1704) (3.3322)^{.75} = (1704) (2.4663)$$

Aof = 4203 MCF/D

Note: Well flared 212.80 MCF of gas during test and made 13.12 Bbls of water.

TESTED BY R. Hardy & C. Dein

WITNESSED BY

Charles W. Dein

Well Test Engineer

