

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE September 13, 1977

Operator El Paso Natural Gas Company		Lease Howell M #1-A	
Location <u>31</u> SW <u>15-30-08</u>		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4 1/2"	Set At: Feet 5548'	Tubing: Diameter 2 3/8"	Set At: Feet 5478'
Pay Zone: From 4546	To 5487'	Total Depth: 5548'	Shut In 9-4-77
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing

Choke Size, Inches		Choke Constant: C			
Shut-In Pressure, Casing, PSIG	+ 12 = PSIA	Days Shut-In	Shut-In Pressure, Tubing PSIG	+ 12 = PSIA	
782	794	9	778	790	
Flowing Pressure: P PSIG	+ 12 = PSIA		Working Pressure: P _w PSIG	+ 12 = PSIA	
Temperature: T = °F Ft =	n =		F _{pv} (From Tables)	Gravity	

$$\text{CHOKE VOLUME} = Q = C \times P_1 \times F_1 \times F_g \times F_{pv}$$

Q =

= MCF/D

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

$$A_o^2 = \left(\frac{Q}{C \times P_1 \times F_1 \times F_g \times F_{pv}} \right)^n$$

A_{of} = MCF/D



TESTED BY Joe Golding

WITNESSED BY

Well Test Engineer