

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE November 15, 1974

Operator El Paso Natural Gas Company		Lease Huerfano Unit #253	
Location 1050/S, 1090/E, Sec. 11, T26N, R10W		County San Juan	State New Mexico
Formation Gallup		Pool Angel Peak	
Casing: Diameter 4.500	Set At: Feet 6178'	Tubing: Diameter 2.375	Set At: Feet 6118'
Pay Zone: From 5836	To 6108	Total Depth: PBD 6178' 6153'	Shut In 11-8-74
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches 4" MR	Orifice 2.50	Choke Constant: C 32.64		Well tested thru a 3/4" variable choke.		
Shut-In Pressure, Casing, 560	PSIG	+ 12 = PSIA 572	Days Shut-In 7	Shut-In Pressure, Tubing 455	PSIG	+ 12 = PSIA 467
Flowing Pressure: P M.R. 1 WH 4	PSIG	+ 12 = PSIA MR 13 WH 16		Working Pressure: P _w 247	PSIG	+ 12 = PSIA 259
Temperature: T = 54 °F	F _t = 1.0058	n = .75		F _{pv} (From Tables) 1.004		Gravity .720 F _g = 1.179

CHOKE VOLUME = Q = C x P_f x F_t x F_g x F_{pv}

Q = Calculated from meter run.

= 135 MCF/D

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

$$Aof = Q \left(\frac{327184}{260103} \right)^n = 135(1.2579)^{.75} = 135(1.1878)$$

Aof = 161 MCF/D



Note: The produced 13.5 Bbl. of an emulsion of oil and water with a API gravity of 24.

TESTED BY Goodwin & Johnson

WITNESSED BY _____

Loren W Fothergill
 Loren W. Fothergill