

EL PASO NATURAL GAS COMPANY OPEN FLOW TEST DATA

DATE February 22, 1978

Operator El Paso Natural Gas Company		Lease Lucerne A #2-A	
Location SE 9-31-10		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4 1/2	Set At: Feet 5663'	Tubing: Diameter 2 3/8	Set At: Feet 5616'
Pay Zone: From 4478	To 5614	Total Depth: 5663'	Shut In 2-2-78
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Meter Choke Size, Inches 4" M.R.		Orifice 2.750		Meter Choke Constant: C 41.10	
Shut-In Pressure, Casing, --		PSIG + 12 = PSIA	Days Shut-In 20		Well test thru 3/4" variable choke
Flowing Pressure: P 270 W.H.		PSIG + 12 = PSIA	Shut-In Pressure, Tubing 588		PSIG + 12 = PSIA 600
Temperature: T = 52 °F		Ft = 1.0078		Working Pressure: Pw Calc.	
		n = .75		Fpv (From Tables) 1.009	
				Gravity .670 Fg = 1.222	

$$\text{CHOKE VOLUME} = Q = C \times P_r \times F_r \times F_g \times F_{pv}$$

$$Q = \text{Calculated from meter readings.} = \underline{\quad 2626 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{360000}{134375} \right)^n = (2626) (2.6791)^{.75} = (2626) (2.0941)$$

$$Aof = \underline{\quad 5499 \quad} \text{ MCF/D}$$

Note: Well made 5.04 bbls of 44.4 A.P.I. gravity oil. Well vented 243 MCF of gas to the atmosphere.

TESTED BY J. Thursonson

ITNESSED BY

C. R. Wagner
Well Test Engineer

