

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE April 8, 1975

Operator El Paso Natural Gas Company		Lease Riddle 1-A	
Location 1715/S, 990/W, Sec. 4, T30N, R9W		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5578'	Tubing: Diameter 2.375	Set At: Feet 5472'
Pay Zone: From 4679	To 5644	Total Depth: PBTD 5578 5561'	Shut In 4-1-75
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Meter Choke Size, Inches 4" M.R.		Plate Plate 2.500		Plate Choke Constant: C 32.64		Well tested thru a 3/4" variable choke.	
Shut-In Pressure, Casing, PSIG 708		+ 12 = PSIA 720		Days Shut-In 7		Shut-In Pressure, Tubing PSIG 480	
Flowing Pressure: P W.H. 264 M.R. 88		+ 12 = PSIA W.H. 276 M.R. 100		Working Pressure: P _w 649		+ 12 = PSIA 661	
Temperature: T = 60 °F		n = .75		F _{pv} (From Tables) 1.030		Gravity .668 F _g = 1.224	

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

$$Q = \text{Calculated from orifice meter readings} = \underline{\hspace{2cm}} 3559 \underline{\hspace{2cm}} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{518400}{81479} \right)^n = 3559(6.3623)^{.75} = 3559(4.006)$$

$$Aof = \underline{\hspace{2cm}} 14257 \underline{\hspace{2cm}} \text{ MCF/D}$$

Note: Unloaded 1 Bbl of water in first 15 minutes of flow. Dry flow for rest of the test.

Gas vented to atmosphere 448 MCF.

TESTED BY Rhames

WITNESSED BY

Loren W. Fethergill
Well Test Engineer