EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE December 9, 1976

Operator: El Paso Natural Gas Company		Lease: San Juan 27-4 Unit #125	
Location: NE 8-27N-4W		County: Rio Arriba	State: New Mexico
Formation: Mesa Verde		Pool: Blanco	
Casing: Diameter: 4.500	Set At: Feet: 6400'	Tubing: Diameter: 2.375	Set At: Feet: 6375'
Pay Zone: From: 5525	To: 6361'	Total Depth: PBTD: 6400 6383	Shut In: 12-2-76
Stimulation Method: Sandwater Frac		Flow Through Casing	Flow Through Tubing: XX

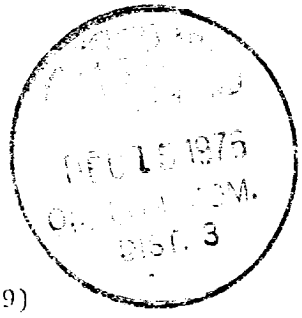
Choke Size, Inches: Plate 2.500" Plate, 4" M.R.	Choke Constant: C: 32.64		Tested through a 3/4" variable choke
Shut-In Pressure, Casing, PSIG: 1012	+ 12 = PSIA: 1024	Days Shut-In: 7	Shut-In Pressure, Tubing PSIG: 1012 / + 12 = PSIA: 1024
Flowing Pressure: P PSIG: 292 W.H., 85 M.R.	+ 12 = PSIA: 304 W.H., 97 M.R.		Working Pressure: P_w PSIG: Calculated / + 12 = PSIA: 633
Temperature: T= 53 °F	F_t=1.0068	n = .75	Fpv (From Tables): 1.009 / Gravity: 0.690 F_g = 1.204

CHOKE VOLUME = $Q = C \times P_t \times F_t \times F_g \times F_{pv}$

Q = Calculated from orifice meter readings = 3612 MCF/D

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

$$\text{Aof} = Q \left(\frac{1048576}{647887} \right)^n = (3612)(1.6185) = (3612)(1.4349)$$



Aof = 5183 MCF/D

Note: The well started producing liquid the last 15 minutes of the test and produced 5 bbls. of 53.9° API gravity oil, 1 Bbl. of water and 502 MCF of gas.

TESTED BY R. Hardy & J. B. Goodwin

WITNESSED BY _____

Well Test Engineer