FORM 23-75 (12-66)

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE 7-18-75

Operator: El Paso Natural Gas Company		Lease: San Juan 28-7 Unit #243	
Location: 1180/S, 1465/W, Sec. 31, T28N, R7W		County: Rio Arriba	State: New Mexico
Formation: Dakota		Pool: Basin	
Casing: Diameter: 4.500	Set At: Feet: 7315'	Tubing: Diameter: 1.900	Set At: Feet: 7229'
Pay Zone: From: 7000	To: 7225'	Total Depth: 7315' PBTD 7307'	Shut In: 7-10-75
Stimulation Method: Sandwater Frac		Flow Through Casing: XX	Flow Through Tubing:

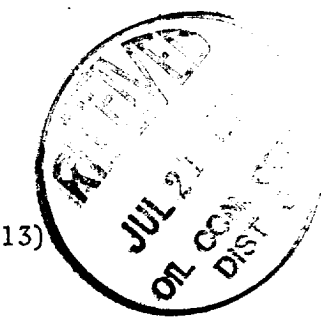
Choke Size, Inches: 2.750" Plate, 4" M.R.		Choke Constant: C: 41.10		Well tested through 3/4" variable choke	
Shut-In Pressure, Casing, PSIG: 2417	+ 12 = PSIA: 2429	Days Shut-In: 8	Shut-In Pressure, Tubing PSIG: 2417	+ 12 = PSIA: 2429	
Flowing Pressure: P PSIG: 76 M.R., 210 W.H.	+ 12 = PSIA: 88 M.R. 222 W.H.		Working Pressure: P_w PSIG: 475	+ 12 = PSIA: 487	
Temperature: T= 58 °F Ft= 1.002	n = 0.75		Fpv (From Tables): 1.007	Gravity: .633 Fg=1.257	

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

Q = Calculated from orifice meter readings = 2447 MCF/D

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

$$Aof = Q\left(\frac{5900041}{5662872}\right)^n = (2447)(1.0419)^{.75} = (2447)(1.0313)$$



Aof = 2524 MCF/D

Note: The well produced 8.24 Bbls. of water and 9.27 Bbls of 45.2° API gravity oil during the test. The well produced 437 MCF gas during the test.

TESTED BY R. Hardy

WITNESSED BY

Charles W. Dean

Well Test Engineer