

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 7-17-75

Operator El Paso Natural Gas Company		Lease San Juan 28-7 Unit #241	
Location 1690/S, 810/W, Sec. 9, T28N, R7W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 7874'	Tubing: Diameter 1.900	Set At: Feet 7827'
Pay Zone: From 7646	To 7844'	Total Depth: PBSD 7874' 7866	Shut In 7-2-75
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Plate Choke Size, Inches 2.500" Plate, 4" M.R.		Plate Choke Constant: C 32.64		Tested through a 3/4" variable choke	
Shut-In Pressure, Casing, PSIG 2533	+ 12 = PSIA 2545	Days Shut-In 15	Shut-In Pressure, Tubing PSIG 2105	+ 12 = PSIA 2117	
Flowing Pressure: P PSIG 11 M.R., 69 W.H.	+ 12 = PSIA 23 M.R., 81 W.H.		Working Pressure: Pw PSIG 460	+ 12 = PSIA 472	
Temperature: T= 57°F	Ft= 1.003	n = 0.750	Fpv (From Tables) 1.004	Gravity .650	Fg=1.240

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

$$Q = \text{Calculated from orifice meter readings} = 842 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{6477025}{6254241} \right)^n = 842(1.0356)^{0.75} = (842)(1.0266)$$

$$Aof = 864 \text{ MCF/D}$$

Note: The well produced 3.69 Bbls of 48.1° API gravity oil and 20 bbls of water during the test. The well produced 263 MCF gas during the test.

TESTED BY R. Hardy, C. Dein

WITNESSED BY

Charles W. Hardy
Well Test Engineer

