

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE January 17, 1975

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit #94	
Location 454/S, 950/W, Sec. 3, T27N, R4W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8138'	Tubing: Diameter 1.990	Set At: Feet 8064'
Pay Zone: From 7922'	To 8072'	Total Depth: PBD 8138' 8130	Shut In 1-10-75
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2239	+ 12 = PSIA 2251	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 977	+ 12 = PSIA 989	
Flowing Pressure: P PSIG 94	+ 12 = PSIA 106	Working Pressure: P _w PSIG 586	+ 12 = PSIA 598		
Temperature: T = 52 °F	n = .75	Fpv (From Tables) 1.010	Gravity .655	Fg = 0.9571	

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

$$Q = 12.365(106)(1.0078)(0.9571)(1.010) = \underline{1277} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{5067001}{4709397} \right)^n = 1277(1.0759)^{.75} = 1277(1.0564)$$

$$Aof = \underline{1349} \text{ MCF/D}$$

Note: After the first 15 minutes the well produced a slug of water. During the rest of the test the well blew a heavy fog of water.

TESTED BY F. JohnsonWITNESSED BY L. Fothergill

Loren W. Fothergill
Well Test Engineer

