

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE January 2, 1975

Operator El Paso Natural Gas Company		Lease San Juan 27-4 Unit #78	
Location 1840/S, 1115/W, Sec. 21, T27N, R4W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool Tapacito	
Casing: Diameter 2.875	Set At: Feet 3816'	Tubing: Diameter No Tubing	Set At: Feet --
Pay Zone: From 3690'	To 3710'	Total Depth: PBSD 3816' 3805'	Shut In 12-10-74
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 1056	+ 12 = PSIA 1068	Days Shut-In 23	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA --	
Flowing Pressure: P PSIG 114	+ 12 = PSIA 126		Working Pressure: P <sub>w</sub> PSIG Calculated	+ 12 = PSIA 166	
Temperature: T = 50 °F	n = .85		Fpv (From Tables) 1.014	Gravity .680	F <sub>g</sub> = 0.9393

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

$$Q = 12.365(126)(1.0098)(0.9393)(1.014) = \underline{1498} \text{ MCF/D}$$

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

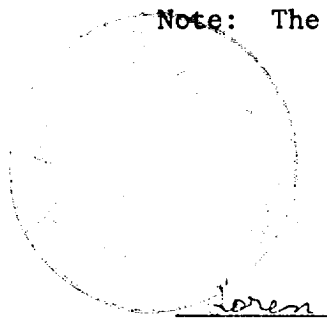
$$Aof = Q \left( \frac{1140624}{1113068} \right)^n = 1498(1.0248)^{.85} = 1498(1.0210)$$

$$Aof = \underline{1530} \text{ MCF/D}$$

Note: The well blew a dry gas.

TESTED BY C. Rhames

WITNESSED BY \_\_\_\_\_


  
Loren W. Featherhill  
 Well Test Engineer