

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE December 13, 1973

Operator El Paso Natural Gas Company		Lease Rincon Unit #198	
Location 1180/N, 800/E, Sec. 32, T27N, R6W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool So. Blanco	
Casing: Diameter 2.875	Set At: Feet 3275'	Tubing: Diameter No Tubing	Set At: Feet
Pay Zone: From 3156	To 3226	Total Depth: 3275	Shut In 12-5-73
Stimulation Method Sandwater Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 1009	+ 12 = PSIA 1021	Days Shut-In 7	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 126	+ 12 = PSIA 138	Working Pressure: Pw PSIG Calculated	+ 12 = PSIA 176		
Temperature: T = 57 °F	Ft = 1.003	n = .85	Fpv (From Tables) 1.013	Gravity .665	Fg = .9498

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

$$Q = (12.365)(138)(1.003)(.9498)(1.013) = \underline{1647} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1042441}{1011465} \right)^n = 1647(1.0306)^{.85} = 1647(1.0260)$$

$$Aof = \underline{1689} \text{ MCF/D}$$

Note: Well produced dry gas.

TESTED BY Norton

WITNESSED BY _____

William D. Welch
 William D. Welch
 Well Test Engineer

