

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATADATE 12/28/72

Operator EL PASO NATURAL GAS COMPANY		Lease Heaton #31	
Location 1180/S, 1500/W, Sec. 28, T31, R11		County San Juan	State NM
Formation Pictured Cliffs		Pool Aztec	
Casing: Diameter 2.875	Set At: Feet 2546	Tubing: Diameter No tubing	Set At: Feet
Pay Zone: From 2426	To 2462	Total Depth: 2546	Shut In 12/20/72
Stimulation Method SWF		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 567	+ 12 = PSIA 579	Days Shut-In 8	Shut-In Pressure, Tubing PSIG No tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 139	+ 12 = PSIA 151	Working Pressure: P <sub>w</sub> PSIG Calculated	+ 12 = PSIA 184		
Temperature: T = 57 °F	F <sub>t</sub> = 1.0029	n = .85	F <sub>pv</sub> (From Tables) 1.013	Gravity .635	F <sub>g</sub> = .9721

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

$$Q = (12.365)(151)(1.0029)(.9721)(1.013) = 1844 \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{335241}{301385} \right)^n = (1844)(1.1123)^{.85} = (1844)(1.0947)$$

$$Aof = 2019 \text{ MCF/D}$$

NOTE: Well produced a medium fog of water throughout the test

TESTED BY W. D. Welch

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

*William D. Welch*  
William D. Welch  
Well Test Engineer

