

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 12/7/72

Operator EL PASO NATURAL GAS COMPANY		Lease Hughes #21	
Location 1660/S, 1190/E, Sec. 21, T29N, R8W		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 2.875	Set At: Feet 3090	Tubing: Diameter No tubing	Set At: Feet
Pay Zone: From 3010	To 3050	Total Depth: 3090	Shut In 11/30/72
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 1059	+ 12 = PSIA 1071	Days Shut-In 7	Shut-In Pressure, Tubing PSIG No tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 229	+ 12 = PSIA 241	Working Pressure: P _w PSIG Calculated	+ 12 = PSIA	305	
Temperature: T= 61 °F	n = .85	F _{pv} (From Tables) 1.021	Gravity .645	F _g = .9645	

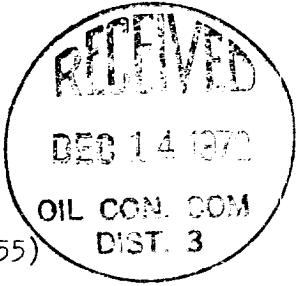
CHOKE VOLUME = Q = C x P_i x F_i x F_g x F_{pv}

Q = (12.365)(241)(.9990)(.9645)(1.021) = 2932 MCF/D

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

Aof = Q $\left(\frac{1147041}{1054016} \right)^n = (2932)(1.08826)^{.85} = (2932)(1.0655)$

Aof = 3124 MCF/D



NOTE: Well blew dry gas.

TESTED BY Norton

WITNESSED BY

William D Welch
William D. Welch
Well Test Engineer