

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE August 23, 1978

Operator El Paso Natural Gas Company		Lease Hughes #3-A (PC)	
Location SE 20-29-08		County San Juan	State New Mexico
Formation Pictured Cliffs		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5762'	Tubing: Diameter 1 1/4	Set At: Feet 3053'
Pay Zone: From 3020	To 3064	Total Depth: 5762'	Shut In 8-7-78
Stimulation Method Sandwater Frac		Flow Through Casing XXX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 943	+ 12 = PSIA 955	Days Shut-In 16	Shut-In Pressure, Tubing PSIG 943	+ 12 = PSIA 955	
Flowing Pressure: P PSIG 98	+ 12 = PSIA 110		Working Pressure: P _w PSIG 100	+ 12 = PSIA 112	
Temperature: T = 68 °F	F _t = .9924	n = .85	F _{pv} (From Tables) 1.008	Gravity .670	F _g = .9463

CHOKE VOLUME = Q = C x P_t x F_t x F_g x F_{pv}

Q = 12.365(110)(.9924)(.9463)(1.008) = 1288 MCF/D

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

Aof = 1288 $\left(\frac{912025}{899481} \right)^{.85} = (1.0139)^{.85} = (1.0118)(1288)$

Aof = 1303 MCF/D

Note: Well blew dry gas throughout test.
Well vented 166 MCF to the atmosphere during test.

TESTED BY N. Waggoner

WITNESSED BY

C. R. Wagner
Well Test Engineer