

Operator El Paso Natural Gas Company		Lease Hardie #4-A	
Location SE 23-29-08		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5697'	Tubing: Diameter 2 3/8	Set At: Feet 5602'
Pay Zone: From 4683	To 5627'	Total Depth: 5697'	Shut In 10-28-78
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing

Choke Size, Inches		Choke Constant: C			
Shut-In Pressure, Casing, PSIG 782	+ 12 = PSIA 794	Days Shut-In 9	Shut-In Pressure, Tubing PSIG 276	+ 12 = PSIA 288	
Flowing Pressure: P PSIG	+ 12 = PSIA		Working Pressure: P _w PSIG	+ 12 = PSIA	
Temperature: T = °F F _t =	n =		F _{pv} (From Tables)	Gravity F _g =	

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

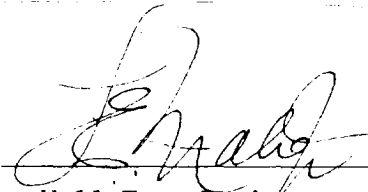
Q = _____ MCF/D

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

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

Aof = _____ MCF/D

TESTED BY N. Waggoner
 WITNESSED BY _____


 Well Test Engineer