

E L PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 9-20-73

Operator El Paso Natural Gas Company		Lease Lindrith Unit #73	
Location <u>1750 1520</u> 1785/N, 1815/E, Sec. 19, T-24N, R2W		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool So. Blanco	
Casing: Diameter 2.875	Set At: Feet 3196'	Tubing: Diameter No Tubing	Set At: Feet
Pay Zone: From 3110	To 3138'	Total Depth: 3196	Shut In 9-4-73
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 588	+ 12 = PSIA	Days Shut-In 16	Shut-In Pressure, Tubing PSIG No Tubing	+ 12 = PSIA	
Flowing Pressure: P PSIG 5	+ 12 = PSIA		Working Pressure: P _w PSIG Calculated	+ 12 = PSIA	21
Temperature: T = 68°F	F _t = .9924	n = .85	F _p v (From Tables) 1.004	Gravity .665	F _g = .9498

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

$$Q = (12.365)(17)(.9924)(.9498)(1.004) = \underline{199} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{360000}{359559} \right)^n = (199)(1.0012)^{.85} = (199)(1.0010)$$

$$Aof = \underline{199} \text{ MCF/D}$$

Note: Well blew dry gas.

TESTED BY Norton

WITNESSED BY _____

William D. Welch
William D. Welch
Well Test Engineer