

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE June 21, 1978

Operator El Paso Natural Gas Company		Lease Neil #3-A (MV)	
Location NW 15-31-11		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4.500	Set At: Feet 5297'	Tubing: Diameter 2 3/8	Set At: Feet 5182'
Pay Zone: From 4868	To 5211	Total Depth: 5297'	Shut In 3-14-78
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XXX

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG --	+ 12 = PSIA --	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 798	+ 12 = PSIA 810	
Flowing Pressure: P PSIG 298	+ 12 = PSIA 310		Working Pressure: P _w PSIG Calc.	+ 12 = PSIA 606	
Temperature: T = 69 °F	F _t = .9924	n = .75	F _{pv} (From Tables) 1.029	Gravity .650	F _g = .9608

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

$$Q = 12.365(310)(.9924)(.9608)(1.029) = 3761 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{656100}{288864} \right)^n = (2.2713)^{.75} = (3761) = (1.8502)(3761)$$

$$Aof = 6959 \text{ MCF/D}$$

Note: Well blew a very light fog of water throughout test. Well vented 369 MCF to the atmosphere during the test.

TESTED BY D. Wright

WITNESSED BY

C.R. Hagan
Well Test Engineer

