

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE December 7, 1973

Operator El Paso Natural Gas Company		Lease Allison Unit #38	
Location 790/S, 1840/E, Sec. 17, T32N, R6W		County San Juan	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8297'	Tubing: Diameter 2 3/8"	Set At: Feet 8157'
Pay Zone: From 7968	To 8176	Total Depth: 8297	Shut In 11-29-73
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2497	+ 12 = PSIA 2509	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 1740	+ 12 = PSIA 1752	
Flowing Pressure: P PSIG 235	+ 12 = PSIA 247		Working Pressure: P _w PSIG 1397	+ 12 = PSIA 1409	
Temperature: T = 118 °F	n = .75		Fpv (From Tables) 1.017	Gravity .650	Fg = .9608

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

Q = (12.365) (247) (.9485) (.9608) (1.017) = 2831 MCF/D

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

Aof = Q $\left(\frac{6295081}{4309800} \right)^n = 2831(1.4606)^{.75} = 2831(1.3286)$

Aof = 3761 MCF/D

Note: Well unloaded a 3/4" stream of water and distilate in 5 min. with a heavy spray for the rest of the test.

TESTED BY Norton

WITNESSED BY _____

William D. Welch

William D. Welch
Well Test Engineer

