FORM 23-75 (12-66)

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE Oct. 8, 1979

Operator: El Paso Natural Gas Company		Lease: Mudge #15A (PM)	
Location: SE 8-31-11		County: San Juan	State: New Mexico
Formation: Pictured Cliff		Pool: Aztec PC Ext.	
Casing: Diameter: 4.500	Set At: Feet: 5350	Tubing: Diameter: 1 1/4	Set At: Feet: 2784
Pay Zone: From: 2438	To: 2574	Total Depth: 5350	Shut In: 9-19-79
Stimulation Method: Sand Water Frac		Flow Through Casing: XXX	Flow Through Tubing:

Choke Size, Inches: .750	Choke Constant: C: 12.365			
Shut-In Pressure, Casing, PSIG: 828	+ 12 = PSIA: 840	Days Shut-In: 19	Shut-In Pressure, Tubing PSIG: 828	+ 12 = PSIA: 840
Flowing Pressure: P PSIG: 227	+ 12 = PSIA: 239		Working Pressure: Pw PSIG: 243	+ 12 = PSIA: 255
Temperature: T= 53 °F	Ft=1.007	n = .85	Fpv (From Tables): 1.026	Gravity: .670 Fg=.9463

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

$Q = (12.365)(239)(1.007)(.9463)(1.026) =$ 2889 MCF/D

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

$Aof = \left(\frac{705600}{640575} \right)^n = (1.1015)^{.85}(2889) = (1.0857)(2889)$

NOTE: Well Blew Dry Gas Throughout Test and Vented 321 MCF/D to the Atmosphere During The Test.

Aof = 3137 MCF/D

TESTED BY L. Fothergill

WITNESSED BY _____

C. R. Wagner

Well Test Engineer