FORM 23-75 (12-66)

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE October 17, 1973

Operator: El Paso Natural Gas Company		Lease: San Juan 32-7 Unit #43	
Location: 1060/N, 1660/E, Sec. 21, T32N, R7W		County: San Juan	State: New Mexico
Formation: Dakota		Pool: Basin	
Casing: Diameter: 4.500	Set At: Feet: 7993'	Tubing: Diameter: 1 1/2	Set At: Feet: 7949'
Pay Zone: From: 7827	To: 7952	Total Depth: 7993	Shut In: 10-7-73
Stimulation Method: Sandwater Frac		Flow Through Casing: X	Flow Through Tubing:

Choke Size, Inches: .750		Choke Constant: C: 12.365			
Shut-In Pressure, Casing, PSIG: 2760	+ 12 = PSIA: 2772	Days Shut-In: 10	Shut-In Pressure, Tubing PSIG: 1372	+ 12 = PSIA: 1384	
Flowing Pressure: P PSIG: 70	+ 12 = PSIA: 82		Working Pressure: P_w PSIG: 364	+ 12 = PSIA: 376	
Temperature: T= 66 °F	Ft= .9943	n = .75	Fpv (From Tables): 1.009	Gravity: .655	Fg= .9571

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

$Q = (12.365)(82)(.9943)(.9571)(1.009) = 974$ MCF/D

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

$Aof = Q \left(\frac{7683984}{7542608} \right)^n = 974\ (1.0187)^{.75} = 974\ (1.0140)$

Aof = 987 MCF/D

Note: Light mist of drip and water throughout test.

TESTED BY Rhames

WITNESSED BY

William D. Welch

William D. Welch
Well Test Engineer