FORM 23-75 (12-60)

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DATE September 10, 1973

Operator: El Paso Natural Gas Company		Lease: San Juan 27-5 Unit #166	
Location: 1160/N, 1635/E, Sec. 31, T-27N, R5W		County: Rio Arriba	State: New Mexico
Formation: Dakota		Pool: Basin	
Casing: Diameter: 4.500	Set At: Feet: 7556'	Tubing: Diameter: 1 1/2	Set At: Feet: 7478'
Pay Zone: From: 7286	To: 7486'	Total Depth: 7556	Shut In: 9-1-73
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: 2672	+ 12 = PSIA: 2684	Days Shut-In: 9	Shut-In Pressure, Tubing PSIG: 1211	+ 12 = PSIA: 1223	
Flowing Pressure: P PSIG: 237	+ 12 = PSIA: 249		Working Pressure: P_w PSIG: 572	+ 12 = PSIA: 584	
Temperature: T= 69 °F	Ft= .9915	n = .75	Fpv (From Tables): 1.022	Gravity: .655	Fg = .9571

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

$Q = (12.365)(249)(.9915)(.9571)(1.022) =$ 2986 MCF/D

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

$Aof = Q \left(\frac{7203856}{6862800} \right)^n = 2986\ (1.0497)^{.75} = 2986\ (1.0370)$

Aof = 3097 MCF/D

Note: Well produced a heavy mist of water.

TESTED BY B. J. B.

WITNESSED BY

William D. Welch

William D. Welch
Well Test Engineer