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EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 4/18/73

Operator El Paso Natural Gas Company		Lease San Juan 28-7 Unit #190	
Location 1840' N, 800' E, Sec. 27, T28N, R7W		County Rio Arriba	State NM
Formation Dakota		Pool Basin	
Casing: Diameter 4 1/2	Set At: Feet 7362	Tubing: Diameter 1 1/2	Set At: Feet 7320
Pay Zone: From 7080	To 7298	Total Depth: 7362	Shut In 3/21/73
Stimulation Method SWF		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365			
Shut-In Pressure, Casing, PSIG 2162	+ 12 = PSIA 2174	Days Shut-In 28	Shut-In Pressure, Tubing PSIG 1754	+ 12 = PSIA 1766	
Flowing Pressure: P PSIG 319	+ 12 = PSIA 331		Working Pressure: Pw PSIG 661	+ 12 = PSIA 673	
Temperature: T = 84 °F	Ft = .9777	n = .75	Fpv (From Tables) 1.028	Gravity .650	Fg = .9608

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

$$Q = (12.365)(331)(.9777)(.9608)(1.028) = 3952 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{4726276}{4273374} \right)^n = 3952 (1.1060)^{.75} = 3952 (1.0785)$$

$$Aof = 4263 \text{ MCF/D}$$

NOTE: The well produced a light to medium mist of water throughout the test.

TESTED BY W. Welch

WITNESSED BY

William D Welch
William D. Welch
Well Test Engineer