

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE October 31, 1973

Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit #147	
Location 790 840 1025/N, 800/E Sec. 36, T27N, R5W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 4.500	Set At: Feet 8541'	Tubing: Diameter 1 1/2	Set At: Feet 8492'
Pay Zone: From 8300	To 8510'	Total Depth: 8541	Shut In 10-6-73
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Orifice			
Choke Size, Inches 2.750 Plate, 4" MR		Choke Constant: C 41.10	
Shut-In Pressure, Casing, PSIG 2415		Days Shut-In 25	Tested thru a 3/4" Variable choke
Flowing Pressure: P PSIG 154 MR, 222 WH		Working Pressure: P _w PSIG 1444	+ 12 = PSIA 1497
Temperature: T = 64 °F F_t = .9962		F _{pv} (From Tables) 1.015	Gravity .655 F_g = 1.236

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

$$Q = \text{Calculated from orifice meter readings} = \underline{3305} \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{5890329}{3770393} \right)^n = (3305) (1.5623)^{.75} = (3305) (1.3974)$$

$$Aof = \underline{4618} \text{ MCF/D}$$

Note: The well produced 12 bbls of 57.8°
ApI gravity oil and 46 bbls of water during
the test.

TESTED BY C. Rhames, Don Norton

WITNESSED BY _____

H. E. McAnally
Well Test Engineer

