

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DATE August 1, 1977

Operator El Paso Natural Gas Company		Lease Barnes #2-A	
Location NW 22- <sup>32</sup> <del>25</del> -11		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4 1/2	Set At: Feet 5858'	Tubing: Diameter 2 3/8"	Set At: Feet 5685'
Pay Zone: From 4739	To 5787	Total Depth: 5858	Shut In 7-23-77
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing XX

Choke Size, Inches .750		Choke Constant: C 12.3650			
Shut-In Pressure, Casing, PSIG	+ 12 = PSIA	Days Shut-In 8	Shut-In Pressure, Tubing PSIG	+ 12 = PSIA	
			675	687	
Flowing Pressure: P PSIG	+ 12 = PSIA	Working Pressure: P <sub>w</sub> PSIG	+ 12 = PSIA		
246	258	Calc.	515		
Temperature: T = 76 °F	n = Ft = .9850	F <sub>pv</sub> (From Tables) 1.024	Gravity .670	F <sub>g</sub> = .9463	

$$\text{CHOKE VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

$$Q = 12.3650(258)(.9850)(.9463)(1.024) = \underline{\quad 3045 \quad} \text{ MCF/D}$$

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

$$Aof = Q \left( \frac{471969}{206744} \right)^n = (3045)(2.2829)^{.75} = (3045)(1.8572)$$

$$Aof = \underline{\quad 5655 \quad} \text{ MCF/D}$$

Note: Well blew light fog of distillate and water first 35 minutes and then blew dry gas rest of test. Well vented to the atmosphere 391 MCF of gas.

TESTED BY D. Wright, C. R. Wagner

WITNESSED BY Jim Thurstonson

C. R. Wagner  
Well Test Engineer

