

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DATE 8-5-75

Operator El Paso Natural Gas Company		Lease Howell F # 2 (CH)	
Location 1760/S, 1450/E, Sec. 1, T 27 N, R 8 W		County San Juan	State New Mexico
Formation CH		Pool Undes.	
Casing: Diameter 2.875	Set At: Feet 4537	Tubing: Diameter No tubing	Set At: Feet ---
Pay Zone: From 4328	To 4333	Total Depth: PBD 4537 4526	Shut In 7-22-75
Stimulation Method Sandwater Frac		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches .750		Choke Constant: C 12.365		Tubingless Completion	
Shut-In Pressure, Casing, PSIG 1055	+ 12 = PSIA 1067	Days Shut-In 12	Shut-In Pressure, Tubing PSIG No tubing	+ 12 = PSIA ----	
Flowing Pressure: P PSIG 9	+ 12 = PSIA 21		Working Pressure: Pw PSIG Calculated	+ 12 = PSIA 28	
Temperature: T = 64 °F Ft = .9962	n =		Fpv (From Tables) .75	Gravity .655 Fg = .9571	

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

$$Q = (12.365)(21)(.9962)(.9571)(1.004) = 249 \text{ MCF/D}$$

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

$$Aof = Q \left(\frac{1138489}{1137705} \right)^n = (249)(1.0007)^{.75} = (249)(1.0052) = 250.3$$

$$Aof = 250 \text{ MCF/D}$$

Note: Well unloaded heavy fog of water and distillate in approximately 10 min. 45.42 MCF of gas was vented to the atmosphere during the test..

TESTED BY Norton

WITNESSED BY

Charles W. D.
Well Test Engineer