

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE May 27, 1965

Operator El Paso Natural Gas Company		Lease San Juan 29-5 Unit No. 32 (14V) (OWO)	
Location 990'S, 1500'W, Section 29, T-29-N, R-5-W		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 7.000	Set At: Feet 7625	Tubing: Diameter 1.660	Set At: Feet 5681
Pay Zone: From 5290	To 5724	Total Depth: 8032	Shut In 5-11-65
Stimulation Method Sand Water Frac		Flow Through Casing X	Flow Through Tubing

Choke Size, Inches .750	Choke Constant: C 12.365		Baker Model "D" Packer set at 5778 ft.	
Shut-In Pressure, Casing, (MV) 959 PSIG	+ 12 = PSIA 971	Days Shut-In 16	Shut-In Pressure, Tubing (MV) 955 PSIG	+ 12 = PSIA 967
Flowing Pressure: P 371 PSIG	+ 12 = PSIA 383		Working Pressure: P _w 401 PSIG	+ 12 = PSIA 413
Temperature: T = 72 °F	F _i = .9887	n = .75	F _p v (From Tables) 1.036	Gravity .650 F _g = .9608

ISIT (DK) = 1616 psig
FSIT (DK) = 1630 psig

CHOKE VOLUME = Q = C × P_i × F_i × F_g × F_pv

Q = (12.365) (333) (.9887) (.9608) (1.036) = 4661 MCF/D

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

Aof = $\left(\frac{942,841}{772,272} \right)^n = (1.2208) (4661)^{.75} = (4661) (1.1615)$

Aof = 5414 MCF/D



TESTED BY D. Norton
CALCULATED BY C. R. Wagner
WITNESSED BY _____
CHECKED BY W. D. Dawson

Lewis D. Galloway
Lewis D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE May 20, 1965

Operator El Paso Natural Gas Company		Lease San Juan 29-5 Unit No. 32 (DK) (OWWO)	
Location 990'S, 1500'W, Section 29, T-29-N, R-5-W		County Rio Arriba	State New Mexico
Formation Dakota		Pool Basin	
Casing: Diameter 5.000	Set At: Feet 8029	Tubing: Diameter 2.375	Set At: Feet 7814
Pay Zone: From 7775	To 7872	Total Depth: 8032	Shut In 5-13-65
Stimulation Method Sand Water Frac		Flow Through Casing	Flow Through Tubing X

Choke Size, inches .750	Choke Constant: C 12.365	Baker Model "D" Packer set at 5778 ft.	
Shut-In Pressure, Casing, PSIG 926 (MV)	+ 12 = PSIA 938	Days Shut-In 7	Shut-In Pressure, Tubing PSIG 1487 (DK)
Flowing Pressure: P PSIG 131	+ 12 = PSIA 143	Working Pressure: P _w PSIG Calc.	+ 12 = PSIA 317
Temperature: T = 67 °F	n = .75	Fpv (From Tables) 1.011	Gravity .601
F _t = .9933	F _g = 1.000		

ISIP (MV) = 924 psig
FSIPC (MV) = 931 psig

CHOKE VOLUME = Q = C × P_t × F_t × F_g × F_{pv}

$$Q = (12.365) (143) (.9933) (1.000) (1.011) = \underline{1,776} \text{ MCF/D}$$

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

$$Aof = \left(\frac{2,247,001}{2,146,512} \right)^n = (1776) (1.0468)^{.75} = (1776) (1.0349)$$

$$Aof = \underline{1,838} \text{ MCF/D}$$



NOTE: Well produced a light spray of distillate and water throughout the test.

TESTED BY D. R. Roberts
CALCULATED BY H. E. McAnally
~~W. D. Dawson~~
CHECKED BY W. D. Dawson

Lewis D. Galloway
Lewis D. Galloway