

EL PASO NATURAL GAS COMPANY

Memorandum

To: Initial Potential Distribution List

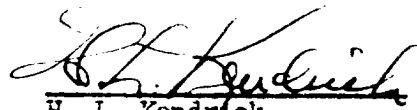
Date: February 20, 1959

From: Gas-Production Engineering

Place: Farmington, New Mex.

SUBJECT: Initial Potential of a Worked over Well.

The attached Initial Potential test was made on this well after work over. This test signifies the completion of the work over and the well is ready for re-connection and production to the gathering system.


H. L. Kendrick
Gas Engineer

HLK/nb

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE August 16, 1960

Operator El Paso Natural Gas Co.		Lease San Juan No. 10 (OWO) (NY)	
Location 9908, 990W; 10-30N-10W		County San Juan	State New Mexico
Formation Mesaverde		Pool Blanco	
Casing: Diameter 7"	Set At: Feet 5293	Tubing: Diameter 2"	Set At: Feet 5540
Pay Zone: From 5374	To 5456	Total Depth: 5617 g/o 5614	Shut In 8/7/60
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365		5-1/2" liner from 5191 to 5617 Baker "BJ" Packer at 5293	
Shut-In Pressure, Casing, (PO) 873	PSIG	+ 12 = PSIA 885	Days Shut-In 9	Shut-In Pressure, Tubing 866 (NY)	PSIG + 12 = PSIA 878
Flowing Pressure: P 185	PSIG	+ 12 = PSIA 197		Working Pressure: Pw Calc.	PSIG + 12 = PSIA 389
Temperature: T = 68 °F	F _g = .9924	n = .75		Fpv (From Tables) 1.019	Gravity .670 F _g = .9463

Initial SIFC (PO) = 873 psig
Final SIFC (PO) = 876 psig

$$\text{CHOKE VOLUME} = Q \cdot C \cdot P_1 \cdot F_1 \cdot F_g \cdot F_{pv}$$

$$Q = 12.365 \times 197 \times .9924 \times .9463 \times 1.019 = 2331 \text{ MCF/D}$$

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

$$Aof = \left(\frac{770884}{619563} \right)^n = 1.2442^{.75} \times 2331 = 1.1782 \times 2331$$

$$Aof = 2746 \text{ MCF/D}$$

Flow down in 5 min. Unloaded - then
blew very light fog.

TESTED BY Frank Clark

WITNESSED BY _____

Checked By L. D. Galloway

Lewis D. Galloway
L. D. Galloway

OPEN FLOW TEST DATA

DUAL COMPLETION

August 25, 1960

El Paso Natural Gas Co.

San Juan No. 10 (OWWO) (P)

990S, 990W. 10;30N;10W

San Juan

New Mexico

Pictured Cliffs

Undesignated

7"

5293

1-1/4

3134

3088

3130

5617 c/o 5614

8/7/60

Sand Water Frac.

X

.75

12.365

5 1/2" liner from 5191 to 5617

922 (PC)

934

18

923 (PC)

935

Csg. 291

303

Tbg. 305

317

65

.9952

.85

1.027

.635

.9721

Initial SIPT (M) = 962 psig

Baker "EGJ" Packer at 5293

Final SIPT (M) = 962 psig

12.365 x 303 x .9952 x .9721 x 1.027

3722

874225
773736

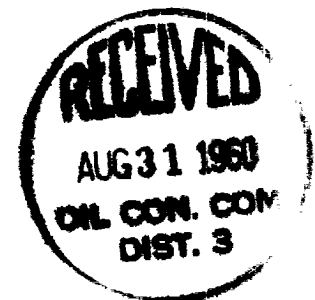
1.1298⁸⁵ x 3722 = 1.1092 x 3722

4128

C. R. Wagner

Checked By W. D. Dawson

Lewis D. Galloway
L. D. Galloway



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