

NEW MEXICO OIL CONSERVATION GAS WELL TEST DATA SHEET

(TO BE USED FOR FRUITLAND PICTURED CLIP
EXCEPT MARKER DOME STG)

Pool El Paso Natural Gas Formation El Paso County El Paso
Purchasing Pipeline El Paso Natural Gas Date Test Filed 7/27/58
Operator El Paso Natural Gas Lease San Juan 1945 Unit Well No. 1
Unit 6 Sec. 31 Twp. 34 Rge. 6 Pay Zone From 100 To 100
Casing: OD 3 1/2 WT. 25.5 Set At 250 Tubing: OD 2 WT. 4.7 T. Perf. 250
Produced Through: Casing 2 Tubing 2 Gas Gravity: Measured 0.6 Estimated 0.6
Date of Flow Test: From 7/20/58 To 7/27/58 * Date S.I.P. Measured 7/20/58
Meter Run Size 1 Orifice Size 1 Type Chart 1 Type Tops 1

OBSERVED DATA

Flowing casing pressure (Dwt) 750 psig + 12 = 762 psia (a)
Flowing tubing pressure (Dwt) 750 psig + 12 = 762 psia (b)
Flowing meter pressure (Dwt) 750 psig + 12 = 762 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading 750 psig + 12 = 762 psia (d)
Square root chart reading (750) ² x spring constant 1 = 762 psia (d)
Meter error (c) - (d) or (d) - (c) 0 ± = 0 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing; (a) - (c) Flow through casing = 0 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading 750 psig + 12 = 762 psia (g)
Square root chart average reading (750) ² x spring constant 1 = 762 psia (g)
Corrected seven day avgs. meter press. (p_f) (g) + (e) = 762 psia (h)
P_f = (h) + (f) = 762 psia (i)
Wellhead casing shut-in pressure (Dwt) 750 psig + 12 = 762 psia (j)
Wellhead tubing shut-in pressure (Dwt) 750 psig + 12 = 762 psia (k)
P_c = (j) or (k) whichever well flowed through = 762 psia (l)
Flowing Temp. (Meter Run) 75 °F + 460 = 535 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 381 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{V(a)}{V(d)} \times \left(\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right)^{1/n} = \frac{750}{750} \times \left(\frac{762^2 - 381^2}{762^2 - 381^2} \right)^{1/1} = 750 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 750 \times \left[\frac{762^2 - 381^2}{762^2 - 381^2} \right]^1 = 750 \text{ MCF/day}$$

SUMMARY

P_c = 762 psia
Q = 750 Mcf/day
P_w = 381 psia
P_d = 381 psia
D = 750 Mcf/day

Company El Paso Natural Gas
By Original Signed
Title Harold L. Kendrick
Witnessed by
Company

* This is date of completion test.
* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-a})	(F ₀ Q) ²	(F ₀ Q) ²	(1-e ^{-a})	P _t ²	P _t ² + R ²	P _w
			R ²		(Column 1)		
381	.271	2.66	2.66		274,916	274,916	381

3 at 300 = 307

OK

