

NEW MEXICO OIL CONSERVATION COMMISSION
GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA
EXCEPT BARKER DOME STORAGE AREA)

704-14

OHWO

Pool Blanco Formation Mesa Verde County San Juan

Purchasing Pipeline El Paso Natural Gas Date Test Filed _____

Operator El Paso Natural Gas Lease Vandewart Well No. 3-A

Unit M Sec. 13 Twp. 29 Rge. 8 Pay Zone: From 5243 To 5950

Casing: OD 7 WT. 23 Set At 5182 Tubing: OD 2 WT. 4.7 T. Perf. 5338

Produced Through: Casing _____ Tubing X Gas Gravity: Measured 676 Estimated _____

Date of Flow Test: From 5/30/59 To 6/7/59 * Date S.I.P. Measured 5/22/58

Meter Run Size _____ Orifice Size _____ Type Chart _____ Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)

Flowing tubing pressure (Dwt) _____ psig + 12 = _____ psia (b)

Flowing meter pressure (Dwt) _____ psig + 12 = _____ psia (c)

Flowing meter pressure (meter reading when Dwt. measurement taken:

Normal chart reading _____ psig + 12 = _____ psia (d)

Square root chart reading ()² x spring constant _____ = _____ psia (d)

Meter error (c) - (d) or (d) - (c) _____ ± _____ = _____ psi (e)

Friction loss, Flowing column to meter:

(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____ = _____ psi (f)

Seven day average static meter pressure (from meter chart):

Normal chart average reading _____ psig + 12 = _____ psia (g)

Square root chart average reading (6.80)² x sp. const. 10 _____ = 462 psia (g)

Corrected seven day avge. meter press. (pf) (g) + (e) _____ = 462 psia (h)

P_t = (h) + (f) _____ = 462 psia (i)

Wellhead casing shut-in pressure (Dwt) 854 psig + 12 = 861 psia (j)

Wellhead tubing shut-in pressure (Dwt) 846 psig + 12 = 858 psia (k)

P_c = (j) or (k) whichever well flowed through _____ = 858 psia (l)

Flowing Temp. (Meter Run) 66 °F + 460 _____ = 526 ° Abs (m)

P_d = ½ P_c = ½ (l) _____ = 429 psia (n)

$$Q = \text{(integrated)} \times \left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(d)}} \right) = \underline{497} \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \underline{497} \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \frac{1.0665}{1.0495} = \underline{522} \text{ MCF/day}$$

SUMMARY

P_c = 858 psia
Q = 497 Mcf/day
P_w = 467 psia
P_d = 429 psia
D = 522 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 ^{-S})	(F _c Q) ²	(F _c Q) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
3608	.231	21.837	5.044	213,444	218488	467

D at 500 = 462

Old Well Work Over.

Perforated. 10/29/58

