

Initial Deliverability
Test

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)

Pool Antero Formation Permian County Sandoz
Purchasing Pipeline Sandoz Sales Gas Company Date Test Filed February 4, 1960
Operator Antero Oil & Gas Company Lease Block Well No. 24
Unit 0 Sec. 7 Twp. 28 Rge. 9 Pay Zone: From 2120 To 2140
Casing: OD 4 1/2 WT. 9.50 Set At 2000 Tubing: OD 2 WT. 1.7 T. Perf. 2000
Produced Through: Casing 2 1/2 Tubing 2 1/2 Gas Gravity: Measured 0.64 Estimated 0.64
Date of Flow Test: From 1/25 To 1/25/60 * Date S.I.P. Measured 12/24/59
Meter Run Size 1 Orifice Size 0.075 Type Chart 8 1/2 Type Taps F

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 (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = _____ psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (k)
P_c = (j) or (k) whichever well flowed through _____ = _____ psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = _____ psia (n)

FLOW RATE CALCULATION

$$Q = \frac{2.448}{(Integrated)} \times \left(\frac{V(c)}{V(d)} = \frac{1.000}{1.000} \right) = 2.448 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 2.448 \text{ MCF/da.}$$

SUMMARY

P_c = 640 psia
Q = 2.448 Mcf/day
P_w = 2120 psia
P_d = 2140 psia
D = 2.448 Mcf/day

Company Antero Oil & Gas Company
By ORIGINAL SIGNED BY L. M. STEVENS
Title L. M. Stevens, Dist. Engineer
Witnessed by _____
Company _____

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ⁻⁸)	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>Friction Loss Is Negligible</u>						



OK