

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 South Elmore Formation Permian (Gallina) County San Juan
Purchasing Pipeline Southern States Gas Company Date Test Filed January 12, 1961
Operator Antec Oil and Gas Company Lease Antec-Blanchette Well No. 1-2
Unit 1 Sec. 4 Twp. 22N Rge. 3W Pay Zone: From 300 To 300
Casing: OD 2 7/8 WT. 6.32 Set At 3332 Tubing: OD 2 1/2 WT. 5.00 T. Perf. 300
Produced Through: Casing X Tubing Gas Gravity: Measured 0.630 Estimated
Date of Flow Test: From 12/23 To 22/24 * Date S.I.P. Measured 2/22/60
Meter Run Size 1 Orifice Size Type Chart 1.1 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: = psi (f)
(b) - (c) Flow through tubing: (a) - (c) Flow through casing
Seven day average static meter pressure (from meter chart):
Normal chart average reading 330 psig + 12 = 342 psia (g)
Square root chart average reading () ² x sp. const. = psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 342 psia (h)
P_t = (h) + (f) = 342 psia (i)
Wellhead casing shut-in pressure (Dwt) 3000 psig + 12 = 3012 psia (j)
Wellhead tubing shut-in pressure (Dwt) psig + 12 = psia (k)
P_c = (j) or (k) whichever well flowed through = 3012 psia (l)
Flowing Temp. (Meter Run) 82 °F + 460 = 542 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 1506 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{Q_{integrated}}{V(c)} \times \left(\frac{V(d)}{V(c)} \right) = \frac{260}{1.0016} = 259 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85} = 260 \left[\frac{3012^2 - 1506^2}{3012^2 - 300^2} \right]^{0.85} = 266 \text{ MCF/day}$$

SUMMARY

P_c = 3012 psia
Q = 260 Mcf/day
P_w = 300 psia
P_d = 1506 psia
D = 266 Mcf/day
Company Antec Oil and Gas Company
By
Title ORIGINAL SIGNED BY L. M. STEVENS
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 1)	P _t ² + R ²	P _w
2210	0.148	2.289	0.339	315.84	316.179	300

O/C

