

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 Pictured Cliffs County San Juan
Purchasing Pipeline Southern Union Gas Company Date Test Filed March 8, 1960

Operator Astec Oil & Gas Company Lease Arizona-Flamingo Well No. 7
Unit 3 Sec. 26 Twp. 25 Rge. 4 Pay Zone: From 335 To 370
Casing: OD 4 1/2 WT. 11.30 Set At 3489 Tubing: OD 2" WT. 4.7 T. Perf. 3430
Produced Through: Casing 1 1/8 Tubing XX Gas Gravity: Measured 0.695 Estimated
Date of Flow Test: From 11/6 To 11/16/60 * Date S.I.P. Measured 11/6/60
Meter Run Size 1 Orifice Size 1.030 Type Chart RR Type Taps 7

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 (7.2) ² x sp. const. 10 _____ = _____ 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) 972 psig + 12 = 984 psia (j)
Wellhead tubing shut-in pressure (Dwt) 963 psig + 12 = 975 psia (k)
P_c = (j) or (k) whichever well flowed through 69 _____ = _____ psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = _____ psia (n)

FLOW RATE CALCULATION

$$Q = \frac{175}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{1.0000}{1.0000} \right) = 175 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{175}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.5}} = 128 \text{ MCF/da.}$$

SUMMARY

P_c = 975 psia
Q = 175 Mcf/day
P_w = 108 psia
P_d = 128 psia
D = 128 Mcf/day

Company Astec 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 ^{-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
<u>2303</u>	<u>0.165</u>	<u>2.706</u>	<u>0.446</u>	<u>253.304</u>	<u>253770</u>	<u>228.4</u>

