

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 Astoc Formation Richard Cliff County San Juan
Purchasing Pipeline Southern Union Gas Company Date Test Filed February 6, 1960
Operator Astoc Oil & Gas Company Lease None Well No. 11
Unit 1 Sec. 23 Twp. 29 Rge. 20 Pay Zone: From 2206 To 2293
Casing: OD 4 1/2 WT. 9.90 Set At 2221 Tubing: OD 1 WT. 1.7 T. Perf. 2233
Produced Through: Casing 1 1/2 Tubing 1 1/2 Gas Gravity: Measured 0.694 Estimated 0.694
Date of Flow Test: From 1/13/60 To 1/13/60 * Date S.I.P. Measured 10/10/59
Meter Run Size 1 Orifice Size 1.750 Type Chart 1 Type Taps 1

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)

Q = 145 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{1.000}{\sqrt{(d)}} \right) = \underline{145} \text{ MCF/da}$
(Integrated)

D = Q 145 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{146} \text{ MCF/da.}$
n 0.974

SUMMARY

P_c = 662 psia
Q = 145 Mcf/day
P_w = 222 psia
P_d = 222 psia
D = _____ Mcf/day

Company Astoc Oil & Gas Company
By ORIGINAL SIGNED BY L. M. STEVENS
Title L. M. Stevens, Dist. Eng.
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
Friction loss is negligible						



OK

