

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 Blanco Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed Jan. 8, 1958
Operator Colo. Western Exp. Inc. Lease Jaquez Well No. 1
Unit K Sec. 2 Twp. 31 N Rge. 13 W Pay Zone: From 4418 To 4677
Casing: OD 5 1/2" WT. 15.5# Set At 4730 Tubing: OD 2" NUE WT. 4.7# T. Perf. 4643
Produced Through: Casing _____ Tubing xxxx Gas Gravity: Measured .685 Estimated _____
Date of Flow Test: From 12/9/57 To 12/17/57 Date S.I.P. Measured 6/30/57
Meter Run Size 4" Orifice Size 1" Type Chart 50 RT Type Taps Flange

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 (7.4) ² x sp. const. /0 _____ = 548 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 548 psia (h)
P_t = (h) + (f) _____ = 548 psia (i)
Wellhead casing shut-in pressure (Dwt) 1037 psig + 12 = 1049 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1020 psig + 12 = 1032 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1032 psia (l)
Flowing Temp. (Meter Run) 56 °F + 460 _____ = 516 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 516 psia (n)

Q = 480 (integrated) x $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{1}{1} \right) = \underline{480}$ MCF/DAY

DELIVERABILITY CALCULATION

D = Q 480 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.75} = \frac{798,768}{764,720}^{.75} \times 1.032 = \underline{495}$ MCF/DAY

SUMMARY

P_c = 1032 psia
Q = 480 Mcf/day
P_w = 548 psia
P_d = 516 psia
D = 495 Mcf/day

Company Colorado Western Exploration, Inc.
By Charles E. Hilton
Title Area Superintendent
Witnessed by Fred Hilton
Company Colorado Western Exploration, Inc.

- * 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

The integrated volume used in this test was taken from a per hour average during the flow week. This was made necessary due to a line break on Dec. 15 during the flow week.

OK

5 day flow

