

Initial Deliverability
Test

2 Compass- Denver
1 Compass- Farmington
1 El Paso
1 File

Form C-122-A
Revised April 20, 1955

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 Basin Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 12-18-61
Operator Compass Exploration, Inc. Lease Burts Federal Well No. 1-23
Unit A Sec. 23 Twp. 27N Rge. 13W Pay Zone: From 5890 To 6107
Casing: OD 4 1/2" WT. 11.6 Set At 6148 Tubing: OD 2 3/8 WT. 4.7 T. Perf. Open end
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .653 Estimated _____
Date of Flow Test: From 11-16-61 To 11-24-61 * Date S.I.P. Measured 12-4-61
Meter Run Size 4" Orifice Size 1.000 Type Chart Sq. Root Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 643 psig + 12 = 645 psia (a)
Flowing tubing pressure (Dwt) 491 psig + 12 = 503 psia (b)
Flowing meter pressure (Dwt) 473 psig + 12 = 485 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (6.50)² x spring constant 10 = 422 psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ = +63 psi (e)
Friction loss, Flowing column to meter: _____ = +18 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 _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.55)² x sp. const. 10 = 429 psia (g)
Corrected seven day avge. meter press. (P_f) (g) + (e) _____ = 492 psia (h)
P_t = (h) + (f) _____ = 510 psia (i)
Wellhead casing shut-in pressure (Dwt) 1731 psig + 12 = 1743 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1737 psig + 12 = 1749 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1749 psia (l)
Flowing Temp. (Meter Run) 80 °F + 460 _____ = 540 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 874 psia (n)

FLOW RATE CALCULATION

Q = 666 X $\left(\frac{\sqrt{(c)} = \sqrt{1.1493} = 1.0721}{\sqrt{(d)}} \right) = \underline{714} MCF/day
(Integrated)$

DELIVERABILITY CALCULATION

D = Q 714 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.75} = \underline{617} MCF/day
 $\left[\frac{2,295,125}{2,788,041} \right]^{.75} \cdot .8643 \cdot .75$$

SUMMARY

P_c = 1749 psia
Q = 714 Mcf/day
P_w = 529 52.1 psia
P_d = 874 psia
D = 617 Mcf/day

Company Compass Exploration, Inc.
By [Signature]
Title Production Superintendent
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
4015	.241	45.864	10.860	260.100	270.960	529 52.1

