

Initial Deliverability
Test

72912

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 Formation Bakota County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease Madge Well No. 20
Unit 0 Sec. 8 Twp. 31 Rge. 11 Pay Zone: From 7130 To 7350
Casing: OD 5-1/2 WT. 17 Set At 7447 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 7221
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .608 Estimated _____
Date of Flow Test: From 5/21/61 To 5/29/61 * Date S.I.P. Measured Jan 9/22/60
Meter Run Size _____ Orifice Size _____ Type Chart _____ Type Taps _____

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. _____ = 197 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 197 psia (h)
P_t = (h) + (f) _____ = 197 psia (i)
Wellhead casing shut-in pressure (Dwt) 2418 psig + 12 = 2430 psia (j)
Wellhead tubing shut-in pressure (Dwt) 2465 psig + 12 = 2477 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 2477 psia (l)
Flowing Temp. (Meter Run) 82 °F + 460 _____ = 542 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 1239 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right) = \underline{2030}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 2030 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{1708}$ MCF/da.
 $\frac{4600108}{5789073}$ $\frac{.7946}{.8416}$

SUMMARY

P_c = 2477 psia
Q = 2030 Mcf/day
P_w = 589 psia
P_d = 1239 psia
D = 1708 Mcf/day

Company El Paso Natural Gas
By Original signed by
Title H. L. Kendrick
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>4390</u>	<u>0.273</u>	<u>364275</u>	<u>99447</u>	<u>247009</u>	<u>346456</u>	<u>589</u>

D at 500 = 2026



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