

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 Basin Formation Dakota County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Lease Rincon Well No. 151 (DK)
Unit B Sec. 14 Twp. 27 Rge. 7 Pay Zone: From 7360 To 7520
Casing: OD. 5-1/2 WT. 15.5 Set At 7634 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 7460
Produced Through: Casing _____ Tubing I Gas Gravity: Measured .651 Estimated _____
Date of Flow Test: From 12/7/60 To 12/15/60 * Date S.I.P. Measured 10/11/60
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. _____ = 608 psia (g)
Corrected seven day avge. meter press. (P_f) (g) + (e) _____ = 608 psia (h)
P_f = (h) + (f) _____ = 608 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = 2549 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ psig + 12 = 2621 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 2621 psia (l)
Flowing Temp. (Meter Run) 89 °F + 460 _____ = 549 ° Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 1311 psia (n)

FLOW RATE CALCULATION

Q = _____ X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \frac{1697}{\sqrt{(d)}} = 1697$ MCF/day
(Integrated)

DELIVERABILITY CALCULATION

D = Q 1697 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{5150220}{6424118} \cdot \frac{.8018}{.8473} = 1438$ MCF/day

SUMMARY

P_c = 2621 psia
Q = 1697 Mcf/day
P_w = 607 psia
P_d = 1311 psia
D = 1438 Mcf/day

Company El Paso Natural Gas Company
By H. L. Kendrick Sr. Gas Engineer
Title Harold L. Kendrick
Witnessed by _____
Company _____

- * This is date of completion test.
- * Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(FcQ) ²	(FcQ) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
4862	.293	254.562	75.859	369664	445523	607

D at 500 = 1718

