

Initial Deliverability
Test
74-913

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 Angel Peak Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____

Operator El Paso Natural Gas Lease Huerfano Well No. 109 (D)
Unit I Sec. 2 Twp. 26 Rge. 10 Pay Zone: From 6848 To 6922
Casing: OD 7-5/8 WT. 26.4 Set At 6380 Tubing: OD 2 WT. 4.7 T. Perf. 6879
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .684 Estimated _____
Date of Flow Test: From 12/7/59 To 12/15/59 Date S.I.P. Measured 9/18/59
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. 50 7 = 519 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 519 psia (h)
P_t = (h) + (f) _____ = 519 psia (i)
Wellhead casing shut-in pressure (Dwt) Dual psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ psig + 12 = 1852 psia (k)
P_c = (j) or (k) whichever well flowed through 14 = 1852 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 = 534 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 926 psia (n)

FLOW RATE CALCULATION

Q = _____ X $\left(\frac{V(c)}{V(d)} \right)^{.875} = \text{★ } \underline{631} \text{ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 631 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \underline{542} \text{ MCF/da.}$
 $\left[\frac{2572428}{3150335} \right]^n$ $\frac{.8165}{.8590}$

SUMMARY

P_c = 1852 psia
Q = 631 Mcf/day
P_w = 529 psia
P_d = 926 psia
D = 542 Mcf/day

Company El Paso Natural Gas
By _____ Original Signed
Title _____
Witnessed by Harold L. Kendrick
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
4705	.290	35.200	10208	269361	279569	529

D at 500 = 632



