

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 El
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed _____
Operator El Paso Natural Gas Co. Lease Ludrick Well No. 16
Unit G Sec. 31 Twp. 30 Rge. 10 Pay Zone: From 6071 To 7048
Casing: OD 5500 WT. 1700 Set At 7146 Tubing: OD 2375 WT. 0470 T. Perf. 6970
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .654 Estimated _____
Date of Flow Test: From 5-14-61 To 5-21-61 * Date S.I.P. Measured 8-30-60
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. _____ = 469 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 469 psia (h)
P_t = (h) + (f) _____ = 469 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = 2026 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ psig + 12 = 1843 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1843 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 922 psia (n)

FLOW RATE CALCULATION

Q = 561 X $\left(\frac{\sqrt{(c)} = \underline{1.0000} = \underline{1.0000}}{\sqrt{(d)}} \right)^2 = \underline{561} MCF/day
(integrated)$

DELIVERABILITY CALCULATION

D = Q 561 $\left[\frac{(P_c^2 - P_d^2) = \underline{.8056}}{(P_c^2 - P_w^2) = \underline{\hspace{1cm}}} \right]^n \underline{.8407} = \underline{476} MCF/day.$

SUMMARY

P_c = 1843 psia
Q = 561 Mcf/day
P_w = 477 psia
P_d = 922 psia
D = 476 Mcf/day

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

- * 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
4558	.282	27026	7647	21991	227558	477

D at 500 = 555

CORRECTED COPY



