

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 7283201 Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease HUNTSMAN Well No. 113
Unit C Sec. 33 Twp. 27 Rge. 10 Pay Zone: From 6206 To 6234
Casing: OD 2-7/8 WT. 6.40 Set At 6525 Tubing: OD None WT. _____ T. Perf. _____
Produced Through: Casing X Tubing _____ Gas Gravity: Measured _____ Estimated .711
Date of Flow Test: From 6/6/61 To 6/14/61 * Date S.I.P. Measured 1/5/61
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. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 533 psia (h)
P_t = (h) + (f) _____ = 533 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = 533 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1999 psig + 12 = 2011 psia (k)
P_c = (j) or (k) whichever well flowed through No Tubing = _____ psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 = 2011 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 1006 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{879}{(\text{Integrated})} \times \left(\frac{\frac{V(c)}{V(d)}}{\frac{V(c)}{V(d)}} \right) = 879 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = 749 \text{ MCF/day}$$

SUMMARY

P_c = 2011 psia
Q = 879 Mcf/day
P_w = 533 psia
P_d = 1006 psia
D = 749 Mcf/day

Company El Paso Natural Gas Co.
By _____
Title _____
Witnessed by 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
<u>4469</u>	<u>.277</u>	<u>23.805</u>	<u>6594</u>	<u>284089</u>	<u>290683</u>	<u>533</u>

D at 500 = 883

