

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 Blanco Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease Vandervart Well No. 4-A
Unit B Sec. 13 Twp. 29 Rge. 8 Pay Zone: From 4776 To 5486
Casing: OD 7" WT. 23 Set At 4638 Tubing: OD 2" WT. 4.7 T. Perf. 4766
Produced Through: Casing _____ Tubing x Gas Gravity: Measured .695 Estimated _____
Date of Flow Test: From 11-22-57 To 11-30-57 * Date S.I.P. Measured 7-23-57
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 (7.15)² x sp. const. 10 _____ = 511 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 511 psia (h)
P_t = (h) + (f) _____ = 511 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ 968 psig + 12 = 980 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ 957 psig + 12 = 969 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 969 psia (l)
Flowing Temp. (Meter Run) _____ 51 °F + 460 _____ = 511 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 485 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{_____ } 385 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \text{ } 385 \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{703736}{675036} \right]^n \frac{(1.0425).75}{(1.0317)} = \text{_____ } 397 \text{ MCF/da.}$$

SUMMARY

P_c = 969 psia Company El Paso Natural Gas
Q = 385 Mcf/day By Original Signed
P_w = 514 psia Title Lewis D. Galloway
P_d = 485 psia Witnessed by _____
D = 397 Mcf/day 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
3312	.214	13,104	2.804	261121	263925	514

D at 500 = 385

Tubing Perforated

