

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 BLANCO Formation MESA VERDA County SAN JUAN
Purchasing Pipeline EL PASO NATURAL GAS COMPANY Date Test Filed Dec.. 31, 1959
Operator FRANK A. SCHULTZ Lease SCHULTZ-STATE Well No. 13-16
Unit G Sec. 16 Twp 27N Rge. 8W Pay Zone: From 4448 To 4514
Casing: OD 5-1/2 WT. 15.5 Set At 4649 Tubing: OD 2" EUE WT. 4.7 T. Perf. 4550
Produced Through: Casing _____ Tubing X Gas Gravity: Measured 0.704 Estimated _____
Date of Flow Test: From 12-14-59 To 12-22-59 * Date S.I.P. Measured _____
Meter Run Size _____ Orifice Size 1.750 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 (7.10) ² x sp. const. 10 = 504 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 504 psia (h)
P_t = (h) + (f) _____ = 504 psia (i)
Wellhead casing shut-in pressure (Dwt) 1056 psig + 12 = 1068 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1054 psig + 12 = 1066 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 531 psia (l)
Flowing Temp. (Meter Run) 71 °F + 460 _____ = 533 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = _____ psia (n)

FLOW RATE CALCULATION

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

DELIVERABILITY CALCULATION

$$D = Q \text{ } \underline{904} \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{852,000}{867,000} \right]^n \text{ } \underline{0.987} = \underline{892} \text{ MCF/day.}$$

SUMMARY

P_c = 1066 psia
Q = 904 Mcf/day
P_w = 519 psia
P_d = 533 psia
D = 892 Mcf/day

Company FRANK A. SCHULTZ
By Michael A. State
Title Engineer
Witnessed by _____
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
3203	0.208	72230	15020	254,016	269,036	519

