

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 South Blanco P.C. Formation Picture Cliff County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 7-14-58
Operator Hugh McMillan Lease Hall Well No. 2
Unit P Sec. 28 Twp. 25N Rge. 3W Pay Zone: From 3544 To 3580
Casing: OD 5 1/2 WT. 15.5 Set At 3645 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 3572
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .660 Estimated _____
Date of Flow Test: From 6-23-58 To 6-29-58 * Date S.I.P. Measured 4-15-58
Meter Run Size 4" Orifice Size 1.500 Type Chart Sq. Rt. Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) 212 psig + 12 = 224 psia (a)
Flowing tubing pressure (Dwt) 212 psig + 12 = 224 psia (b)
Flowing meter pressure (Dwt) 212 psig + 12 = 224 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (6.7)² x spring constant 500 = 224 psia (d)
Meter error (c) - (d) or (d) - (c) ± _____ = 0 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 0 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.75)² x sp. const. 500 = 228 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 228 psia (h)
P_t = (h) + (f) = 228 psia (i)
Wellhead casing shut-in pressure (Dwt) 1030 psig + 12 = 1042 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1030 psig + 12 = 1042 psia (k)
P_c = (j) or (k) whichever well flowed through = 1042 psia (l)
Flowing Temp. (Meter Run) 66 °F + 460 = 526 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 521 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{300}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{14.97}{14.97} = 1.000 \right) = 300 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{300}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.85}} = 245 \text{ MCF/da.}$$

SUMMARY

P_c = 1042 psia
Q = 300 Mcf/day
P_w = 228 psia
P_d = 521 psia
D = 245 Mcf/day

Company Well Production Company
By N. A. NEELY, OWNER
Title 1841 ZUNI DRIVE
Witnessed by FARMINGTON, NEW MEXICO
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 R ²	(1-e ^{-S})	P _t ² (Column i)	P _t ² + R ²	P _w

