

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. 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. 4
Unit P Sec. 21 Twp. 25N Rge. 3W Pay Zone: From 3786 To 3820
Casing: OD 5 1/2 WT. 14.00 Set At 3865 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 3823
Produced Through: Casing X Tubing Gas Gravity: Measured .656 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 1.750 Type Chart Sq. Rt. Type Taps

OBSERVED DATA

Flowing casing pressure (Dwt) 220 psig + 12 = 232 psia (a)
Flowing tubing pressure (Dwt) 220 psig + 12 = 232 psia (b)
Flowing meter pressure (Dwt) 220 psig + 12 = 232 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading psig + 12 = psia (d)
Square root chart reading (6.8)² x spring constant 500 = 231 psia (d)
Meter error (c) - (d) or (d) - (c) ± = 1 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) = 229 psia (h)
P_t = (h) + (f) = 229 psia (i)
Wellhead casing shut-in pressure (Dwt) 1014 psig + 12 = 1026 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1014 psig + 12 = 1026 psia (k)
P_c = (j) or (k) whichever well flowed through = 1026 psia (l)
Flowing Temp. (Meter Run) 67 °F + 460 = 527 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 513 psia (n)

FLOW RATE CALCULATION

Q = 513 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^* = \underline{514}$ MCF/day
(Integrated) 15.23 = 1.002
15.20

DELIVERABILITY CALCULATION

D = Q 514 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \cdot \frac{.85}{.8178} = \underline{420}$ MCF/day.
789507
.7893
1000235

SUMMARY

P_c = 1026 psia
Q = 514 Mcf/day
P_w = 229 psia
P_d = 513 psia
D = 420 Mcf/day

Company Well Production Company
By N. A. NEELY, OWNER
Title 1041 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



