

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 Basin Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 3-9-64
Operator DAN AMERICAN PETROLEUM CORP. Lease Buff Gas Unit Well No. 1
Unit D Sec. 34 Twp. 30N Rge. 12W Pay Zone: From 6274 To 6331
Casing: OD 4-1/2 WT. 10.3 Set At 6425 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 6337
Produced Through: Casing Tubing X Gas Gravity: Measured .713 Estimated
Date of Flow Test: From 4-9-64 To 4-17-64 * Date S.I.P. Measured 3-13-64
Meter Run Size 4" Orifice Size 1.230 Type Chart Sq. Rt. Type Taps Flange

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 (7.3) ² x sp. const. 10 = 519 psia (g)
Corrected seven day avg. meter press. (p_f) (g) + (e) = 568 psia (h)
P_t = (h) + (f) = 568 psia (i)
Wellhead casing shut-in pressure (Dwt) 1041 psig + 12 = 1053 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1073 psig + 12 = 1085 psia (k)
P_c = (j) or (k) whichever well flowed through = 1087 psia (l)
Flowing Temp. (Meter Run) °F + 460 = °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 544 psia (n)

Q = X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right) = \text{MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION

D = Q 568 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \text{MCF/da.}$
 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right] = \frac{2,949,133}{3,612,685}$ n .8612

SUMMARY

P_c = 1087 psia
Q = 568 Mcf/day
P_w = 379 psia
P_d = 544 psia
D = 748 Mcf/day

Company DAN AMERICAN PETROLEUM CORPORATION
By F. L. Eubank
Title District Engineer
Witnessed by Myr ORIGINAL SIGNED BY
Company F. W. Foell

* 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
4483	.278	66,681	18,315	316,960	335,484	579

