

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 12-24-64

Operator THE AMERICAN PETROLEUM COMPANY Lease O. L. Bando Well No. 3
Unit A Sec. 9 Twp. 36N Rge. 13W Pay Zone: From 6355 To 6379
Casing: OD 4 1/2 WT. 10.5 Set At 6381 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 6380
Produced Through: Casing 2 Tubing 2 Gas Gravity: Measured .706 Estimated
Date of Flow Test: From 11-21-64 To 11-29-64 * Date S.I.P. Measured 6-8-64
Meter Run Size 4" Orifice Size 1.500 Type Chart 64, 84 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 (7.2)² x sp. const. 10 = 510 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 510 psia (h)
P_t = (h) + (f) = 510 psia (i)
Wellhead casing shut-in pressure (Dwt) 1605 psig + 12 = 1617 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1600 psig + 12 = 1610 psia (k)
P_c = (j) or (k) whichever well flowed through = 1620 psia (l)
Flowing Temp. (Meter Run) °F + 460 = °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 810 psia (n)

Q = X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \text{ } = \text{ }} \right)^* = \text{ }$ MCF/day
(integrated) $\sqrt{(d)} = \text{ }$

DELIVERABILITY CALCULATION

D = Q 1348 $\left[\frac{(P_c^2 - P_d^2) = 1,940,300}{(P_c^2 - P_w^2) = 2,311,361} \right]^n \text{ } 0.0043 = \text{1195}$ MCF/day.

SUMMARY

P_c = 1620 psia
Q = 1348 Mcf/day
P_w = 360 psia
P_d = 810 psia
D = 1195 Mcf/day

Company THE AMERICAN PETROLEUM COMPANY
By F. L. Bando
Title DISTRICT ENGINEER
Witnessed by BY
Company ORIGINAL SIGNED BY
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
4489	0.279	162.638	44.813	288.326	313.139	360

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