

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 Elmore-Pictured Cliffs Formation Pictured Cliffs County Sio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Corporation Date Test Filed 2-27-59

Operator PAN AMERICAN PETROLEUM CORP. Lease Alamogordo Contract 155 Well No. 9
Unit 8 Sec. 30 Twp. 24N Rge. 5E Pay Zone: From 3020 To 3044
Casing: OD 6-2/3 WT. 9.5 Set At 3130 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 3004
Produced Through: Casing _____ Tubing I Gas Gravity: Measured 0.697 Estimated _____
Date of Flow Test: From 1-15-59 To 1-23-59 * Date S.I.P. Measured 11-27-58
Meter Run Size 4 Orifice Size 1.750 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 (_____) ² x sp. const. _____ = 532 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 532 psia (h)
P_t = (h) + (f) _____ = 532 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ 944 psig + 12 = 976 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ 944 psig + 12 = 976 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 976 psia (l)
Flowing Temp. (Meter Run) _____ 99 °F + 460 _____ = 519 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 488 psia (n)

FLOW RATE CALCULATION

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

DELIVERABILITY CALCULATION

$$D = Q \text{ — } \frac{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n}{1.102} = \text{_____ MCF/da.}$$

SUMMARY

P_c = 976 psia
Q = 1590 Mcf/day
P_w = 942 psia
P_d = 488 psia
D = 1762 Mcf/day

Company PAN AMERICAN PETROLEUM CORPORATION
By R. E. Bumer, Jr.
Title Field Engineer
Witnessed by _____
Company _____

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

*Furnished by pipeline company

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
<u>2100</u>	<u>0.142</u>	<u>225.721</u>	<u>32.032</u>	<u>283.024</u>	<u>315.076</u>	<u>942</u>

INITIAL DELIVERABILITY TEST

Ok

