

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 Undesignated Dakota Formation Dakota County San Juan
Purchasing Pipeline Southern Union Gas Company Date Test Filed February 15, 1960
Operator Pan American Petroleum Corp. Lease Miller Gas Unit Well No. 1
Unit H Sec. 20 Twp. 30N Rge. 13W Pay Zone: From 6056 To 6100
Casing: OD 5-1/2 WT. 14.8 4.15.56 Set At 6228 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 6049
Produced Through: Casing _____ Tubing X Gas Gravity: Measured 0.724* Estimated _____
Date of Flow Test: From 12-24-59 To 12-31-59 * Date S.I.P. Measured 7-8-59
Meter Run Size 4" Orifice Size 1.000 Type Chart Conventional 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 590* psig + 12 = 562 psia (g)
Square root chart average reading (_____)² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 562 psia (h)
P_t = (h) + (f) _____ = 562 psia (i)
Wellhead casing shut-in pressure (Dwt) 1908 psig + 12 = 1920 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1921 psig + 12 = 1933 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1933 psia (l)
Flowing Temp. (Meter Run) 68* °F + 460 _____ = 528 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 967 psia (n)

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

DELIVERABILITY CALCULATION

$$D = Q \text{ } \underline{353*} \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right] = \underline{2,001,400} \text{ } \underline{0.8615} = \underline{304} \text{ MCF/da.}$$

SUMMARY

P_c = 1933 psia
Q = 353* Mcf/day
P_w = 565 psia
P_d = 967 psia
D = 304 Mcf/day

Company Pan American Petroleum Corporation
By R. M. Bower, Jr.
Title Area Engineer
Witnessed by _____
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 (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>4379</u>	<u>.273</u>	<u>11,016</u>	<u>3,007</u>	<u>315,844</u>	<u>318,851</u>	<u>565</u>

*Furnished by pipeline company,



