

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 Rio Arriba
Purchasing Pipeline Southern Union Gas Company Date Test Filed May 18, 1960
Operator Pan American Petroleum Corp. Lease Jicarilla Contract 147 Well No. 1
Unit A Sec. 8 Twp. 22N Rge. 5W Pay Zone: From 7166 To 7186
Casing: OD 4-1/2 WT. 11.6 Set At 7530 Tubing: OD 2-3/8 WT. 4.7 T. Perf. open ended
Produced Through: Casing Tubing X Gas Gravity: Measured 0.690 Estimated
Date of Flow Test: From 4-24-60 To 5-1-60 * Date S.I.P. Measured 4-2-60
Meter Run Size 4" Orifice Size 1.500 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 (6.78)² x sp. const. 10 = 460 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 460 psia (h)
P_t = (h) + (f) = 460 psia (i)
Wellhead casing shut-in pressure (Dwt) 2321 psig + 12 = 2333 psia (j)
Wellhead tubing shut-in pressure (Dwt) 2321 psig + 12 = 2333 psia (k)
P_c = (j) or (k) whichever well flowed through = 2333 psia (l)
Flowing Temp. (Meter Run) 67 °F + 460 = 527 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 1167 psia (n)

FLOW RATE CALCULATION

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

DELIVERABILITY CALCULATION

D = Q 939* $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n \frac{0.8330}{1} = \text{782 MCF/da.}$
4,081,000
5,207,831

SUMMARY

P_c = 2333 psia
Q = 939* Mcf/day
P_w = 485 psia
P_d = 1167 psia
D = 782 Mcf/day

Company Pan American Petroleum Corporation
By R. M. Bauer, Jr. RMB/Sauer
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
4934	0.301	77.934	23,458	211,600	235,058	485

