

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 Mesa-Mesa Verde Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 2-1-57
Operator PAN AMERICAN PETROLEUM CORPORATION Lease Amelia L. Elliott "B" Well No. 2
Unit N Sec. 10 Twp. 29 Rge. 9 Pay Zone: From 3965 To 4835
Casing: OD 7" WT. 200 Set At 3965 Tubing: OD 2-3/8" WT. 4.75 T. Perf. 4767
Produced Through: Casing Tubing X Gas Gravity: Measured .695 Estimated
Date of Flow Test: From 1-8-57 To 1-16-57 * Date S.I.P. Measured 1-23-57
Meter Run Size 4" Orifice Size 5" Type Chart 89.14 Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 645 psig + 12 = 657 psia (a)
Flowing tubing pressure (Dwt) 499 psig + 12 = 511 psia (b)
Flowing meter pressure (Dwt) 483 psig + 12 = 495 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading psig + 12 = psia (d)
Square root chart reading (6.95)² x spring constant 1000 = 483 psia (d)
Meter error (c) - (d) or (d) - (c) = +12 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 16 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading psig + 12 = psia (g)
Square root chart average reading (7.00)² x sp. const. 1000 = 490 psia (g)
Corrected seven day avge. meter press. (P_f) (g) + (e) = 502 psia (h)
P_t = (h) + (f) = 518 psia (i)
Wellhead casing shut-in pressure (Dwt) 863 psig + 12 = 875 psia (j)
Wellhead tubing shut-in pressure (Dwt) 792 psig + 12 = 804 psia (k)
P_c = (j) or (k) whichever well flowed through = 804 psia (l)
Flowing Temp. (Meter Run) 73 °F + 460 = 513 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 402 psia (n)

FLOW RATE CALCULATION

Q = 1972 X $\left(\frac{\sqrt{(c)} = \underline{22.249} = \underline{1.012}}{\sqrt{(d)} = \underline{21.977}} \right)^2 = \underline{1611}$ MCF/day
(integrated)

DELIVERABILITY CALCULATION

D = Q 1611 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{2191}$ MCF/day
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{472,827}{312,976}$ n 1.36

SUMMARY

P_c = 804 psia
Q = 1611 Mcf/day
P_w = 963 psia
P_d = 402 psia
D = 2191 MCF/day

Company PAN AMERICAN PETROLEUM CORPORATION
By R. M. Bauer, Jr. RMBauer, Jr.
Title Field Engineer
Witnessed by
Company

* This is date of completion test.
* Meter error correction factor

REMARKS ON FRICTION CALCULATIONS

GL	(1-e ^{-S})	(P _c Q) ²	(P _c Q) ² (1-e ^{-S})	P _t ²	P _t ² + R ²	P _w
			R ²	(Column i)		
<u>3323</u>	<u>.214</u>	<u>239.523</u>	<u>49.118</u>	<u>268.324</u>	<u>317.442</u>	<u>963</u>

* LINES: 5" OD 150
Set at 3965'-4835', 10/19/56

TIME FOR NEW ALLOWABLE AFTER WORKOVER

all