

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 West Hole Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed September 12, 1960

Operator Pan American Petroleum Corp. Lease Charley Hook Well No. 1
Unit B Sec. 12 Twp. 27N Rge. 13W Pay Zone: From 9947 To 9946
Casing: OD 4-1/2 WT. 9.5 Set At 4044 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 9945
Produced Through: Casing _____ Tubing X Gas Gravity: Measured 0.635 Estimated _____
Date of Flow Test: From 8-22-60 To 8-30-60 * Date S.I.P. Measured 7-12-60
Meter Run Size 4" Orifice Size 1.750 Type Chart Sp. B. 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 (7.10)² x sp. const. 10 _____ = 504 psia (g)
Corrected seven day avge. meter press. (P_f) (g) + (e) _____ = 504 psia (h)
P_t = (h) + (f) _____ = 504 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ 2022 psig + 12 = 2024 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ 2016 psig + 12 = 2030 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 2030 psia (l)
Flowing Temp. (Meter Run) _____ 73 °F + 460 _____ = 539 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 1015 psia (n)

Q = _____ X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^*$ = _____ MCF/da
(Integrated)

DELIVERABILITY CALCULATION

D = Q 3794 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n$ 0.8733 = 2110 MCF/da.
3,090,405
3,732,940

SUMMARY

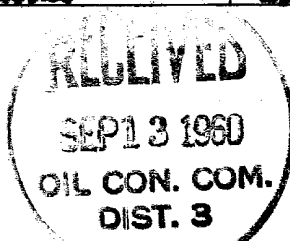
P_c = 2030 psia Company Pan American Petroleum Corporation
Q = 3794 Mcf/day By R. H. Bauer, Jr.
P_w = 647 psia Title Area Engineer
P_d = 1015 psia Witnessed by _____
D = 2110 Mcf/day Company _____

* 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>3794</u>	<u>0.239</u>	<u>670.040</u>	<u>244.924</u>	<u>252.026</u>	<u>432.940</u>	<u>647</u>

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2-12

0 1 2 3 4 5 6 7 8 9