

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 Otero Chacra Formation Chacra County Rio Arriba
Purchasing Pipeline El Paso Nat'l Gas Co. Date Test Filed 2-23-58
Operator Amerada Pet. Corp. Lease J. Apache "F" Well No. 4
Unit J Sec. 18 Twp. 29N Rge. 9E Pay Zone: From 3904' To 3630'
Casing: OD 9 1/4" WT. 15.5 Set At 3649' Tubing: OD 2 3/8" WT. 4.7 T. Perf. 3435'
Produced Through: Casing Tubing X Gas Gravity: Measured 0.676 Estimated X
Date of Flow Test: From 12-31-57 To 1-8-58 * Date S.I.P. Measured 1-16-58
Meter Run Size 4" Orifice Size 1.90" Type Chart L-10 500 Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) _____ psig + 12 = 380 psia (b)
Flowing meter pressure (Dwt) _____ psig + 12 = 387 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (6.2)² x spring constant 5 = 387 psia (d)
Meter error (c) - (d) or (d) - (c) ± _____ = 0 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____ = 3 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (8.90)² x sp. const. 5 = 396 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 399 psia (h)
P_t = (h) + (f) _____ = 399 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 386 _____ psig + 12 = 398 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 398 psia (l)
Flowing Temp. (Meter Run) 63 °F + 460 _____ = 503 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 499 psia (n)

Q = 1.015 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \sqrt{387} = 1} \right)^* = \underline{1.015}$ MCF/da
(Integrated) $\sqrt{(d)} = \sqrt{387}$

DELIVERABILITY CALCULATION

D = Q 1.015 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{912}$ MCF/da.
 $\frac{747003}{836803}$ n 0.9183

SUMMARY

P_c = 398 psia Company Amerada Petroleum Corporation
Q = 1.015 Mcf/day By D. J. Furr
P_w = 399 psia Title Foreman
P_d = 499 psia Witnessed by _____
D = 912 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
2322	0.155	91	14	159201	160113	399

P_o = 9.402
N = 0.75

