

Initial Deliverability
Test

Form C-122-A
Revised April 20, 1955

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 Alamosa Formation Alamosa County San Juan
Purchasing Pipeline Southern Union Gas Company Date Test Filed January 29, 1960
Operator Apache Oil & Gas Company Lease Delgadillo-Garcia Well No. 13
Unit 1 Sec. 20 Twp. 36N Rge. 10E Pay Zone: From 1450 To 1470
Casing: OD 7 WT. 20 & 23 Set At 1410 Tubing: OD 2 WT. 4.7 T. Perf. 1470
Produced Through: Casing 1 Tubing 1 Gas Gravity: Measured 0.450 Estimated
Date of Flow Test: From 12/1/59 To 1/1/60 * Date S.I.P. Measured 12/3/59
Meter Run Size 1 Orifice Size 2.000 Type Chart 1 Type Taps 7

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 130 psig + 12 = 142 psia (g)
Square root chart average reading () ² x sp. const. = 142 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 142 psia (h)
P_t = (h) + (f) = 142 psia (i)
Wellhead casing shut-in pressure (Dwt) 1046 psig + 12 = 1058 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1025 psig + 12 = 1037 psia (k)
P_c = (j) or (k) whichever well flowed through 10 = 10 psia (l)
Flowing Temp. (Meter Run) 70 °F + 460 = 530 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 5 psia (n)

Q = 970 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{1.000}{1.000} \right) = \underline{970} MCF/da
(Integrated)$

D = Q 970 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.75} = \underline{970} MCF/da.
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.75} = \frac{1.000}{1.000}$$

SUMMARY

P_c = 1058 psia
Q = 970 Mcf/day
P_w = 5-58 591-2 psia
P_d = 5 psia
D = 970 Mcf/day

Company Apache Oil & Gas Company
By ORIGINAL SIGNED BY L. M. STEVENS
Title L. M. Stevens, Dist. 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>300</u>	<u>0.232</u>	<u>80.402</u>	<u>17.592</u>	<u>10394</u>	<u>10406</u>	<u>591-2</u>

OK



