

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 Ballard Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 8-25-60

Operator FUDCO PETROLEUM CORPORATION Lease Otero Well No. 4
Unit 6 Sec. 23 Twp. 24N Rge. 6W Pay Zone: From 2099 To 2161
Casing: OD 7 WT. 20 Set At 2246 Tubing: OD 1.75 WT. 1.7 T. Perf. 2125
Produced Through: Casing Tubing X Gas Gravity: Measured 0.682 Estimated
Date of Flow Test: From 7-30-60 To 8-7-60 * Date S.I.P. Measured 6-13-60
Meter Run Size 4" Orifice Size 1" Type Chart 84. Rt. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 316 psig + 12 = 328 psia (a)
Flowing tubing pressure (Dwt) 297 psig + 12 = 219 psia (b)
Flowing meter pressure (Dwt) 297 psig + 12 = 219 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading psig + 12 = psia (d)
Square root chart reading (6.7)² x spring constant 5 = 224 psia (d)
Meter error (c) - (d) or (d) - (c) = -5 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 0 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading psig + 12 = psia (g)
Square root chart average reading (6.60)² x sp. const. 5 = 213 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 213 psia (h)
P_t = (h) + (f) = 213 psia (i)
Wellhead casing shut-in pressure (Dwt) 654 psig + 12 = 666 psia (j)
Wellhead tubing shut-in pressure (Dwt) 654 psig + 12 = 666 psia (k)
P_c = (j) or (k) whichever well flowed through = 666 psia (l)
Flowing Temp. (Meter Run) 74 °F + 460 = 534 °Abs (m)
P_d = 1/2 P_c + 1/2 (l) = 333 psia (n)

FLOW RATE CALCULATION

Q = 86 (Integrated) X $\left(\frac{\sqrt{(c)} \text{ } 219 = 14.79865}{\sqrt{(d)} \text{ } 224 = 14.96663} = 0.98878 \right) = 75$ MCF/day

DELIVERABILITY CALCULATION

D = Q 75 $\left[\frac{(P_c^2 - P_d^2) = 332.667}{(P_c^2 - P_w^2) = 397.674} \right]^n \frac{0.83653}{0.8592} = 64$ MCF/day.

"D" at 262 = 71

SUMMARY

P_c = 666 psia
Q = 75 Mcf/day
P_w = 214 psia
P_d = 333 psia
D = 64 Mcf/day

Company FUDCO PETROLEUM CORPORATION
By B. H. Weyhoff, Jr.
Title Production Engineer
Witnessed by Jack Dunning
Company Fudco Petroleum Corp.

* 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>389</u>	<u>0.074</u> <u>0.028</u>	<u>1524</u> <u>14,299</u>	<u>113</u> <u>400</u> 513	<u>45,369</u>	<u>45,882</u>	<u>214</u>

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1. The first part of the report is a general introduction to the subject of the study.

2. The second part of the report is a detailed description of the methods used in the study.

3. The third part of the report is a discussion of the results of the study.

4. The fourth part of the report is a conclusion and a list of references.

5. The fifth part of the report is a list of appendices.

6. The sixth part of the report is a list of figures and tables.

7. The seventh part of the report is a list of footnotes.

8. The eighth part of the report is a list of references.

9. The ninth part of the report is a list of appendices.

10. The tenth part of the report is a list of figures and tables.

11. The eleventh part of the report is a list of footnotes.

12. The twelfth part of the report is a list of references.

13. The thirteenth part of the report is a list of appendices.

14. The fourteenth part of the report is a list of figures and tables.

15. The fifteenth part of the report is a list of footnotes.

16. The sixteenth part of the report is a list of references.