

3-CCC

1-EPMS Production Dept.

1-B

1-F

Initial Deliverability
Test

Form C-122-A

Revised April 20, 1955

"CORRECTED REPORT"

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 Basin Dakota Formation Dakota County BJ
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 4/21/61
Operator Southwest Production Co. Lease James Scott Well No. 1
Unit A Sec. 18 Twp. 30N Rge. 11W Pay Zone: From 6393 To 6644
Casing: OD 3 1/2" WT. 178 Set At 6682 Tubing: OD 3/8" WT. 4.70 T. Perf. 6564
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .660 Estimated _____
Date of Flow Test: From 3/29/61 To 4/6/61 * Date S.I.P. Measured 4/13/61
Meter Run Size _____ Orifice Size 1.250 Type Chart _____ Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) 518 psig + 12 = 530 psia (b)
Flowing meter pressure (Dwt) 513 psig + 12 = 525 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.25)² x spring constant 1000 = 526 psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ = -1 psi (e)
Friction loss, Flowing column to meter: _____ = 5 psi (f)
(b) - (c) Flow through tubing: (a) - (c) Flow through casing
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.20)² x sp. const. 1000 = 518 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 517 psia (h)
P_t = (h) + (f) _____ = 522 psia (i)
Wellhead casing shut-in pressure (Dwt) 1830 psig + 12 = 1842 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1830 psig + 12 = 1842 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1842 psia (l)
Flowing Temp. (Meter Run) 83 °F + 460 _____ = 543 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 921 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{701}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{525}{526} = \frac{.9980}{.9990} \right)^* = 700 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{700}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = \frac{2,544,723}{3,108,786} \frac{(.8605)}{(.8185)} = 602 \text{ MCF/day}$$

SUMMARY

P_c = 1842 psia
Q = 700 Mcf/day
P_w = 533 psia
P_d = 921 psia
D = 602 Mcf/day

Company Southwest Production Company
By George L. Hoffman, Jr.
Title Production Foreman
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
4332	.270	43,310	11,694	272,404	284,178	533



