

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 Basin Dakota Formation Dakota County SJ
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 3/2/61

Operator Southwest Production Co. Lease Edgar Federal Well No. 3
Unit G Sec. 1 Twp. 27N Rge. 12W Pay Zone: From 6324 To 6342
Casing: OD 5 1/2" WT. 15.5 Set At 6436 Tubing: OD 2 3/8 WT. 4.70 T. Perf. 6341
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .714 Estimated _____
Date of Flow Test: From 2/4/61 To 2/14/61 * Date S.I.P. Measured 2/23/61
Meter Run Size _____ Orifice Size _____ Type Chart _____ Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) 520 psig + 12 = 433 532 psia (b)
Flowing meter pressure (Dwt) 504 psig + 12 = 516 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.1)² x spring constant 1000 = 504 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 _____ = 16 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.05)² x sp. const. 1000 = 497 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 509 psia (h)
P_t = (h) + (f) _____ = 525 psia (i)
Wellhead casing shut-in pressure (Dwt) 1728 psig + 12 = 1740 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1726 psig + 12 = 1738 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1738 psia (l)
Flowing Temp. (Meter Run) 98 °F + 460 _____ = 558 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 869 psia (n)

Q = 403 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{1.0238}{\sqrt{(d)}} = \frac{1.0119}{\sqrt{(d)}} \right)^* = \underline{408} \text{ MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION

D = Q 408 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{2,265,483}{2,740,900} \cdot \frac{(.8265)}{(.8668)} = \underline{354} \text{ MCF/da.}$

SUMMARY

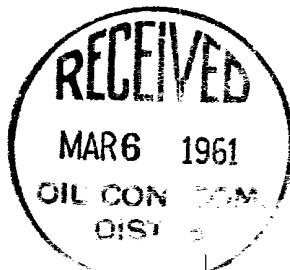
P_c = 1738 psia
Q = 408 Mcf/day
P_w = 529 psia
P_d = 869 psia
D = 354 Mcf/day

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
4327	.280	14,714	4,119	275,625	279,744	529



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MEMBERS OF THE
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