

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 4/4/61
Operator Southwest Production Co. Lease Edgar Federal Well No. 1
Unit G Sec. 12 Twp. 27N Rge. 12W Pay Zone: From 6363 To 6381
Casing: OD 5 1/2" WT. 15.5 Set At 6504 Tubing: OD 2 3/8" WT. 4.70 T. Perf. 6361
Produced Through: Casing X Tubing X Gas Gravity: Measured .715 Estimated
Date of Flow Test: From 2/6/61 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) 499 psig + 12 = 511 psia (a)
Flowing tubing pressure (Dwt) 478 psig + 12 = 490 psia (b)
Flowing meter pressure (Dwt) 478 psig + 12 = 490 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading 7.0 psig + 12 = 490 psia (d)
Square root chart reading (7.0)² x spring constant 1000 = 490 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 = 21 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading 7.0 psig + 12 = 490 psia (g)
Square root chart average reading (7.0)² x sp. const. 1000 = 490 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 490 psia (h)
P_t = (h) + (f) = 511 psia (i)
Wellhead casing shut-in pressure (Dwt) 1526 psig + 12 = 1538 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1526 psig + 12 = 1538 psia (k)
P_c = (j) or (k) whichever well flowed through = 1538 psia (l)
Flowing Temp. (Meter Run) 70 °F + 460 = 530 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 769 psia (n)

Q = 142 (Integrated) X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{V(c)}{V(d)} = \frac{1.0}{1.0} = 1.00} \right)^* = \underline{142} \text{ MCF/da}$

DELIVERABILITY CALCULATION

D = Q 142 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{128} \text{ MCF/da.}$
 $\frac{1,774,083}{2,099,299} = .8433$
 $\frac{1,774,083}{2,103,821} = .8433$
 $(.8433)^{.75} = .8433$

SUMMARY

P_c = 1538 psia Company Southwest Production Company
Q = 142 Mcf/day By George L. Hoffman, Jr.
P_w = 511 psia Title Production Manager
P_d = 769 psia Witnessed by
D = 128 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
<u>4548</u>	<u>.282</u>	<u>17,824</u>	<u>5.024</u>	<u>261,121</u>	<u>266,145</u>	<u>516</u>
		<u>1,782</u>	<u>503</u>		<u>266,623</u>	<u>511</u>

OK



1870

1871

1872

1873

1874

1875

1876

1877

1878

1879