

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 Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator Pioneer Prod. Corp. Lease Smith Well No. 1
Unit J Sec. 12 Twp. 29N Rge. 13W Pay Zone: From 5994 To 6142
Casing: OD 5 1/2 WT. 15.5 Set At 6250 Tubing: OD 1 1/2 WT. 2.4 T. Perf. 6115
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .675 Estimated _____
Date of Flow Test: From _____ To _____ * Date S.I.P. Measured 6-3-61 ?
Meter Run Size 4" Orifice Size 1.500 Type Chart SR Type Taps Flange

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 _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.85) ² x sp. const. 10 _____ = 469 psia (g)
Corrected seven day avge. meter press. (pf) (g) + (e) _____ = _____ psia (h)
 $P_t = (h) + (f)$ _____ = 469 psia (i)
Wellhead casing shut-in pressure (Dwt) 1511 psig + 12 = 1523 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1512 psig + 12 = 1524 psia (k)
 $P_c = (j) \text{ or } (k) \text{ whichever well flowed through}$ _____ = 1524 psia (l)
Flowing Temp. (Meter Run) 75 °F + 460 _____ = 565 °Abs (m)
 $P_d = \frac{1}{2} P_c = \frac{1}{2} (l)$ _____ = 762 psia (n)

Q = 758 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\sqrt{(d)}}{\sqrt{(d)}} \right)^* = \underline{758} \text{ MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION

$D = Q \frac{758}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{1,741,932}{2,012,415} \right]^n .75 .8974} = \underline{680} \text{ MCF/da.}$
(.8656) .75

SUMMARY

$P_c = \underline{1524}$ psia
Q = 758 Mcf/day
 $P_w = \underline{557}$ psia
 $P_d = \underline{762}$ psia
D = 680 Mcf/day

Company Pioneer Prod. Corp.
By Original signed by T. A. D.
Title Consulting 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
4128	.259	348.270	90.202	219.961	510.165	557

