

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 Phillips Well No. 1
Unit C Sec. 16 Twp. 22N Rge. 11W Pay Zone: From 6064 To 6216
Casing: OD 5 1/2" WT. 15.5# Set At 6168 Tubing: OD 1 1/2" WT. 2.4 T. Perf. 6168
Produced Through: Casing _____ Tubing I Gas Gravity: Measured .356 Estimated _____
Date of Flow Test: From _____ To _____ * Date S.I.P. Measured 5-21-61
Meter Run Size 4" Orifice Size 1.750 Type Chart 32 Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 1105 psig + 12 = 1117 psia (a)
Flowing tubing pressure (Dwt) 671 psig + 12 = 683 psia (b)
Flowing meter pressure (Dwt) 476 psig + 12 = 488 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.0)² x spring constant 10 = 490 psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ = 2 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____ = 195 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. 10 = 497 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 495 psia (h)
P_t = (h) + (f) _____ = 690 psia (i)
Wellhead casing shut-in pressure (Dwt) 1982 psig + 12 = 1974 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1980 psig + 12 = 1958 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1958 psia (l)
Flowing Temp. (Meter Run) 78 °F + 460 _____ = 538 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 979 psia (n)

FLOW RATE CALCULATION

Q = 1892 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\sqrt{.9859}}{\sqrt{.9879}} = .9979 \right) = \underline{1892} MCF/day
(Integrated)$

DELIVERABILITY CALCULATION

D = Q 1892 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{.75} = \underline{1942} MCF/day.
 $\left[\frac{2,799,488}{2,705,528} \right]^{.75} (1.0356)^{.75}$$

SUMMARY

P_c = 1982 psia
Q = 1892 Mcf/day
P_w = 1015 psia
P_d = 966 psia
D = 1942 Mcf/day

Company Pioneer Prod. Corp.
By Original signed by T. A. Dugan
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
4057	.255	2169.790	551.296	496.100	1028.296	1015

