

Initial Deliverability
TestForm C-122-A
Revised April 20, 1955NEW 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 KPM Co. Date Test Filed 1-22-62

Operator Pioneer Prod. Corp. Lease Heid Well No. 1
Unit H Sec. 13 Twp. 29N Rge. 12W Pay Zone: From 6142 To 6136
Casing: OD 4 1/2 WT. 9.5 Set At 6406 Tubing: OD 2 3/8 WT. 4.6 T. Perf. 6298
Produced Through: Casing Tubing X Gas Gravity: Measured .637 Estimated
Date of Flow Test: From 12-25-61 To 1-1-62 * Date S.I.P. Measured 1-8-62
Meter Run Size 4" Orifice Size 2.000 Type Chart SR Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 875 psig + 12 = 887 psia (a)
Flowing tubing pressure (Dwt) 839 psig + 12 = 852 psia (b)
Flowing meter pressure (Dwt) 497 psig + 12 = 509 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading psig + 12 = psia (d)
Square root chart reading (7.05)² x spring constant 10 = 497 psia (d)
Meter error (c) - (d) or (d) - (c) = 42 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = +363 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) = 539 psia (h)
P_t = (h) + (f) = 882 psia (i)
Wellhead casing shut-in pressure (Dwt) 1854 psig + 12 = 1866 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1835 psig + 12 = 1847 psia (k)
P_c = (j) or (k) whichever well flowed through = 1847 psia (l)
Flowing Temp. (Meter Run) 70 °F + 460 = 530 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 924 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{2484}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\sqrt{1.0040}}{\sqrt{1.0020}} = 1.0020 \right) = 2489 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{2489}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.75} \frac{1.0082}{(1.0110)^{.75}}} = 2509 \text{ MCF/da.}$$

SUMMARY

P_c = 1847 psia
Q = 2489 Mcf/day
P_w = 939 psia
P_d = 924 psia
D = 2509 Mcf/day

Company Pioneer Prod. Corp.
By Original signed by
Title Consulting Engineer
Witnessed by
Company

- * This is date of completion test.
* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ⁻⁸)	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸) R ²	P _t ² (Column 4)	P _t ² + R ²	P _w
4012	.253	547.633	138.551	743.044	881.995	939

RECEIVED
JAN 23 1962
OIL CON. COM.
DIST. 3

