

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 El Paso Natural Gas Co. Date Test Filed 2-2-62
Operator Pioneer Production Corp. Lease Redfern Well No. 5
Unit N Sec. 10 Twp. 24N Rge. 11W Pay Zone: From 5968 To 6138
Casing: OD 4 1/2" WT. 10.5 Set At 6228 Tubing: OD 2 3/8" WT. 4.74 T. Perf. 6121
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .643 Estimated _____
Date of Flow Test: From 1-6-62 To 1-14-62 * Date S.I.P. Measured 1-21-62
Meter Run Size 4" Orifice Size 1.750 Type Chart S.R. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) Packer psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) 1053 psig + 12 = 1065 psia (b)
Flowing meter pressure (Dwt) 482 psig + 12 = 494 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) _____ ± _____ = +4 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing; (a) - (c) Flow through casing _____ = +571 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.9)² x sp. const. 10 = 476 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 480 psia (h)
_____ = 1051 psia (i)
P_t = (h) + (f) _____
Wellhead casing shut-in pressure (Dwt) Packer psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1818 psig + 12 = 1830 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1830 psia (l)
Flowing Temp. (Meter Run) 61 °F + 460 _____ = 521 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 915 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{1511}{(\text{integrated})} \times \left(\frac{\sqrt{(c)} = \sqrt{1.0082} = 1.0041}{\sqrt{(d)}} \right) = 1517 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{1517}{\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{2,511,675}{2,193,646} \right]^{.75} \frac{1.1068}{(1.1450)^{.75}}} = 1679 \text{ MCF/day}$$

SUMMARY

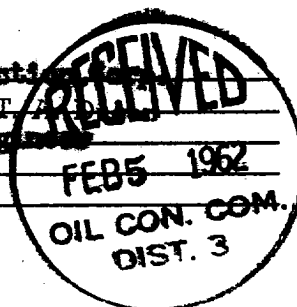
P_c = 1830 psia
Q = 1517 Mcf/day
P_w = 1075 psia
P_d = 915 psia
D = 1679 Mcf/day

Company Pioneer Production Corp.
By Original signed by T. H. ...
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
3936	.249	203,427	50,653	1104,602	1155,254	1075



12/22/2011