

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 Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed _____
Operator The Ohio Oil Company Lease Ohio Cont. Sec. 15 Well No. 2-15
Unit P Sec. 15 Twp. 38N Rge. 11W Pay Zone: From 5968 To 6135
Casing: OD 4 1/2" WT. 11.68 Set At 6224 Tubing: OD 2 3/8" WT. 4.70 T. Perf. 6118 6224
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .666 Estimated _____
Date of Flow Test: From 5/30/61 To 6/6/61 * Date S.I.P. Measured 6/13/61
Meter Run Size 4" Orifice Size 1.750 Type Chart Sq. Rt. Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) 1394 psig + 12 = 1406 psia (a)
Flowing tubing pressure (Dwt) 1250 psig + 12 = 1262 psia (b)
Flowing meter pressure (Dwt) 512 psig + 12 = 524 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.2)² x spring constant 10 = 518 psia (d)
Meter error (c) - (d) or (d) - (c) ± _____ = +6 psi (e)
Friction loss, Flowing column to meter: _____ = _____ psi (f)
(b) - (c) Flow through tubing: (a) - (c) Flow through casing
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.20)² x sp. const. 10 = 518 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 524 psia (h)
P_t = (h) + (f) _____ = 1368 psia (i)
Wellhead casing shut-in pressure (Dwt) 2010 psig + 12 = 2022 psia (j)
Wellhead tubing shut-in pressure (Dwt) 2005 psig + 12 = 2017 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 2017 psia (l)
Flowing Temp. (Meter Run) 63 °F + 460 _____ = 523 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 1009 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{3271}{(\text{integrated})} \times \left(\frac{\sqrt{(c)} \frac{3271}{512} = 22.8910 = 1.0058}{\sqrt{(d)} \frac{518}{22.7596}} \right)^* = 3290 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{3290}{\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{3050}{2230} \right]^{.75}} = 3290 \times 1.264 = 4159 \text{ MCF/day}$$

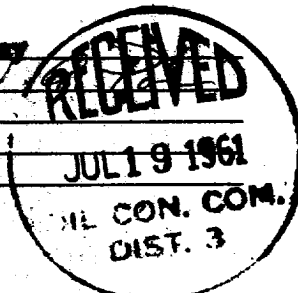
SUMMARY

P_c = 2017 psia
Q = 3290 Mcf/day
P_w = 1356 psia
P_d = 1009 psia
D = 4159 Mcf/day

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

Company The Ohio Oil Company
By H. A. Roe
Title Production Foreman
Witnessed by _____
Company _____

ELS 7/6/61



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
4062	0.256	957	243	1593	1800	1356

OR

