

Initial Deliverability  
TestNEW 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 Gov't. Sec. 26 Well No. 2-26  
Unit E Sec. 26 Twp. 28N Rge. 11W Pay Zone: From 5970 To 6182  
Casing: OD 5½" WT. 15½# Set At 6247 Tubing: OD 2-3/8 WT. 4.7# T. Perf. 6080-6110  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured .672 Estimated \_\_\_\_\_  
Date of Flow Test: From 6/6/61 To 6/13/61 \* Date S.I.P. Measured 6/20/61  
Meter Run Size 4" Orifice Size 2.500 Type Chart Sq. Rt. Type Taps \_\_\_\_\_

## OBSERVED DATA

Flowing casing pressure (Dwt) 1800 psig + 12 = 1812 psia (a)  
Flowing tubing pressure (Dwt) 1560 psig + 12 = 1572 psia (b)  
Flowing meter pressure (Dwt) 501 psig + 12 = 513 psia (c)  
Flowing meter pressure (meter reading when Dwt. measurement taken):  
Normal chart reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (d)  
Square root chart reading (7.20)<sup>2</sup> x spring constant 10 = 518 psia (d)  
Meter error (c) - (d) or (d) - (c) ± \_\_\_\_\_ = -5 psi (e)  
Friction loss, Flowing column to meter:  
(b) - (c) Flow through tubing; (a) - (c) Flow through casing = 1059 psi (f)  
Seven day average static meter pressure (from meter chart):  
Normal chart average reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (g)  
Square root chart average reading (7.15)<sup>2</sup> x sp. const. 10 = 511 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) = 506 psia (h)  
P<sub>t</sub> = (h) + (f) = 1565 psia (i)  
Wellhead casing shut-in pressure (Dwt) 2012 psig + 12 = 2024 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 2010 psig + 12 = 2022 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through = 2022 psia (l)  
Flowing Temp. (Meter Run) 66 °F + 460 = 526 °Abs (m)  
P<sub>d</sub> = ½ P<sub>c</sub> = ½ (l) = 1011 psia (n)

## FLOW RATE CALCULATION

$$Q = \frac{4456}{(\text{Integrated})} \times \left( \frac{\sqrt{(c)} \frac{513}{22.6495} = .9952}{\sqrt{(d)} \frac{518}{22.7596}} \right)^* = 4435 \text{ MCF/da}$$

## DELIVERABILITY CALCULATION

$$D = Q \frac{4435}{\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{3066}{1192} \right]^n \frac{.75}{4435 \times 2.03}} = 9003 \text{ MCF/da.}$$

## SUMMARY

P<sub>c</sub> = 2022 psia  
Q = 4435 Mcf/day  
P<sub>w</sub> = 1702 psia  
P<sub>d</sub> = 1011 psia  
D = 9003 Mcf/day

Company The Ohio Oil Company  
By W. A. Poe  
Title Production Foreman  
Witnessed by \_\_\_\_\_  
Company \_\_\_\_\_

ELS 7/6/61

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

## REMARKS OR FRICTION CALCULATIONS

| GL   | (1-e <sup>-s</sup> ) | (F <sub>c</sub> Q) <sup>2</sup> | (F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )<br>R <sup>2</sup> | P <sub>t</sub> <sup>2</sup><br>(Column i) | P <sub>t</sub> <sup>2</sup> + R <sup>2</sup> | P <sub>w</sub> |
|------|----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------|----------------|
| 4086 | 0.257                | 1738.7                          | 446.9                                                                  | 2449                                      | 2896                                         | 1702           |