

3-00C

1-EPNG Proration Dept.

1-Dallas

1-File

Form C-122-A

Revised April 20, 1955

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 SJ  
 Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 12/20/60  
 Operator Southwest Production Co. Lease Halloway Federal Well No. #6  
 Unit K Sec. 18 Twp. 27N Rge. 11W Pay Zone: From 6426 To 6492  
 Casing: OD 5 1/2" WT. 15.5 Set At 5525 Tubing: OD 2 3/8 WT. 4.70 T. Perf. 6260  
 Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured .698 Estimated \_\_\_\_\_  
 Date of Flow Test: From 11/21/60 To 11/29/60\* Date S.I.P. Measured 12/6/60  
 Meter Run Size \_\_\_\_\_ Orifice Size 1.0000 Type Chart \_\_\_\_\_ Type Taps \_\_\_\_\_

## OBSERVED DATA

Flowing casing pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (a)  
 Flowing tubing pressure (Dwt) 511 psig + 12 = 523 psia (b)  
 Flowing meter pressure (Dwt) 502 psig + 12 = 514 psia (c)  
 Flowing meter pressure (meter reading when Dwt. measurement taken):  
 Normal chart reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (d)  
 Square root chart reading (7.2)<sup>2</sup> x spring constant 1000 = 518 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 \_\_\_\_\_ = 9 psi (f)  
 Seven day average static meter pressure (from meter chart):  
 Normal chart average reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (g)  
 Square root chart average reading (7.20)<sup>2</sup> x sp. const. 1000 = 518 psia (g)  
 Corrected seven day avge. meter press. (pf) (g) + (e) \_\_\_\_\_ = 514 psia (h)  
 P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 523 psia (i)  
 Wellhead casing shut-in pressure (Dwt) 1601 psig + 12 = 1613 psia (j)  
 Wellhead tubing shut-in pressure (Dwt) 1704 psig + 12 = 1716 psia (k)  
 P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1716 psia (l)  
 Flowing Temp. (Meter Run) 81 °F + 460 \_\_\_\_\_ = 541 °Abs (m)  
 P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 858 psia (n)

## FLOW RATE CALCULATION

$$Q = \frac{846}{(\text{integrated})} \times \left( \frac{\sqrt{(c)} = .9922}{\sqrt{(d)} = .9961} \right)^* = 843 \text{ MCF/da}$$

## DELIVERABILITY CALCULATION

$$D = Q \frac{843}{\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = 734 \text{ MCF/da.}$$

$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{2,208,492}{2,653,978}$ 
 $\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{(.8712)}{(.8321)}$

## SUMMARY

P<sub>c</sub> = 1716 psia  
 Q = 843 Mcf/day  
 P<sub>w</sub> = 539 psia  
 P<sub>d</sub> = 858 psia  
 D = 734 Mcf/day

Company Southwest Production Company  
 By [Signature]  
 Title Production Foreman  
 Witnessed by \_\_\_\_\_  
 Company \_\_\_\_\_

\* 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> |
|------|----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------|----------------|
| 4382 | .273                 | 62.818                          | 17.149                                                                 | 273,529                                   | 290,678                                      | 539            |



