

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 South Blanco (P.C.) Formation Pictured Cliffs County R A  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 9-8-58  
Operator Skelly Oil Company Lease C. W. Roberts Well No. 1  
Unit D Sec. 18 Twp. 25N Rge. 3W Pay Zone: From 3620 To 3650  
Casing: OD 5 1/2" WT. 14# Set At 3717 Tubing: OD 2" WT. 4.70 T. Perf. 3608  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured .648 Estimated \_\_\_\_\_  
Date of Flow Test: From 5-15-58 To 5-22-58 \* Date S.I.P. Measured 8-12-57  
Meter Run Size 4" Orifice Size 1.000 Type Chart SR Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (a)  
Flowing tubing pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (b)  
Flowing meter pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (c)  
Flowing meter pressure (meter reading when Dwt, measurement taken:  
Normal chart reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (d)  
Square root chart reading (\_\_\_\_\_) <sup>2</sup> x spring constant \_\_\_\_\_ = \_\_\_\_\_ psia (d)  
Meter error (c) - (d) or (d) - (c) \_\_\_\_\_ ± \_\_\_\_\_ = \_\_\_\_\_ psi (e)  
Friction loss, Flowing column to meter:  
(b) - (c) Flow through tubing; (a) - (c) Flow through casing \_\_\_\_\_ = \_\_\_\_\_ psi (f)  
Seven day average static meter pressure (from meter chart):  
Normal chart average reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (g)  
Square root chart average reading (4.85) <sup>2</sup> x sp. const. 10.00 \_\_\_\_\_ = 235 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = \_\_\_\_\_ psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 235 psia (i)  
Wellhead casing shut-in pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1010 psig + 12 = 1022 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1022 psia (l)  
Flowing Temp. (Meter Run) 64 °F + 460 \_\_\_\_\_ = 524 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 511 psia (n)

Q = \_\_\_\_\_ X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\sqrt{(d)}}{\sqrt{(d)}} \right) =$  \_\_\_\_\_ MCF/day  
(integrated)

DELIVERABILITY CALCULATION

D = Q 584  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n$  .7957<sup>.85</sup> = 481 MCF/day.

SUMMARY

P<sub>c</sub> = 1022 psia Company Skelly Oil Company  
Q = 584 Mcf/day By Lee King  
P<sub>w</sub> = 245 psia Title Production Engineer  
P<sub>d</sub> = 511 psia Witnessed by \_\_\_\_\_  
D = 481 Mcf/day 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> |
|------|----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------|----------------|
| 2338 | .156                 | 30.15                           | 4.703                                                                  | 55,225                                    | 59,928                                       | 245            |



