

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 Formation Pictured Cliffs County S J  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 9-8-58  
Operator Skelly Oil Company Lease Farming "C" Well No. 1  
Unit D Sec. 2 Twp. 27N Rge. 9W Pay Zone: From 2310 To 2340  
Casing: OD 5 1/2" WT. 14# Set At 2444 Tubing: OD 1" WT.        T. Perf. 2310  
Produced Through: Casing X Tubing        Gas Gravity: Measured 642 Estimated         
Date of Flow Test: From 1-6-58 To 1-13-58 \* Date S.I.P. Measured 8-7-57  
Meter Run Size 1" Orifice Size 1.500 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 ( 7.55 )<sup>2</sup> x sp. const. 5.00 = 285 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e)        =        psia (h)  
P<sub>t</sub> = (h) + (f)        =        psia (i)  
Wellhead casing shut-in pressure (Dwt) 695 psig + 12 = 707 psia (j)  
Wellhead tubing shut-in pressure (Dwt)        psig + 12 =        psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through        = 707 psia (l)  
Flowing Temp. (Meter Run) 52 °F + 460        = 512 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l)        = 353 psia (n)

FLOW RATE CALCULATION

Q =        X  $\left( \frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^* = \text{_____ MCF/da}$   
(integrated)

DELIVERABILITY CALCULATION

D = Q 622  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \text{_____ MCF/da.}$   
375,240 418,624 .8964 .85 567

SUMMARY

|                  |            |         |              |                            |
|------------------|------------|---------|--------------|----------------------------|
| P <sub>c</sub> = | <u>707</u> | psia    | Company      | <u>Skelly Oil Company</u>  |
| Q =              | <u>622</u> | Mcf/day | By           | <u>Lee R. King</u>         |
| P <sub>w</sub> = | <u>285</u> | psia    | Title        | <u>Production Engineer</u> |
| P <sub>d</sub> = | <u>353</u> | psia    | Witnessed by | <u>      </u>              |
| D =              | <u>567</u> | Mcf/day | Company      | <u>      </u>              |

- \* 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><br>R <sup>2</sup> | (1-e <sup>-S</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> |
|----|----------------------|---------------------------------|---------------------------------------------------|----------------------|-------------------------------------------|----------------------------------------------|----------------|
|    |                      |                                 |                                                   |                      |                                           |                                              |                |

