

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 Wildcat Lubbock Naty Formation PC County San Juan  
Purchasing Pipeline EP Date Test Filed \_\_\_\_\_

Operator EP Lease Haerfano Well No. 90  
Unit E Sec. 35 Twp. 27N Rge. 10W Pay Zone: From 2370 To 2380  
Casing: OD 5-1/2 WT. 15.5 Set At 2470 Tubing: OD 1-1/4 WT. 2.3 T. Perf. 2358  
Produced Through: Casing I Tubing \_\_\_\_\_ Gas Gravity: Measured 640 Estimated \_\_\_\_\_  
Date of Flow Test: From 3/31/57 To 4/9/57 \* Date S.I.P. Measured 11/29/56  
Meter Run Size 4 Orifice Size 0.500 Type Chart Sq. root Type Taps F

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 (6.55) <sup>2</sup> x sp. const. 5 \_\_\_\_\_ = 215 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 215 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 215 psia (i)  
Wellhead casing shut-in pressure (Dwt) 505 psig + 12 = 517 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 505 psig + 12 = 517 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 517 psia (l)  
Flowing Temp. (Meter Run) 44 °F + 460 \_\_\_\_\_ = 504 ° Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 259 psia (n)

FLOW RATE CALCULATION

Q = \_\_\_\_\_ X  $\left( \frac{V(c)}{V(d)} \right)^* =$  \_\_\_\_\_ MCF/da  
(Integrated)

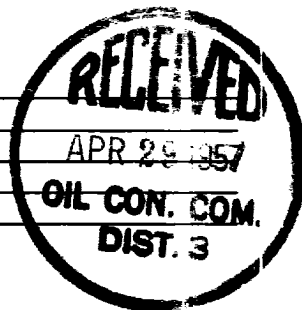
DELIVERABILITY CALCULATION

D = Q 130  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{0.9056}{0.9193} =$  120 MCF/da.

SUMMARY

P<sub>c</sub> = 517 psia  
Q = 130 Mcf/day  
P<sub>w</sub> = 215 psia  
P<sub>d</sub> = 259 psia  
D = 120 Mcf/day

Company Original Signed  
By Lewis D. Galloway  
Title \_\_\_\_\_  
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> |
|----|----------------------|---------------------------------|--|---|--|----------------|
|    |                      |                                 | Negligible   |   |  |                |

12061.5 - 0.8985 = 0.9130  
22106.4

D250 = 119

*OK*