

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 Undesignated Formation Pictured Cliffs County San Juan

Purchasing Pipeline \_\_\_\_\_ Date Test Filed \_\_\_\_\_

Operator El Paso Natural Gas Lease Russell Well No. No. 1-A  
Unit J Sec. 23 Twp. 28N Rge. 8W Pay Zone: From 2414 To 2492  
Casing: OD 5-1/2 WT. 15.5 Set At 2517 Tubing: OD 1-1/4 WT. 2.4 T. Perf. 2448  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured .635 Estimated \_\_\_\_\_  
Date of Flow Test: From 2/21/58 To 3/1/58 \* Date S.I.P. Measured 1-30-58 (11 days)  
Meter Run Size \_\_\_\_\_ Orifice Size 1.000 Type Chart \_\_\_\_\_ Type Taps \_\_\_\_\_

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 ( 7.35 ) <sup>2</sup> x sp. const. 1000 = 540 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 540 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 540 psia (i)  
Wellhead casing shut-in pressure (Dwt) 1041 psig + 12 = 1053 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1041 psig + 12 = 1053 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1053 psia (l)  
Flowing Temp. (Meter Run) 61 °F + 460 \_\_\_\_\_ = 521 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 527 psia (n)

Q = \_\_\_\_\_ X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \text{_____} = \text{_____}} \right)^* = \text{386} \text{ MCF/da}$   
(integrated)  $\sqrt{(d)} = \text{_____}$

DELIVERABILITY CALCULATION

D = Q 386  $\left[ \frac{(P_c^2 - P_d^2) = \text{831080}}{(P_c^2 - P_w^2) = \text{807546}} \right]^n \frac{(1.0291)^{.88}}{(1.0246)} = \text{395} \text{ MCF/da.}$

SUMMARY

P<sub>c</sub> = 1053 psia  
Q = 386 Mcf/day  
P<sub>w</sub> = 549 psia  
P<sub>d</sub> = 537 527 psia  
D = 395 Mcf/day

Company El Paso Natural Gas  
By \_\_\_\_\_ Original Signed  
Title Lewis D. Galloway  
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> |
|------|----------------------|---------------------------------|--|---|--|----------------|
| 1554 | .107                 | 90.307                          | 9.663  | 291.600                                   | 301.263                                      | 549            |

D at 250 = 474



| OIL CONSERVATION COMMISSION |   |   |
|-----------------------------|---|---|
| AZTEC DISTRICT OFFICE       |   |   |
| No. Copies Received         | 3 |   |
| Operator                    |   |   |
| Inspector                   | 1 |   |
| Production                  |   |   |
| Slits (A, B, C)             |   |   |
| U. S. G. S.                 | 1 |   |
| Transporter                 |   |   |
| File                        | 1 | ✓ |
|                             |   |   |