

Initial Deliverability  
Test  
70-159

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 Elanco Formation Mesa Verde County San Juan  
Purchasing Pipeline El Paso Natural Gas Date Test Filed \_\_\_\_\_

Operator El Paso Natural Gas Lease Riddle Well No. 3-B  
Unit I Sec. 23 Twp. 30 Rge. 10 Pay Zone: From 4408 To 3251  
Casing: OD 7 WT. 23 Set At 4343 Tubing: OD 2 WT. 4.7 T. Perf. 4408  
Produced Through: Casing X Tubing X Gas Gravity: Measured .681 Estimated \_\_\_\_\_  
Date of Flow Test: From 11/7/59 To 11/15/59 \* Date S.I.P. Measured 4/14/59  
Meter Run Size \_\_\_\_\_ Orifice Size \_\_\_\_\_ 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 6.95 \_\_\_\_\_ psig + 12 = 483 psia (g)  
Square root chart average reading (\_\_\_\_\_) <sup>2</sup> x sp. const. \_\_\_\_\_ = 483 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 483 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 781 psia (i)  
Wellhead casing shut-in pressure (Dwt) 663 psig + 12 = 675 psia (j)  
Wellhead tubing shut-in pressure (Dwt) \_\_\_\_\_ psig + 12 = 675 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 675 psia (l)  
Flowing Temp. (Meter Run) \_\_\_\_\_ °F + 460 \_\_\_\_\_ = 397 °Abs (m)  
P<sub>d</sub> = ½ P<sub>c</sub> = ½ (l) \_\_\_\_\_ = \_\_\_\_\_ psia (n)

Q = \_\_\_\_\_ X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \frac{\sqrt{(d)}}{\sqrt{(d)}}} \right) = \underline{365} \text{ MCF/da}$   
(integrated)

DELIVERABILITY CALCULATION  
D = Q 365  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \underline{418} \text{ MCF/da.}$   
 $\frac{471240}{393251}$   $\frac{1.1983}{1.1453}$

SUMMARY  
P<sub>c</sub> = 675 psia  
Q = 365 Mcf/day  
P<sub>w</sub> = 397 psia  
P<sub>d</sub> = 418 psia  
D = \_\_\_\_\_ Mcf/day  
Company El Paso Natural Gas  
By \_\_\_\_\_  
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> )	P <sub>t</sub> <sup>2</sup>	P <sub>t</sub> <sup>2</sup> + R <sup>2</sup>	P <sub>w</sub>
			R <sup>2</sup>	(Column i)		
3002	.196	11.779	2,309	233289	235598	485

D at 500 = 345

+ Use SIPC for P<sub>c</sub>. SIPC too low.  
After Workover.



