

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

Operator El Paso Natural Gas Lease Ludwick Well No. 9-M  
Unit M Sec. 29 Twp. 30N Rge. 10W Pay Zone: From 4813 To 4930  
Casing: OD 7 5/8 WT. 54 @ 5107 Set At 4460 Tubing: OD 2 WT. 4.7 T. Perf. 4862  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured .705 Estimated \_\_\_\_\_  
Date of Flow Test: From 2/20 To 2/28/57 \* Date S.I.P. Measured 8/2/56  
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 \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (g)  
Square root chart average reading ( 6.65 ) <sup>2</sup> x sp. const. 10 \_\_\_\_\_ = 442 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 442 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 442 psia (i)  
Wellhead casing shut-in pressure (Dwt) PG \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (j)  
Wellhead tubing shut-in pressure (Dwt) 973 MV \_\_\_\_\_ psig + 12 = 985 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 985 psia (l)  
Flowing Temp. (Meter Run) 57 °F + 460 \_\_\_\_\_ = 517 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 493 psia (n)

Q = \_\_\_\_\_ X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{339} \text{ MCF/da}$   
(integrated)

DELIVERABILITY CALCULATION

D = Q 339  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{727,176}{772,516} \right]^n \frac{.9411}{.9555} = \text{324} \text{ MCF/da.}$

SUMMARY

P<sub>c</sub> = 985 psia  
Q = 339 Mcf/day  
P<sub>w</sub> = 445 psia  
P<sub>d</sub> = 493 psia  
D = 324 Mcf/day

Company El Paso Natural Gas Company  
By Tom Grant  
Title \_\_\_\_\_  
Witnessed by \_\_\_\_\_  
Company \_\_\_\_\_

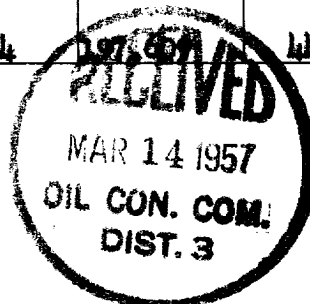
\* This is date of completion test.  
\* Meter error correction factor

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> ) R <sup>2</sup>	P <sub>t</sub> <sup>2</sup> (Column i)	P <sub>t</sub> <sup>2</sup> + R <sup>2</sup>	P <sub>w</sub>
<u>3428</u>	<u>0.221</u>	<u>10.157</u>	<u>2245</u>	<u>195,364</u>	<u>197,609</u>	<u>445</u>

D @ 500 = 317

*OK*



OIL CONSERVATION COMMISSION		
AZTEC DISTRICT OFFICE		
No. Copies Received		3
DISTRIBUTION		
	NO. FURNISHED	
Operator		
Santa Fe		
Proration Office	1	
State Land Office		
U. S. G. S.		
Transporter	1	
File	1	✓

