

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 Basin Dakota Formation Dakota County San Juan  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 1-5-65

Operator PAN AMERICAN FUEL OIL CO. Lease L. C. Kelly Well No. 3  
Unit 7 Sec. 4 Twp. 30 Rge. 12 Pay Zone: From 6425 To 6742  
Casing: OD 4-1/2 WT. 10.5 Set At 6791 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 6616  
Produced Through: Casing \_\_\_\_\_ Tubing E Gas Gravity: Measured 0.645 Estimated \_\_\_\_\_  
Date of Flow Test: From 12-9-64 To 12-17-64 \* Date S.I.P. Measured 7-24-64  
Meter Run Size 4" Orifice Size 1.130 Type Chart Sq. In. 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 (7.50) <sup>2</sup> x sp. const. 10 \_\_\_\_\_ = 543 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 543 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 543 psia (i)  
Wellhead casing shut-in pressure (Dwt) 1967 psig + 12 = 1979 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1967 psig + 12 = 1979 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1979 psia (l)  
Flowing Temp. (Meter Run) \_\_\_\_\_ °F + 460 \_\_\_\_\_ = \_\_\_\_\_ °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 990 psia (n)

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

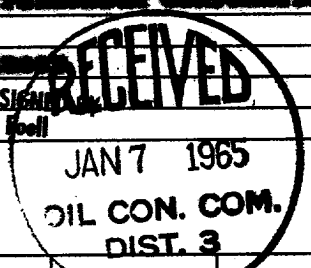
DELIVERABILITY CALCULATION

D = Q 440  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{2,926,241}{2,574,247} \right]^n \cdot 0.002 = \text{_____} = \text{_____ MCF/da.}$

SUMMARY

P<sub>c</sub> = 1979 psia  
Q = 440 Mcf/day  
P<sub>w</sub> = 543 psia  
P<sub>d</sub> = 990 psia  
D = 305 Mcf/day

Company PAN AMERICAN FUEL OIL CO.  
By F. L. Johnson  
Title District Engineer  
Witnessed by Bye ORIGINAL SIGNATURE  
Company F. W. Hoell



\* 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>4400</u>	<u>.276</u>	<u>12,705</u>	<u>3,135</u>	<u>324,949</u>	<u>322,014</u>	<u>543</u>

*Handwritten mark*

