

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 Formation Dakota County San Juan  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 4-2-65  
Operator PAN AMERICAN PETROLEUM CORP. Lease Jack Frost "B" Well No. 2  
Unit D Sec. 27 Twp. 27N Rge. 18W Pay Zone: From 6355 To 6480  
Casing: OD 4-1/2 WT. 10.5 Set At 6354 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 6306  
Produced Through: Casing          Tubing H Gas Gravity: Measured .718 Estimated           
Date of Flow Test: From 3-12-65 To 3-20-65 \* Date S.I.P. Measured 10-18-64  
Meter Run Size 4" Orifice Size 1.750 Type Chart Sq. Rt. 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 ( 6.80 ) <sup>2</sup> x sp. const.          = 462 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e)          = 462 psia (h)  
P<sub>t</sub> = (h) + (f)          = 462 psia (i)  
Wellhead casing shut-in pressure (Dwt) 1812 psig + 12 = 1824 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1673 psig + 12 = 1685 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through          = 1824 psia (l)  
Flowing Temp. (Meter Run)          °F + 460          =          °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l)          = 943 psia (n)

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

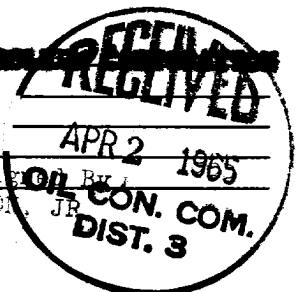
DELIVERABILITY CALCULATION

D = Q 1655  $\left[ \frac{(P_c^2 - P_d^2) = 2,663,976}{(P_c^2 - P_w^2) = 2,271,744} \right]^n \cdot .8571 = 1419$  MCF/day.

SUMMARY

P<sub>c</sub> = 1824 psia  
Q = 1655 Mcf/day  
P<sub>w</sub> = 931 psia  
P<sub>d</sub> = 943 psia  
D = 1419 Mcf/day

Company PAN AMERICAN PETROLEUM CORP.  
By F. L. Moore  
Title District Eng.  
Witnessed by Dys  
Company Original Sign. By



- \* 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> |
|------|----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------|----------------|
| 4598 | .281                 | 242.123                         | 68.837                                                                 | 213.444                                   | 281.481                                      | 931            |