

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 El Paso-Pictured Cliffs Formation Pictured Cliffs County San Juan  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 11-20-58

Operator PAN AMERICAN PETROLEUM CORP. Lease A. L. Elliott "B" Well No. 3  
Unit 7 Sec. 12 Twp. 29N Rge. 9W Pay Zone: From 2440 To 2490  
Casing: OD 9-1/2 WT. 24 Set At 2495 Tubing: OD 2.46 WT. 2.3 T. Perf. 2492  
Produced Through: Casing I Tubing \_\_\_\_\_ Gas Gravity: Measured 0.696 Estimated \_\_\_\_\_  
Date of Flow Test: From 10-7-58 To 10-15-58 \* Date S.I.P. Measured 7-22-58  
Meter Run Size \_\_\_\_\_ Orifice Size 1.500 Type Chart 50 ft. 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 ( 6.70 )<sup>2</sup> x sp. const. \_\_\_\_\_ = \_\_\_\_\_ psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = \_\_\_\_\_ psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = \_\_\_\_\_ psia (i)  
Wellhead casing shut-in pressure (Dwt) 1096 psig + 12 = 1096 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1096 psig + 12 = 1096 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1096 psia (l)  
Flowing Temp. (Meter Run) 66 °F + 460 \_\_\_\_\_ = 526 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 548 psia (n)

FLOW RATE CALCULATION

Q = \_\_\_\_\_ X  $\left( \frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^* =$  \_\_\_\_\_ MCF/day  
(integrated)

DELIVERABILITY CALCULATION

D = Q 1000  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n =$  0.013 MCF/day  
0.013

SUMMARY

P<sub>c</sub> = 1096 psia  
Q = 1000 Mcf/day  
P<sub>w</sub> = 24 psia  
P<sub>d</sub> = 54 psia  
D = 0.013 Mcf/day

Company PAN AMERICAN PETROLEUM CORPORATION  
By L. M. Bower, Jr. R.M. Sawin  
Title Field Engineer  
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>Friction loss negligible</u>					

Specified by pipeline company.

