

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 Tapacito FC Formation Pictured Cliffs County Rio Arriba  
Purchasing Pipeline Pacific Northwest Pipeline Corp. Date Test Filed May 31, 1957  
Operator Northwest Production Corp. Lease "E" Well No. 2-33  
Unit H Sec. 33 Twp. 26N Rge. 3W Pay Zone: From 4082 To 4108  
Casing: OD 7 WT. 20 Set At 4301 Tubing: OD 2-3/8 WT. 4.7 T. Perf.   
Produced Through: Casing XX Tubing  Gas Gravity: Measured  Estimated .670  
Date of Flow Test: From 4-9-57 To 4-17-57 Date S.I.P. Measured 3-13-57  
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:  =  psi (f)  
(b) - (c) Flow through tubing: (a) - (c) Flow through casing  
Seven day average static meter pressure (from meter chart):  
Normal chart average reading 520 psig + 12 = 532 psia (g)  
Square root chart average reading (  )<sup>2</sup> x sp. const.  =  psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e)  =  psia (h)  
 = 532 psia (i)  
P<sub>t</sub> = (h) + (f)  = 991 psia (j)  
Wellhead casing shut-in pressure (Dwt) 979 psig + 12 = 991 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1197 psig + 12 = 1209 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through  = 991 psia (l)  
Flowing Temp. (Meter Run) 58 °F + 460  = 518 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l)  = 496 psia (n)

FLOW RATE CALCULATION

Q = 384 X  $\left( \frac{V(c)}{V(d)} \right) = \text{_____} \text{ MCF/da}$   
(integrated)

DELIVERABILITY CALCULATION

D = Q 384  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \text{_____} \text{ MCF/da.}$   
736.065 1.0448 401

SUMMARY

P<sub>c</sub> = 991 psia  
Q = 384 Mcf/day  
P<sub>w</sub> = 532 psia  
P<sub>d</sub> = 496 psia  
D = 401 Mcf/day

Company Northwest Production Corporation  
By Ray Phillips RAY PHILLIPS  
Title Asst Mgr, Prod Operations  
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>
2735	0.180	.081	.015	283.024	283.039	532

