

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 Elanceo Formation Mesa Verde County San Juan
Purchasing Pipeline EL PASO NATURAL GAS COMPANY Date Test Filed 7-22-58
Operator PACIFIC NORTHWEST Lease Elanceo 31-8 Well No. 3-86
Unit C Sec. 26 Twp. 31N Rge. 8W Pay Zone: From 5130' To 9640'
Casing: OD 5 1/2" WT. Set At 5740' Tubing: OD 1 1/2" WT. 2.3 T. Perf. 9618'
Produced Through: Casing Tubing XX Gas Gravity: Measured .599 Estimated
Date of Flow Test: From 6-15-58 To 6-22-58 * Date S.I.P. Measured 2-28-58
Meter Run Size Orifice Size 1.500 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 () ² 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 (7.40) ² x sp. const. 10.60 = psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = psia (h)
P_t = (h) + (f) = psia (i)
Wellhead casing shut-in pressure (Dwt) psig + 12 = psia (j)
Wellhead tubing shut-in pressure (Dwt) psig + 12 = psia (k)
P_c = (j) or (k) whichever well flowed through = psia (l)
Flowing Temp. (Meter Run) 84 °F + 460 = °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 557-558.5 psia (n)

Q = 1,270 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(d)}}} \right) = \text{MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 1,270 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1.279}{1.203} = \text{MCF/da.}$
929,077
786,320

SUMMARY

P_c = 1113 psia
Q = 1,270 Mcf/day
P_w = 716 psia
P_d = 556.5 psia
D = 1,588 Mcf/day

Company PACIFIC NORTHWEST PIPELINE CORP.
By Original signed by G. H. Peppin
Title District Production Engineer
Witnessed by
Company

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(F _c Q) ²	(F _c Q) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
3365	0.217	977.625	212.145	300.304	512.449	716

