

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 Pictured Cliffs Formation Pictured Cliffs County El Arroyo
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 11-20-55
Operator El Arroyo Petroleum Corp. Lease Fred Hall, et al Well No. 1
Unit 6 Sec. 10 Twp. 23N Rge. 3E Pay Zone: From 3707 To 3700
Casing: OD 5-1/2 WT. 34 Set At 3700 Tubing: OD 3-1/8 WT. 4.7 T. Perf. 3607
Produced Through: Casing _____ Tubing 1 Gas Gravity: Measured 0.660 Estimated _____
Date of Flow Test: From 10-15-55 To 10-22-55 * Date S.I.P. Measured 0-29-50
Meter Run Size 4 Orifice Size 2.500 Type Chart 89, 24 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 (_____) 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 (6.85) ² x sp. const. 5 _____ = _____ 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) 1030 psig + 12 = 1042 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1030 psig + 12 = 1042 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1042 psia (l)
Flowing Temp. (Meter Run) 67 °F + 460 _____ = 507 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 521 psia (n)

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

DELIVERABILITY CALCULATION

D = Q 2307 $\left[\frac{(P_c^2 - P_d^2) = \text{_____}}{(P_c^2 - P_w^2) = \text{_____}} \right]^n \text{ } \frac{0.875}{\text{_____}} = \text{_____ MCF/da.}$

SUMMARY

P_c = 1042 psia
Q = 2307 Mcf/day
P_w = 367 psia
P_d = 521 psia
D = 2066 Mcf/day

Company El Arroyo Petroleum Corporation
By H. H. Bower, Jr.
Title Field 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
<u>24.35</u>	<u>0.262</u>	<u>491.110</u>	<u>79.560</u>	<u>55.285</u>	<u>134.845</u>

Provided by pipeline company.

OK

