

Initial Deliverability
After Workover

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 West Kutz Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 10-10-60

Operator Bayview Oil Corp. Lease H.K.Riddle Well No. 1
Unit M Sec. 7 Twp. 27N Rge. 12W Pay Zone: From 5880 To 5912
Casing: OD 5 1/2 WT. 14.00 Set At 5880 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 5802
Produced Through: Casing Tubing X Gas Gravity: Measured .658 Estimated
Date of Flow Test: From 9-7-60 To 9-15-60 * Date S.I.P. Measured 9-21-60
Meter Run Size 4" Orifice Size 1.000 Type Chart Sq. Rt. Type Taps

OBSERVED DATA

Flowing casing pressure (Dwt) 203 psig + 12 = 215 psia (a)
Flowing tubing pressure (Dwt) 203 psig + 12 = 215 psia (b)
Flowing meter pressure (Dwt) 203 psig + 12 = 215 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading psig + 12 = psia (d)
Square root chart reading (4.6)² x spring constant 1000 = 211 psia (d)
Meter error (c) - (d) or (d) - (c) ± = 4 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 0 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading psig + 12 = psia (g)
Square root chart average reading (4.65)² x sp. const. 1000 = 216 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 220 psia (h)
P_t = (h) + (f) = 220 psia (i)
Wellhead casing shut-in pressure (Dwt) 1308 psig + 12 = 1320 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1308 psig + 12 = 1320 psia (k)
P_c = (j) or (k) whichever well flowed through = 1320 psia (l)
Flowing Temp. (Meter Run) 74 °F + 460 = 534 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 660 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{194}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{14.66}{14.53} = 1.0089 \right)^* = 196 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{196}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.75} \frac{.7218}{.8232}} = 161 \text{ MCF/day}$$

SUMMARY

P_c = 1320 psia
Q = 196 Mcf/day
P_w = 222 psia
P_d = 660 psia
D = 161 Mcf/day

Company Well Production Co.
By N.A. Neely
Title Agent
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
3818	.242	3.397	.822	48400	49222	222



[illegible]

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