

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 Angel Peak Gallup Formation Gallup County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 10-21-58
Operator W.R.Weaver Lease McAdams Well No. 4 Gallup
Unit N Sec. 34 Twp. 27N Rge. 10W Pay Zone: From 6236 To 6245.5
Casing: OD 5 1/8 WT. 15.5 Set At 4958 to 6845 Tubing: OD No Tubing T. Perf. _____
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .705 Estimated _____
Date of Flow Test: From 9-22-58 To 9-30-58 * Date S.I.P. Measured 8-30-58
Meter Run Size 4" Orifice Size 2.500 Type Chart Sq.Rt. Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) 598 psig + 12 = 610 psia (a)
Flowing tubing pressure (Dwt) None psig + 12 = None psia (b)
Flowing meter pressure (Dwt) 487 psig + 12 = 499 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.05)² x spring constant 1000 = 497 psia (d)
Meter error (c) - (d) or (d) - (c) ± = 2 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 111 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.05)² x sp. const. 1000 = 497 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 499 psia (h)
P_t = (h) + (f) = 610 psia (i)
Wellhead casing shut-in pressure (Dwt) 1068 psig + 12 = 1080 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1068 psig + 12 = 1080 psia (k)
P_c = (j) or (k) whichever well flowed through = 1080 psia (l)
Flowing Temp. (Meter Run) 103 °F + 460 = 563 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 540 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{6750}{(\text{integrated})} \times \left(\frac{\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{874800}{788175} = 1.110}{\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{874800}{788175} = 1.110} \right)^{.75} = 6764 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.75} = 6764 \left[\frac{874800}{788175} \right]^{.75} = 7312 \text{ MCF/da.}$$

SUMMARY

P_c = 1080 psia
Q = 6764 Mcf/day
P_w = 615 psia
P_d = 540 psia
D = 7312 Mcf/day

Company Well Production Co.
By N.A. Neely
Title Owner
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
4396	.274	23.854	6.536	372.100	378.636	615

