

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 Canyon Largo Formation Pictured Cliff County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Lease Hamilton State Well No. 8-I
Unit M Sec. 32 Twp. 26 Rge. 7 Pay Zone: From 2864 To 2884
Casing: OD 5 1/2 WT. 15.5 Set At 2912 Tubing: OD 1 1/2 WT. 2.3 T. Perf. 2857
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .685 Estimated _____
Date of Flow Test: From 4/30/57 To 5/9/57 * Date S.I.P. Measured 8/29/56 (19 days)
Meter Run Size 4 Orifice Size .750 Type Chart 34, Rt. 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 (7.15)² x sp. const. 5 _____ = 256 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 256 psia (h)
P_t = (h) + (f) _____ = 256 psia (i)
Wellhead casing shut-in pressure (Dwt) 647 psig + 12 = 659 psia (j)
Wellhead tubing shut-in pressure (Dwt) 647 psig + 12 = 659 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 659 psia (l)
Flowing Temp. (Meter Run) 54 °F + 460 _____ = 514 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 330 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{158} \text{ MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION
D = Q 158 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{.8824}{.8990} = \text{142} \text{ MCF/da.}$
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{325,381}{368,745}$

SUMMARY

P_c = 659 psia
Q = 158 Mcf/day
P_w = 44.856 psia
P_d = 330 psia
D = 142 Mcf/day

Company El Paso Natural Gas Company
By Original Signed
Title Lewis D. Galloway
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 4)	P _t ² + P _d ² w

FRICTION CALCULATION



D • 250 = 157

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