

72398
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 Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Co. Lease Huerfano Well No. 105 (D)
Unit P Sec. 29 Twp. 27 Rge. 10 Pay Zone: From 6276 To 6406
Casing: OD 5 1/2 WT. 17 1/2 Set At 6540 Tubing: OD 2 WT. 4.7 T. Perf. 6357
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .692 Estimated _____
Date of Flow Test: From 9-21-59 To 9-29-59 * Date S.I.P. Measured 12-30-58 (10 Days)
Meter Run Size _____ Orifice Size _____ Type Chort _____ 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 437 psig + 12 = 449 psia (g)
Square root chart average reading (_____)² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 449 psia (h)
P_t = (h) + (f) _____ = 449 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1924 psig + 12 = 1936 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1936 psia (l)
Flowing Temp. (Meter Run) 85 °F + 460 _____ = 545 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 968 psia (n)

$Q = \frac{4840}{8} \times \left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right) = 605 \text{ MCF/da}$

DELIVERABILITY CALCULATION

$D = Q \frac{605}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = \frac{605}{\left[\frac{2311072}{3537630} \right]^{.7946 / .8417}} = 509 \text{ MCF/da.}$

SUMMARY

P_c = 1936 psia
Q = 605 Mcf/day
P_w = 459 psia
P_d = 968 psia
D = 509 Mcf/day

EL PASO NATURAL GAS CO. COMPANY

Company _____
By Original Signed
Title Harold L. Kendrick
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 1)	P _t ² + R ²	P _w
4399	.274	32.353	8,865	201601	210466	459

D500 = 597



