

Initial Deliverability
TestNEW 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 South Blanco Formation Pictured Cliffs County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 1-30-58Operator PUBCO PETROLEUM CORPORATION Lease Federal Well No. 9-3
Unit N Sec. 9 Twp. 27N Rge. 8W Pay Zone: From 2351 To 2456
Casing: OD 7" WT. 23 Set At 2456 Tubing: OD 1" WT. 1.7 T. Perf. 2388
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .641 Estimated _____
Date of Flow Test: From 1-8-58 To 1-16-58 * Date S.I.P. Measured 9-4-57
Meter Run Size 4" Orifice Size 1" Type Chart Sq. Rt. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 331 psig + 12 = 342 psia (a)
Flowing tubing pressure (Dwt) 271 psig + 12 = 283 psia (b)
Flowing meter pressure (Dwt) 269 psig + 12 = 281 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.5)² x spring constant 5 = 281 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 = 2 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.25)² x sp. const. 5 = 263 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 263 psia (h)
P_t = (h) + (f) = 265 psia (i)
Wellhead casing shut-in pressure (Dwt) 821 psig + 12 = 833 psia (j)
Wellhead tubing shut-in pressure (Dwt) 821 psig + 12 = 833 psia (k)
P_c = (j) or (k) whichever well flowed through = 833 psia (l)
Flowing Temp. (Meter Run) 55 °F + 460 = 515 °Abs (m)
P_d = ½ P_c = ½ (l) = 417 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{432}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{1.0}{1.0} = 1.0 \right) = 432 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{432}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{580,000}{573,887} \right]^n (-9061)^{.85} 9196} = 397 \text{ MCF/da.}$$

SUMMARY

P_c = 833 psia
Q = 432 Mcf/day
P_w = 346 psia
P_d = 417 psia
D = 397 Mcf/day

Company PUBCO PETROLEUM CORPORATION
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Witnessed by Wayne Martin
Company Pubco Petroleum Corp.

* 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 R ²	(1-e ^{-S})	P _t ² (Column i)	P _t ² + R ²	P _w
1531	.105	474,064	49,777		70,823	120,002	346

