

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 Basin Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 1-7-61
Operator The British-American Oil Prod. Co. Govt. Fallerton Well No. 6
Unit 1 Sec. 11 Twp. 27N Rge. 11W Pay Zone: From 6417 To 6467
Casing: OD 9 1/2" WT. 14 & 15 lb Set At 6619 Tubing: OD 2-1/16" WT. 3.40 T. Perf. 6395 Pfr.
Produced Through: Casing _____ Tubing I Gas Gravity: Measured 0.662 Estimated _____
Date of Flow Test: From 11-30-60 To 12-2-60 *Date S.I.P. Measured 6-22-60
Meter Run Size 4.0 Orifice Size 1.750 Type Chart Square Root Type Taps Flanged

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = Packer psia (a)
Flowing tubing pressure (Dwt) 654 psig + 12 = 666 psia (b)
Flowing meter pressure (Dwt) 461 psig + 12 = 473 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading 6.00 psig + 12 = _____ psia (d)
Square root chart reading (6.90)² x spring constant 10 = 476 psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ = -3 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____ = 193 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.95)² x sp. const. 10 = 483 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 480 psia (h)
P_t = (h) + (f) _____ = 673 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = Packer psia (j)
Wellhead tubing shut-in pressure (Dwt) 2016 psig + 12 = 2028 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 2028 psia (l)
Flowing Temp. (Meter Run) 78 °F + 460 _____ = 538 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 1014 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{2,263}{(\text{integrated})} \times \left(\frac{\frac{9936}{\sqrt{(c)}} = \frac{9968}{0.2074}}{\frac{226,576}{\sqrt{(d)}}} \right) = \frac{2256}{2264.5} \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q = \frac{2256}{2264.5} \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{.9252}{0.92505} = \frac{2087}{2069} \text{ MCF/day}$$

SUMMARY

P_c = 2028 psia
Q = 2256 2264.5 Mcf/day
P_w = 831 830 psia
P_d = 1014 psia
D = 2087 2069 Mcf/day

Company The British-American Oil Prod. Co.
By Frank Howard *fr*
Title Field Engineer
Witnessed by _____
Company _____

- * This is date of completion test.
- * Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ⁻⁸)	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>4272</u>	<u>0.267</u>	<u>891,500</u> <u>904.4</u>	<u>238,031</u> <u>242.5</u>	<u>452.929</u>	<u>69961</u> <u>6944</u>	<u>831</u> <u>829.3</u>

$$P_c = 13,235$$

OK

RECEIVED

JAN 9 1961

OIL CON. COM.
DIST. 3

