

NEWORKED WELL

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 **Fulcher-Kutz** Formation **Pictured Cliffs** County **San Juan**
Purchasing Pipeline **Southern Union Gas Co.** Date Test Filed **January 8, 1956**
Operator **Johnston Oil Co.** Lease **Lodewick** Well No. **# 1**
Unit **D** Sec. **19** Twp. **27 N** Rge. **9 W** Pay Zone: From **2395** To **2440**
Casing: OD **5 1/2** WT. **14 1/2** Set At **2380** Tubing: OD **1"** WT. **1.7** T. Perf. **2405**
Produced Through: Casing **X** Tubing _____ Gas Gravity: Measured _____ Estimated **.663**
Date of Flow Test: From **11-23-55** To **11-30-55** Date S.I.P. Measured **10-16-55**
Meter Run Size **4"** Orifice Size **1"** Type Chart **Normal** 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 **227** psig + 12 = **239** psia (g) ✓
Square root chart average reading (_____) ² x sp. const. _____ = **239** psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = **239** psia (h) ✓
P_t = (h) + (f) _____ = **239** psia (i) ✓
Wellhead casing shut-in pressure (Dwt) **473** psig + 12 = **485** psia (j) ✓
Wellhead tubing shut-in pressure (Dwt) **473** psig + 12 = **485** psia (k) ✓
P_c = (j) or (k) whichever well flowed through _____ = **485** psia (l) ✓
Flowing Temp. (Meter Run) **60** °F + 460 _____ = **520** °Abs (m) ✓
P_d = 1/2 P_c = 1/2 (l) _____ = **242.5** psia (n) ✓

FLOW RATE CALCULATION

Q = _____ X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \text{_____ MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION

D = Q **338** $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.9905^{.85}} = \text{_____ MCF/da.}$
 $\left[\frac{176,419}{178,104} \right]^{.9905^{.85}} = .9919$

SUMMARY

P_c = **485** psia
Q = **338** Mcf/day
P_w = **239** psia
P_d = **242.5** psia
D = **335.88** Mcf/day

Company **Johnston Oil Co.**
By **M. P. Richardson**
Title **Agent**
Witnessed by **Bruce Giovanni**
Company **Southern Union Gas Co.**

- * 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})	P _t ²	P _t ² + R ²	P _w
			R ²	(Column i)		

* Note: Low casing flow; P_w equal P_t

OK



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