

OPEN FLOW TEST DATA

Date: May 12, 1956

Operator: J. Glenn Turner

Lease: Huerfanito Unit #50-36

Location: 1485N, 990W, 36-27-9

County: San Juan State: N.M.

Formation: Pictured Cliff

Pool: Wildcat

Casing: 5 1/2 " Set @ 2129 '

Tubing: 1 " Set @ 2164 '

Pay Zone: 2124 ' To: 2183 '

Total Depth: 2183 '

Choke Size: .750 "

Choke Constant = C = 14.1605

Stimulation Method: Sand oil frac Flow Through: Casing x Tubing

Shut-In Pressure Casing: 535 psig / 12 = 547 psia (Shut-in 9 days)

Shut-In Pressure Tubing: 535 psig / 12 = 547 psia

Flowing Pressure: P : 15 psig / 12 = 27 psia

Working Pressure: P_w : 15 psig / 12 = 27 psia

Temperature: T : 65 °F / 460 = 525 ° Absolute

F_{pv} (from tables) : 1.003 Gravity 600 est. n 85

Choke Volume = Q = C x P_t x F_t x F_g x F_{pv}

$$Q = 14.1605 \times 27 \times .9952 \times 1.000 \times 1.003 = \underline{\hspace{2cm}} 382 \text{ MCF/D}$$

Open Flow = Aof = Q

$$Aof = 382 \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 382 \left[\frac{299209}{298480} \right]^{.85} = 382 (1.0024) = 382 \times 1.0020$$

Aof = 383 MCF/D

Tested By: H. L. Kendrick

Witnessed By: Virgil Stoabs



L. D. Galloway
L. D. Galloway

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 BALLARD Formation PICTURED CLIFFS County SAN JUAN
Purchasing Pipeline EL PASO NATURAL GAS COMPANY Date Test Filed 10-3-56
Operator J. GLENN TURNER Lease HUERFANITO UNIT Well No. 50-36
Unit E Sec. 36 Twp. 27N Rge. 9W Pay Zone: From 2124 To 2183
Casing: OD 5-1/2" WT. 15.5# Set At 2129 Tubing: OD 1" WT. 1.7# T. Perf. 2154
Produced Through: Casing X Tubing _____ Gas Gravity: Measured _____ Estimated _____
Date of Flow Test: From 8-31-56 To 9-8-56 * Date S.I.P. Measured 5-12-56
Meter Run Size 4" Orifice Size _____ Type Chart Sq. 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 (7.10) ² x sp. const. 5 _____ = 252 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 252 psia (h)
P_t = (h) + (f) _____ = 252 psia (i)
Wellhead casing shut-in pressure (Dwt) 535 _____ psig + 12 = 547 psia (j)
Wellhead tubing shut-in pressure (Dwt) 535 _____ psig + 12 = 547 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 547 psia (l)
Flowing Temp. (Meter Run) 69 °F + 460 _____ = 529 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 274 psia (n)

FLOW RATE CALCULATION

Q = _____ X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^* =$ _____ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 18 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n$ 0.958 = 17 MCF/da.

SUMMARY

P_c = 547 psia
Q = 18 Mcf/day
P_w = 252 psia
P_d = 274 psia
D = 17 Mcf/day

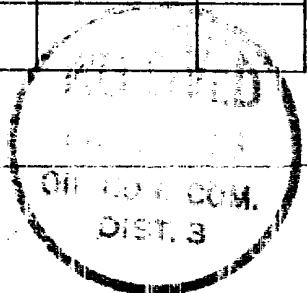
Company J. GLENN TURNER
By [Signature]
Title Engineer
Witnessed by _____
Company _____

* 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 i)	P _t ² + R ²	P _w
			Friction negligible			

OK



OIL CONSERVATION

ARTICLE

No. Copies

DATE

TIME

NAME

ADDRESS

CITY

STATE

ZIP

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TELETYPE

NOTE

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