

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Todd San Andres Formation San Andres County Roosevelt
Initial I Annual _____ Special _____ Date of Test March 24-28, 1964
Company Jack L. McClellan Lease Nix Yates Federal Well No. 1
Unit 0 Sec. 28 Twp. 7 E Rge. 35 S Purchaser Not Connected
Casing 4 1/2 Wt. 11.60 I.D. 4.000 Set at 4332 Perf. 4165 To 4243
Tubing 2 3/8 Wt. 4.70 I.D. 1.995 Set at 4145 Perf. open end To _____
Gas Pay: From 4165 To 4243 L 4145 xG .735 -GL 3047 Bar.Press. 13.2
Producing Thru: Casing Packer Tubing I Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 3/15/64 Packer 4145 Reservoir Temp. 100 Assumed

OBSERVED DATA

Tested Through (Prover) (XXXX) (XXXX) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (XXXX) Size	(Choke) (XXXX) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						1226		Wellhead choke		72
1.	2	3/16	1051		71	1052		36/64		2
2.	2	7/32	979		72	980		36/64		2
3.	2	1/4	922		74	924		36/64		2
4.	2	5/16	796		75	801		36/64		2
5.	2	1 3/8	32		30	594		23/64		23

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	0.7851		1064.2	0.9896	.9035	1.151	860
2.	1.0834		992.2	0.9887	.9035	1.136	1091
3.	1.4030		935.2	0.9868	.9035	1.130	1322
4.	2.1577		809.2	0.9859	.9035	1.102	1714
5.	43.8286		45.0	1.0302	.9035	1.000	1836

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio * _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
P_c 9.936 (1-e^{-s}) 0.189
Specific Gravity Separator Gas .735
Specific Gravity Flowing Fluid _____
P_c 1239.2 P_c 1535.6

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w / P _c
1.	1065.2	1135	8.545	73.02	13.80	1148.8	386.8	1071.8	.86
2.	993.2	986	10.840	117.51	22.21	1008.2	527.4	1004.1	.81
3.	937.2	878	13.135	172.53	32.61	910.6	625.0	954.3	.77
4.	814.2	663	17.030	290.02	54.81	717.8	817.8	847.2	.68
5.	607.2	369	18.242	332.77	62.89	431.9	1103.7	657.2	.53

Absolute Potential: 2,500 MCFPD; n .895

COMPANY Jack L. McClellan
ADDRESS Petroleum Building, Roswell, New Mexico
AGENT and TITLE H. L. Smith Independent Gas Tester
WITNESSED J. W. Braggfield
COMPANY Franklin, Asten & Fair

REMARKS

*Produced a mist of condensate and water.

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

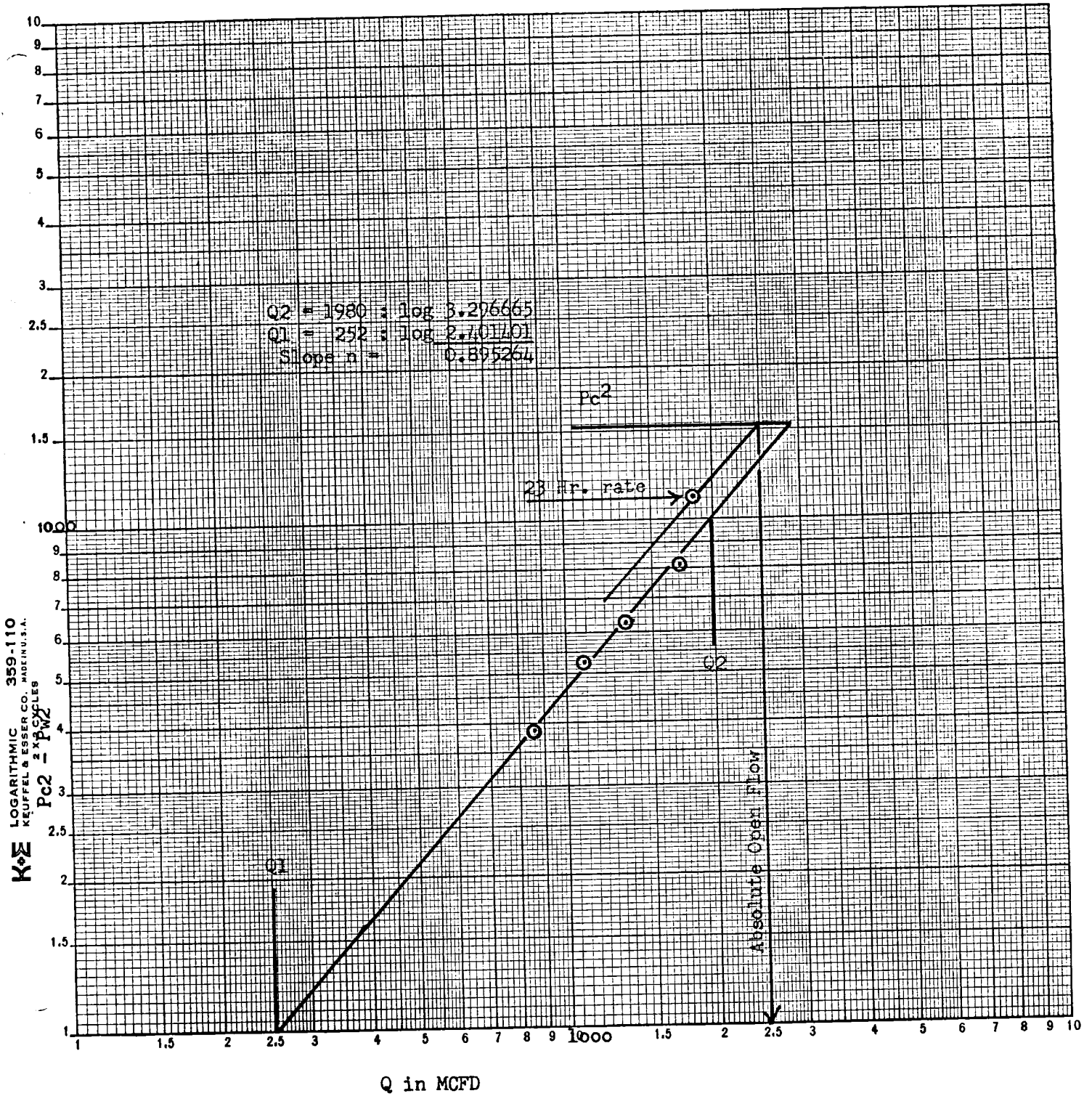
The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

- Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.
- P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia
- P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia
- P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia
- P_f = Meter pressure, psia.
- h_w = Differential meter pressure, inches water.
- F_g = Gravity correction factor.
- F_t = Flowing temperature correction factor.
- F_{pv} = Supercompressibility factor.
- n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

Jack L. McClellan
 Yates Fed No.1
 0 Sec.28 Twp.7E Rge.35S
 Roosevelt County
 March 24-28, 1964
 Absolute Open Flow - 2,500 MCF



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE*
(Other instructions re-
verse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

LC 065510

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Mir-Yates Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 28-T7S-R35E

12. COUNTY OR PARISH

Roosevelt

13. STATE

New Mexico

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

Jack L. McClellan

3. ADDRESS OF OPERATOR

P. O. Box 848, Roswell, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

660' FS & 1980' FS

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4212' GL

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☒FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

On February 26, 1964, used J-55, 25 lb., 8-5/8" casing was set at 247' using 200
sacks of regular cement 15 calcium chloride. Plug was down 12:15 P. M. Waited 12
hours with 375 lbs. pressure on casing. Opened casing up and pressure held.
Halliburton performed the work.

18. I hereby certify that the foregoing is true and correct

SIGNED

Jack L. McClellan

TITLE

Operator

DATE

February 28, 1964

(This space for Federal or State office use)

APPROVED

APPROVED BY

TITLE

MAR 2 1964

DATE

CONDITIONS OF APPROVAL, IF ANY:

J. L. GORDON

ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.