GROUND-WATER LEVELS IN WYOMING, 1978 THROUGH SEPTEMBER 1987

By Hugh I. Kennedy and Sharon L. Green

U.S. GEOLOGICAL SURVEY

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WYOMING STATE ENGINEER

and the

WYOMING ECONOMIC DEVELOPMENT AND STABILIZATION BOARD

Cheyenne, Wyoming

1988

DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, SECRETARY

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

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U.S. Geological Survey
2120 Capitol Avenue
P.O. Box 1125
Cheyenne, Wyoming 82003

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U.S. Geological Survey
Books and Open-File Reports Section
Federal Center
Box 25425
Denver, Colorado 80225

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CONVERSION FACTORS

For use of readers who prefer to use International System (SI) units, rather than the inch-pound terms used in this report, the following conversion factors may be used:

Multipy inch-pound unit	By	To obtain SI unit
acre	4047	hectare
foot (ft)	0.3048	meter
mile	1.609	kilometer

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ABSTRACT

Ground-water levels are measured periodically in a network of 95 observation wells in Wyoming, mostly in areas where ground water is used in large quantities for irrigation or municipal purposes. The monitoring program is conducted by the U.S. Geological Survey in cooperation with the Wyoming State Engineer and the Wyoming Economic Development and Stabilization Board. This report includes maps showing the locations of the selected wells, tables listing well history and highest and lowest water levels for the period of record, and hydrographs for 1978 through September 1987.

INTRODUCTION

Since 1940 the Geological Survey, in cooperation with city, State, and other Federal agencies, has periodically measured ground-water levels in a large number of wells in Wyoming. These observation wells primarily have been in areas where ground water is used in large quantities for irrigation or municipal purposes. The program currently is conducted by the U.S. Geological Survey in cooperation with the Wyoming State Engineer and the Wyoming Economic Development and Stabilization Board.

A more extensive program was started in 1972 in an effort to expand the ground-water-level data base throughout the State. Part of the expansion included the installation of continuous recorders on selected observation wells in the well network. During 1987 a continuous record of water levels was obtained from 83 wells equipped with digital water-level recorders; the remaining wells were periodically measured by hand.

Hydrographs for the 95 wells in the observation network are included in this report. The hydrographs were plotted using either continuous water-level records or periodic water-level measurements. The daily maximum water level was plotted for those wells equipped with continuous recorders. These hydrographs depict annual water-level fluctuations and water-level trends during 1978-87. If more precise water levels are needed, tabulations of actual water-level measurements (recorded to the nearest one-hundredth of a foot) are available from the U.S. Geological Survey, 2120 Capitol Avenue, P.O. Box 1125, Cheyenne, Wyoming 82003 (telephone (307) 772-2153; FTS 328-2153).

Wyoming water-level data and hydrographs for periods prior to 1985 may be found in nine previous reports of ground-water levels, compiled by the U.S. Geological Survey (Ringen, 1973 and 1974; Ballance and Freudenthal, 1975, 1976, and 1977; Stevens, 1978; Ragsdale, 1982; Ragsdale and Oberender, 1985; Kennedy and Oberender, 1987).

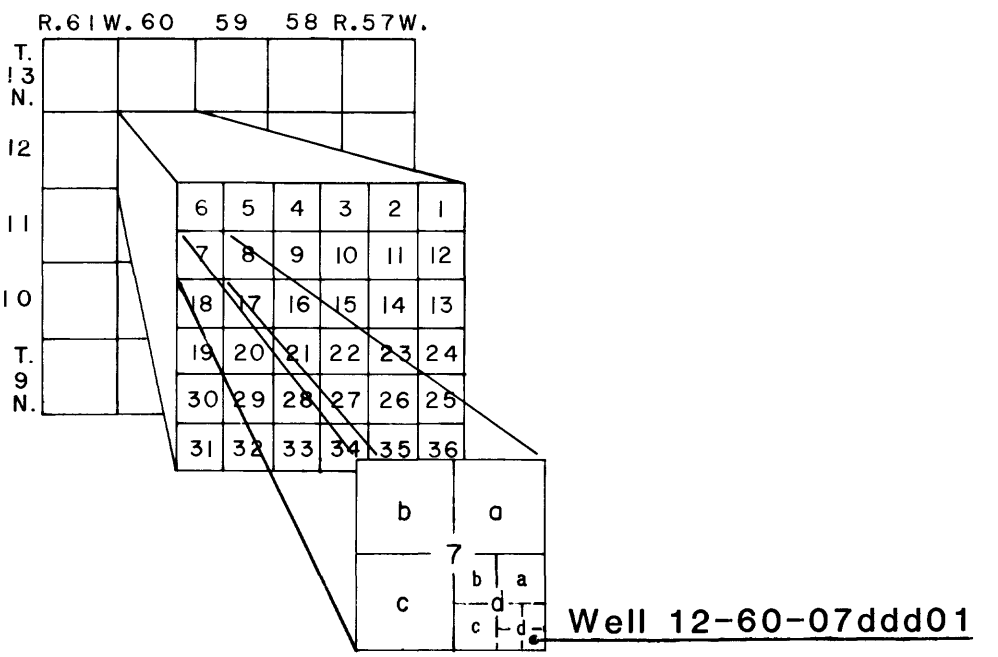
PRESENTATION OF DATA

The data are presented alphabetically by county. Locations of counties are shown on figure 1. Records of observation wells for each county are listed in a table that is preceded by a map showing the locations of the wells in that county (figs. 2-15). Hydrographs for wells for 1978 through 1987 or for the period of record, if less than 10 years, succeed the table for each county.

Numbering System for Wells

The locations of most wells in this report are based on the Federal system of land subdivision. The first number denotes the township north of the 40th Parallel Base Line, the second number denotes the range west of the Sixth Principal Meridian, and the third number denotes the section. A section is divided into quarters of 160 acres each; each quarter is designated a, b, c, or d in a counterclockwise direction, beginning in the northeast quarter. Each quarter is divided into quarters of 40 acres each and again into quarters (10-acre tracts). Alphabetical designations are also assigned to the subsequent subdivisions. A numeral appearing after the letters distinguishes that well from other numbered wells within the same 10-acre tract.

The following illustration shows the location of well 12-60-07ddd01 in Laramie County:



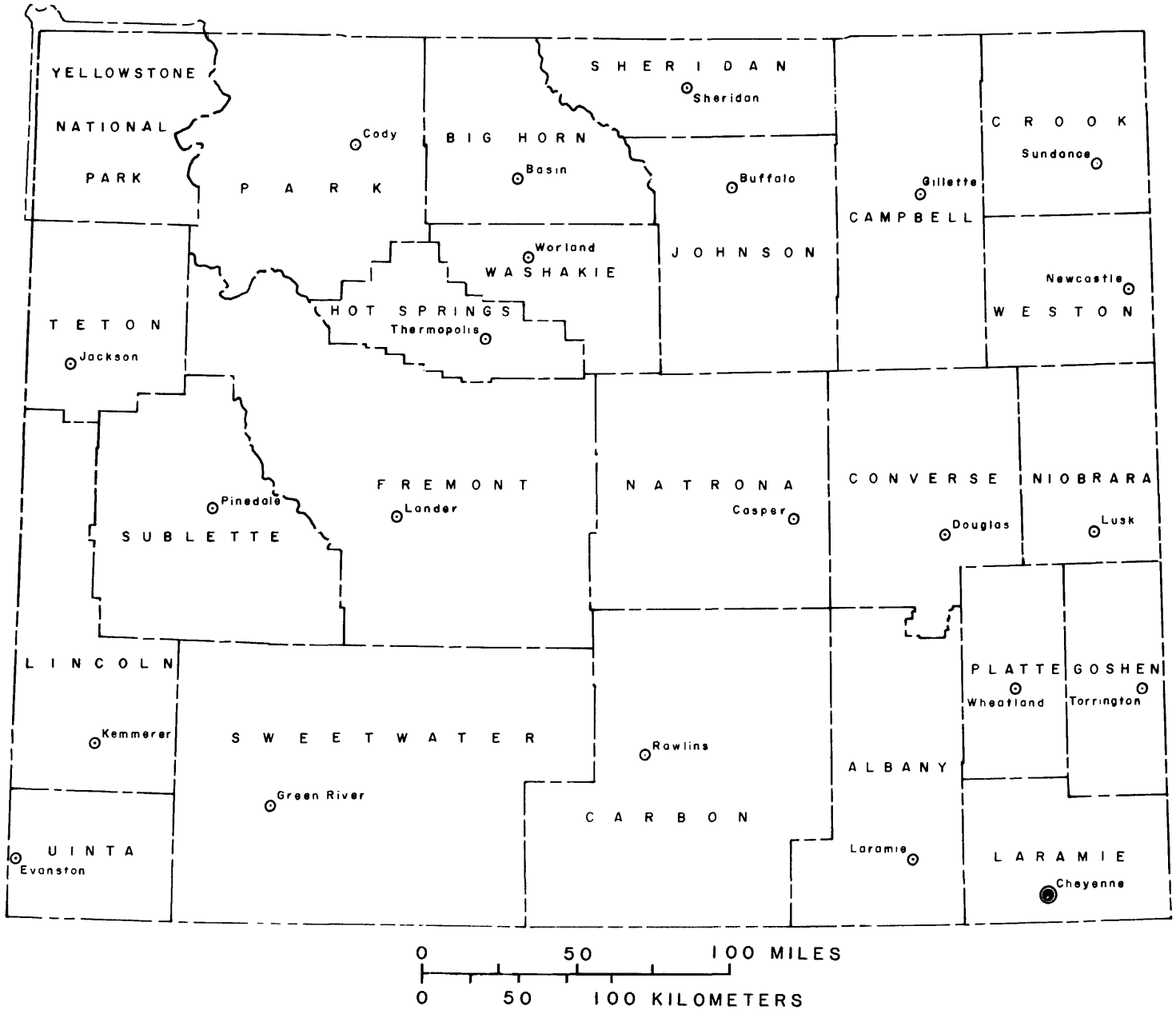
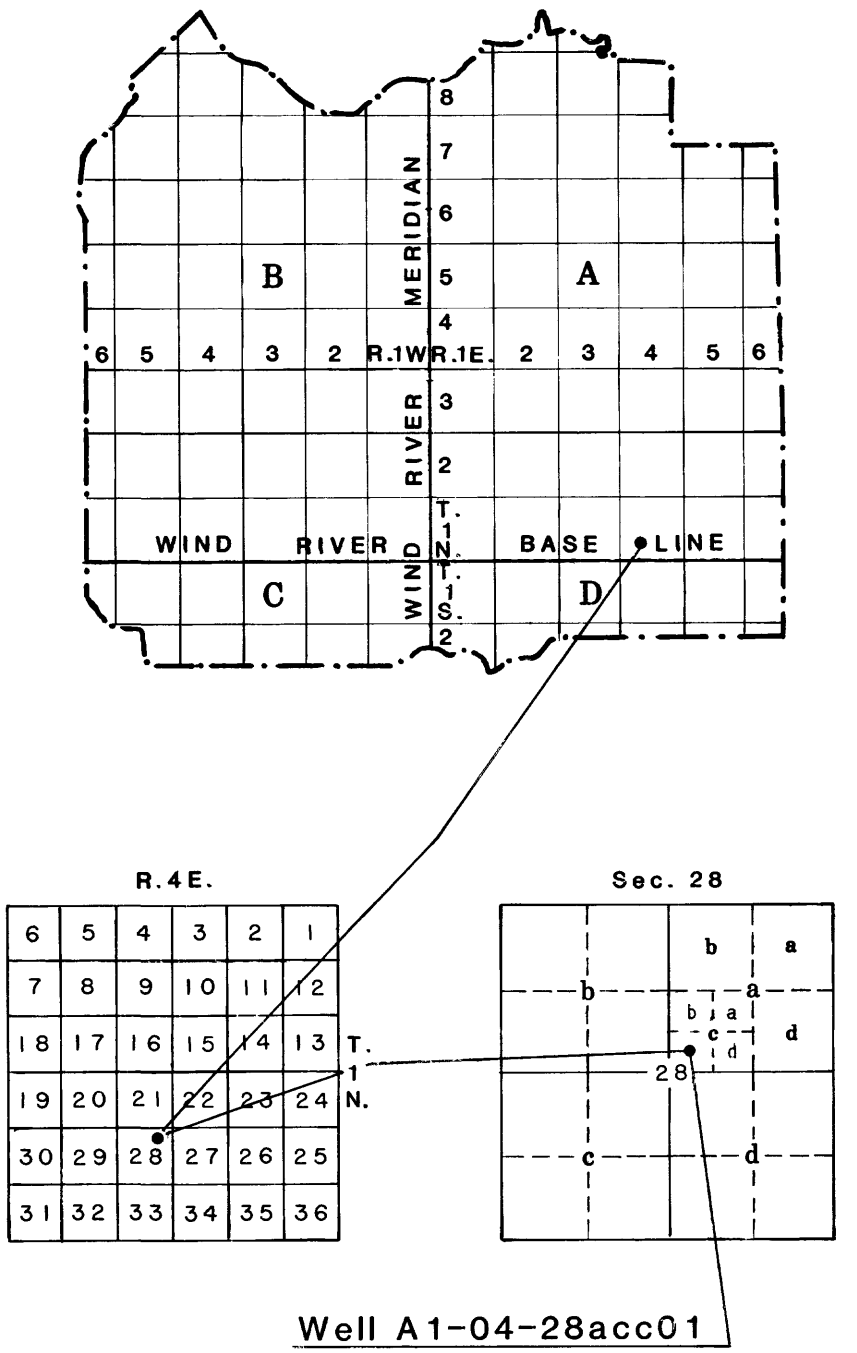


Figure 1.--Counties of Wyoming.

Observation wells on the Wind River Indian Reservation and adjacent area in Fremont County (fig. 7) are similarly located; however, they are in a land subdivision that is referenced as the Wind River Base Line and Meridian (McGreevy and others, 1969). Wells within this system may be in the northeast, northwest, southwest, or southeast quadrants of this base-line and meridian net. Well numbers in this land net have uppercase-letter prefixes that designate the quadrants; A designates the northeast quadrant, B the northwest, C the southwest, and D the southeast.

The following illustration shows the location of well A1-04-28acc01 in Fremont County:



Explanation of Column Headings for Tables of Well Records

Well number: See text for description of the well-numbering system.

Well depth: Depth of well, in feet below land surface.

Use of water: H, domestic; I, irrigation; P, municipal; S, stock; N, industrial; U, unused.

Geologic source: The geologic source codes have been retrieved from Water Data Storage and Retrieval System (WATSTORE) of the U.S. Geological Survey and may not follow the current usage of the U.S. Geological Survey.

Era-them	System	Series	Geologic Source Code	Formation name
Cenozoic	Quaternary	Holocene	111ALVM	Alluvium
			111SPBK	Spoil bank (reclaimed coal mine area)
			111TRRC	Terrace deposits
	Tertiary	Pliocene	121NRPK	North Park Formation[1]
			1210GLL	Ogallala Formation[1]
		Miocene	122ARKR	Arikaree Formation
		Oligocene	123BRUL	Brule Formation
			123WRVR	White River Formation or Group
		Eocene	124WDRV	Wind River Formation
			124WSTC	Wasatch Formation
		Paleocene	125FRRS	Ferris Formation[2]
			125LEBO	Lebo member of Fort Union Formation
Mesozoic	Cretaceous	Upper Cretaceous	211FXHL	Fox Hills Sandstone
		Lower Cretaceous	217LKOT	Lakota Formation
Paleozoic	Permian	Upper Permian	311PRKC	Park City Formation[3]
		Lower Permian	317CSPR	Casper Formation[4]
			317MNLS	Minnelusa Formation[4]
			317TSLP	Tensleep Sandstone[4]
	Mississippian	Upper Mississippian	331MDSN	Madison Limestone
		Lower Mississippian	337PHSP	Pahasapa Limestone

[1] Now designated Miocene by the U.S. Geological Survey
[2] Includes Upper Cretaceous
[3] Includes Lower Permian
[4] Includes Pennsylvanian

Explanation of Column Headings for Tables of Well Records--Continued

Records available: Years for which water-level measurements are available.

Water levels: The highest and lowest water levels are for the period of record and reflect the static water level unless otherwise footnoted.

Explanation of Hydrographs

 Water-level data obtained by continuous water-level recorders. Missing sections of lines are period of no data.

 Individual water-level measurements. Dashed line represents periods of no data between measurements.

Local reference name is shown at the bottom of the hydrograph. Also any additional information is shown at the bottom of the hydrograph.

REFERENCES CITED

Ballance, W.C., and Freudenthal, P.B., 1975, Ground-water levels in Wyoming, 1974: U.S. Geological Survey open-file report, 186 p.

_____ 1976, Ground-water levels in Wyoming, 1975: U.S. Geological Survey Open-File Report 76-598, 170 p.

_____ 1977, Ground-water levels in Wyoming, 1976: U.S. Geological Survey Open-File Report 77-686, 170 p.

Kennedy, H.I., and Oberender, C.B., 1987, Ground-water levels in Wyoming, 1976-1985: U.S. Geological Survey Open-File Report 87-456, 122 p.

McGreevy, L.J., Hodson, W.G., and Rucker, S.J., IV, 1969, Ground-water resources of the Wind River Indian Reservation, Wyoming: U.S. Geological Survey Water-Supply Paper 1576-I, 145 p.

Ragsdale, J.O., 1982, Ground-water levels in Wyoming, 1971 through part of 1980: U.S. Geological Survey Open-File Report 82-859, 194 p.

Ragsdale, J.O., and Oberender, C.B., 1985, Ground-water levels in Wyoming, 1974 through 1983: U.S. Geological Survey Open-File Report 85-403, 194 p.

Ringen, B.H., 1973, Records of ground-water levels in Wyoming, 1940-1971: Wyoming State Engineer's Office, Wyoming Water Planning Program Report No. 13, 479 p.

_____ 1974, Ground-water levels in Wyoming, 1972-73: Wyoming State Engineer's Office, Wyoming Water Planning Program Report No. 13, Supplement No. 1, 158 p.

Stevens, M.D., 1978, Ground-water levels in Wyoming, 1977: U.S. Geological Survey Open-File Report 78-605, 203 p.

GROUND-WATER LEVELS BY COUNTY

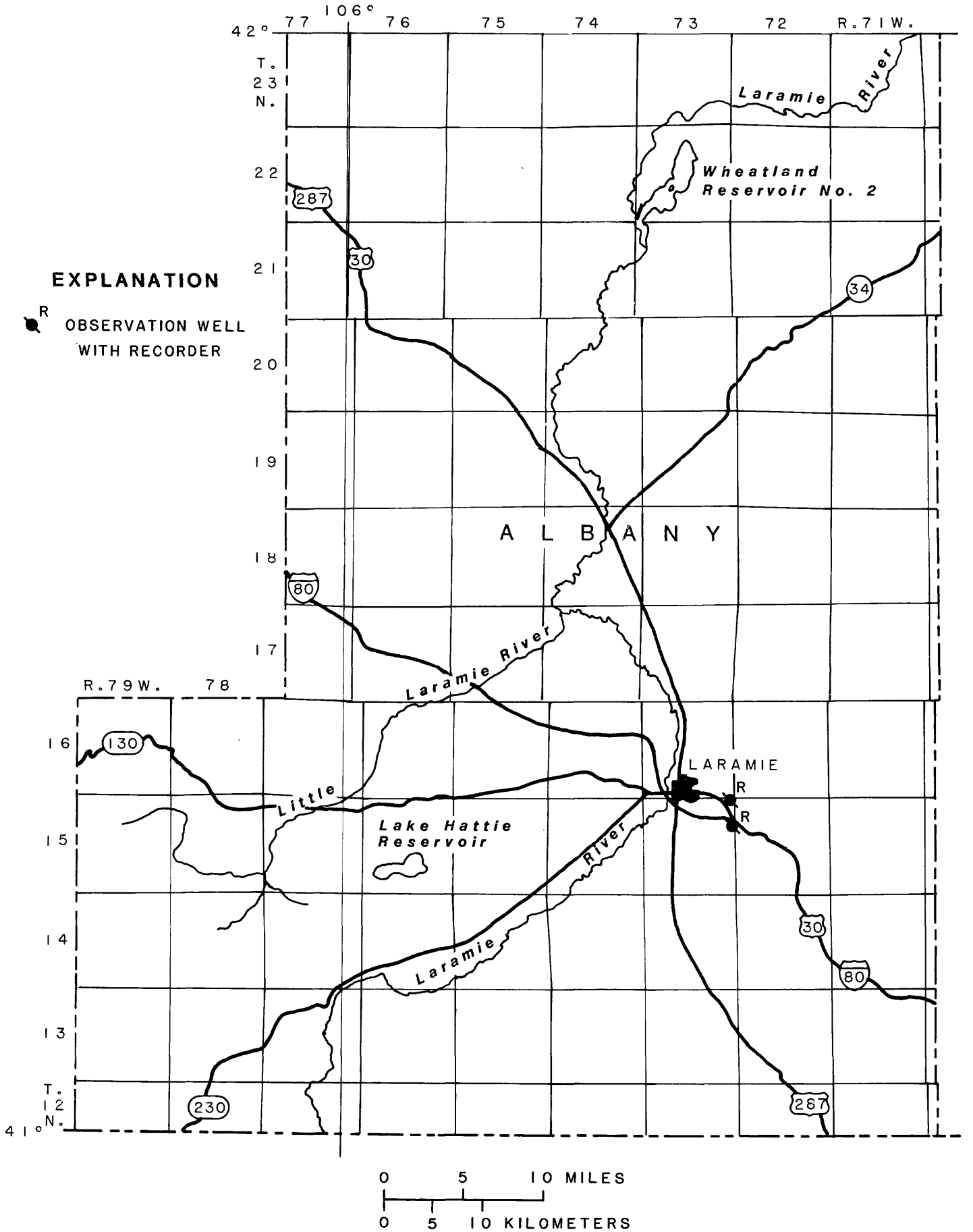
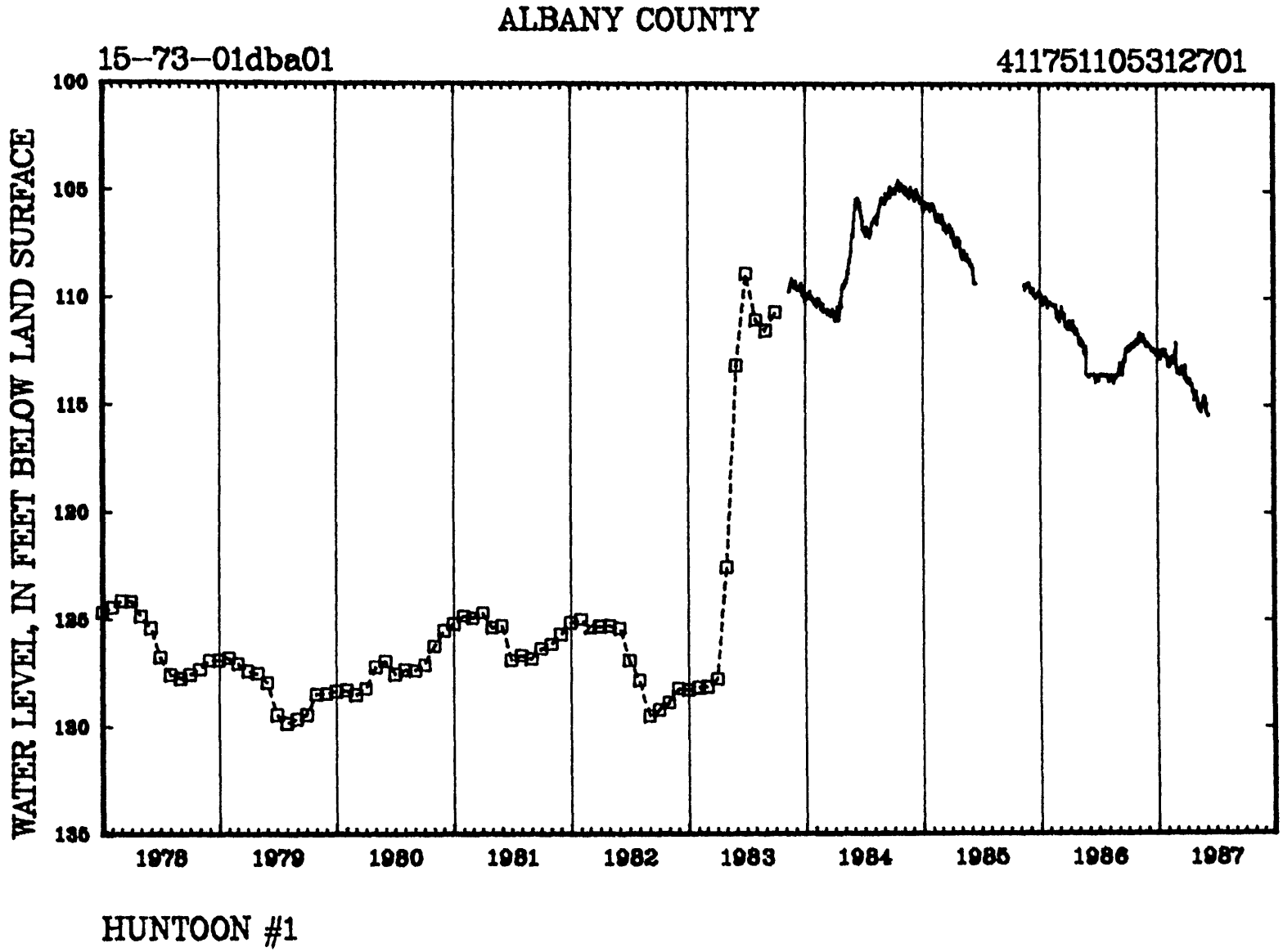


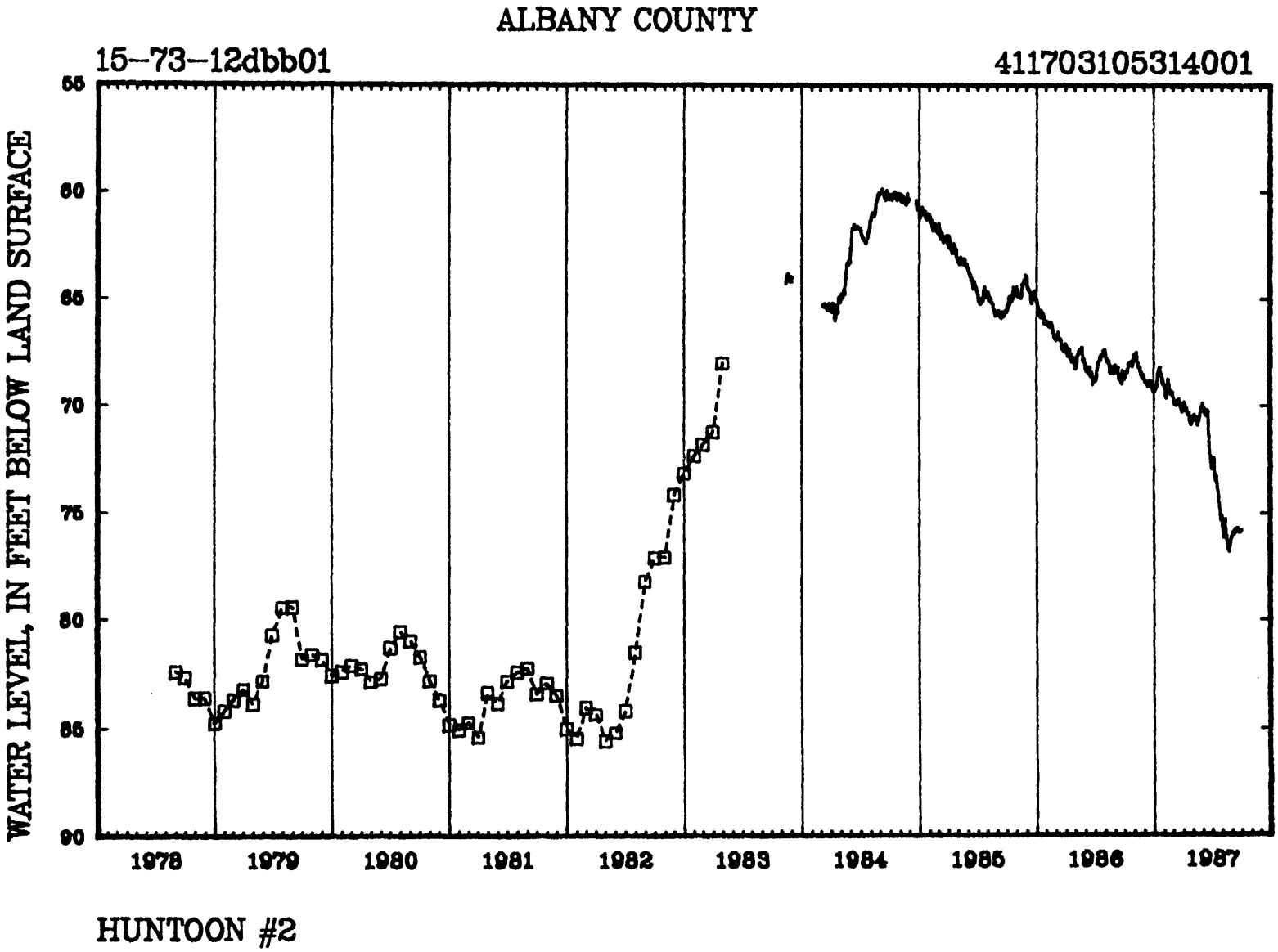
Figure 2.--Location of observation wells in Albany County, Wyoming.

Records of observation wells in Albany County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
15-73-01dba01	182	S	317CSPR	1977-87	104.45	10-84	[1] 129.80	08-79
15-73-12dbb01	243	S	317CSPR	1978-87	59.84	09-84	[1] 85.56	05-82

[1] From hand-measured data


ALBANY COUNTY
15-73-01dba01
411751105312701
WATER LEVEL, IN FEET BELOW LAND SURFACE
100
105
110
115
120
125
130
135
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
HUNTOON #1


ALBANY COUNTY
15–73–12dbb01
411703105314001
WATER LEVEL, IN FEET BELOW LAND SURFACE
55
60
65
70
75
80
85
90
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
HUNTOON #2

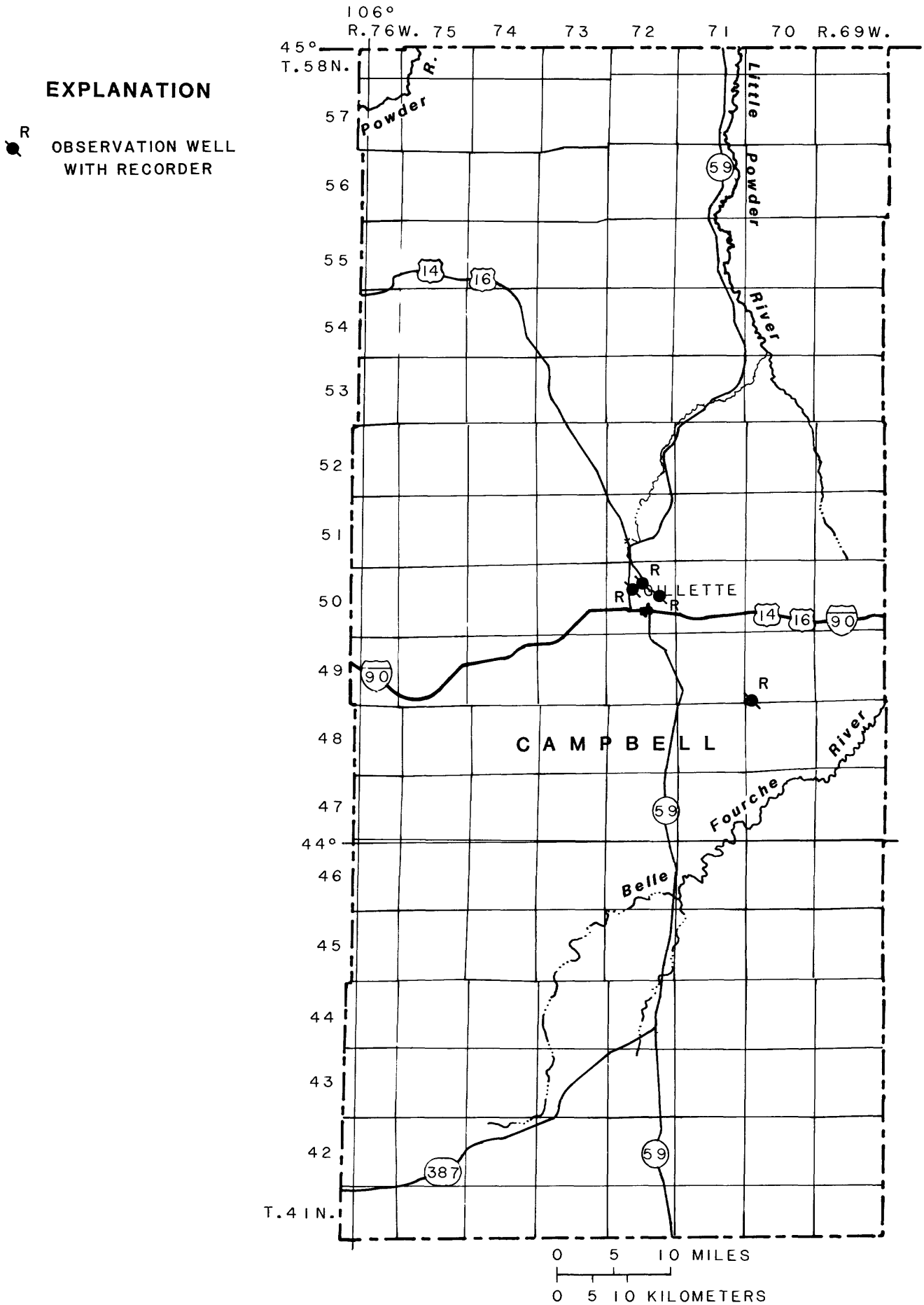
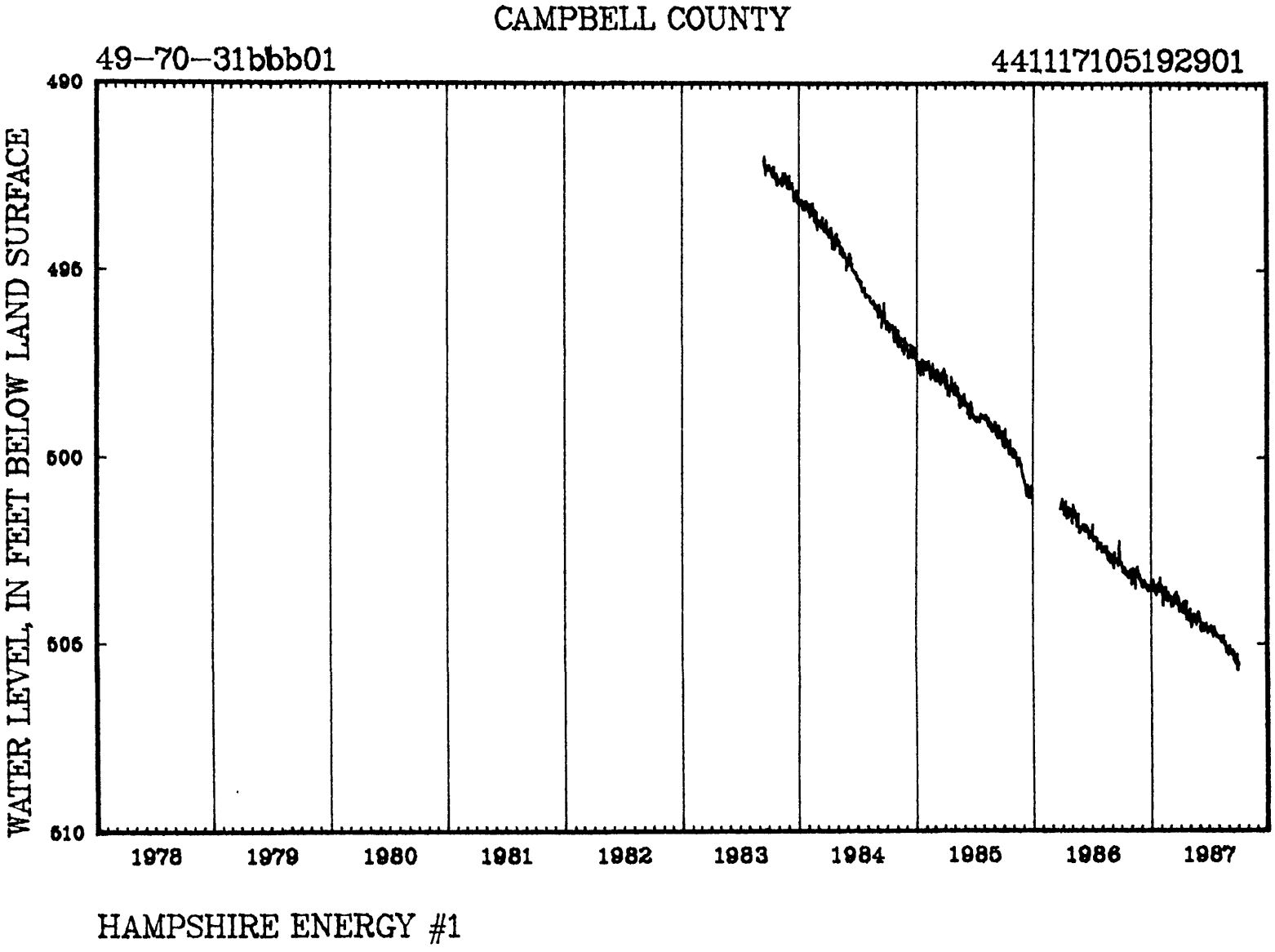


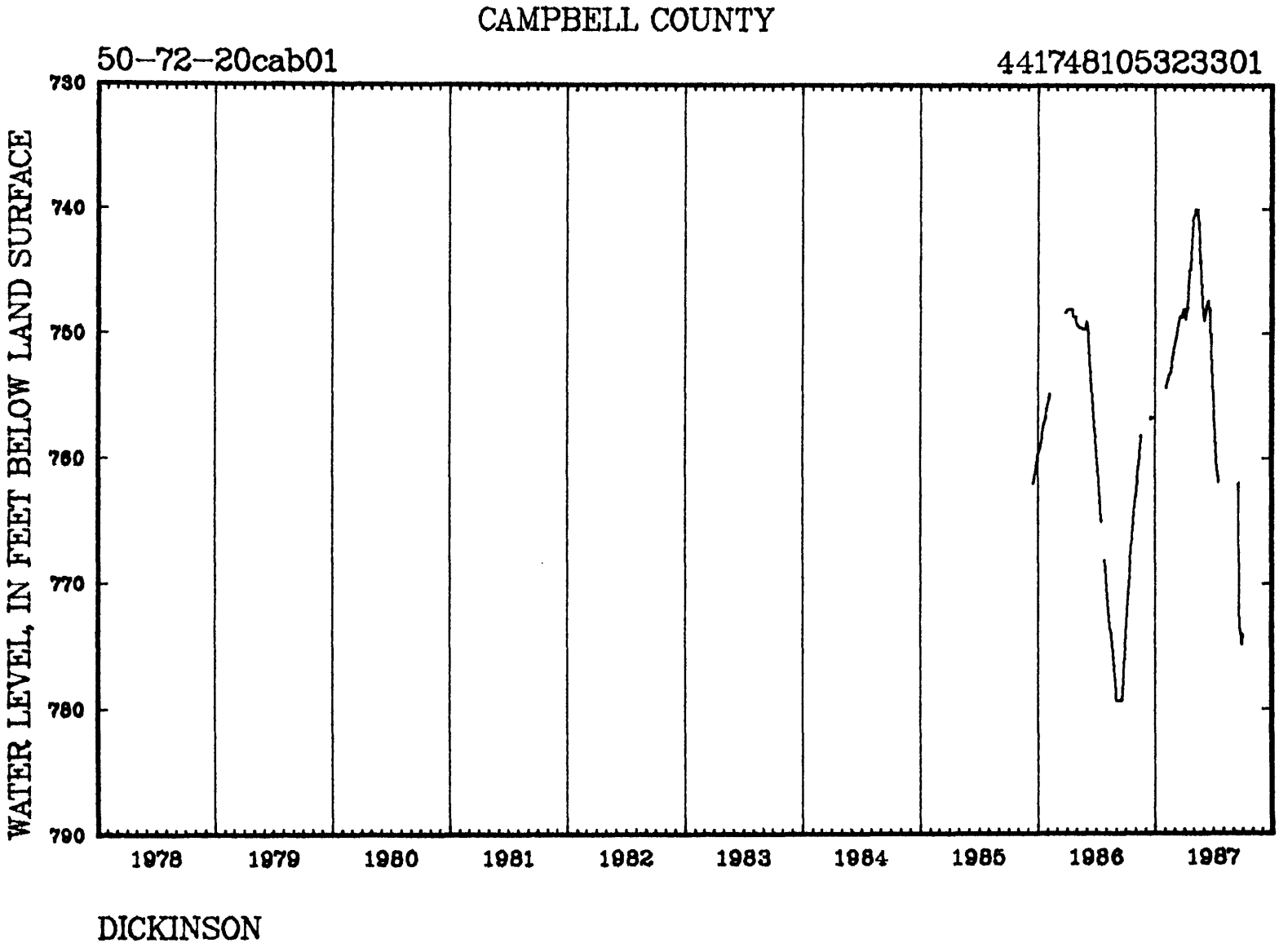
Figure 3.--Location of observation wells in Campbell County, Wyoming.

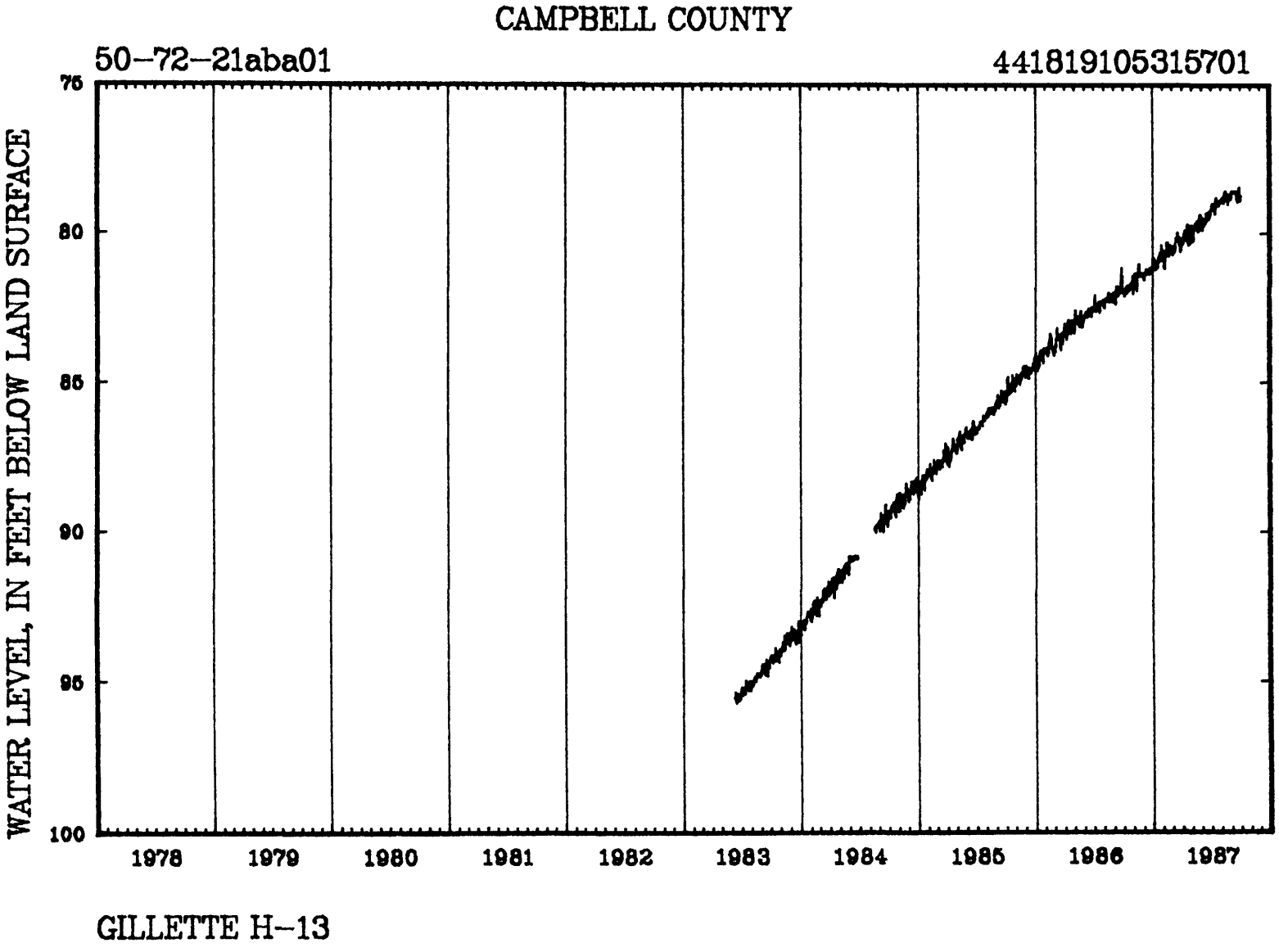
Records of observation wells in Campbell County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
49-70-31bbb01	3,754	U	211FXHL	1983-87	491.98	09-83	505.73	09-87
50-72-20cab01	1,255	U	125LEBO	1985-87	739.99	05-87	779.35	09-86
50-72-21aba01	320	P	124WSTC	1983-87	78.47	09-87	95.71	06-83
50-72-22dba01	826	P	125LEBO	1985-87[2]	600.99	05-85	625.00	12-86, 02-87, 03-87, 04-87

[2] Discontinued


CAMPBELL COUNTY
49-70-31bbb01
441117105192901
WATER LEVEL, IN FEET BELOW LAND SURFACE
490
495
500
505
510
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
HAMPSHIRE ENERGY #1


CAMPBELL COUNTY
50-72-20cab01
441748105323301
WATER LEVEL, IN FEET BELOW LAND SURFACE
730
740
750
760
770
780
790
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
DICKINSON


CAMPBELL COUNTY
50-72-21aba01
441819105315701
WATER LEVEL, IN FEET BELOW LAND SURFACE
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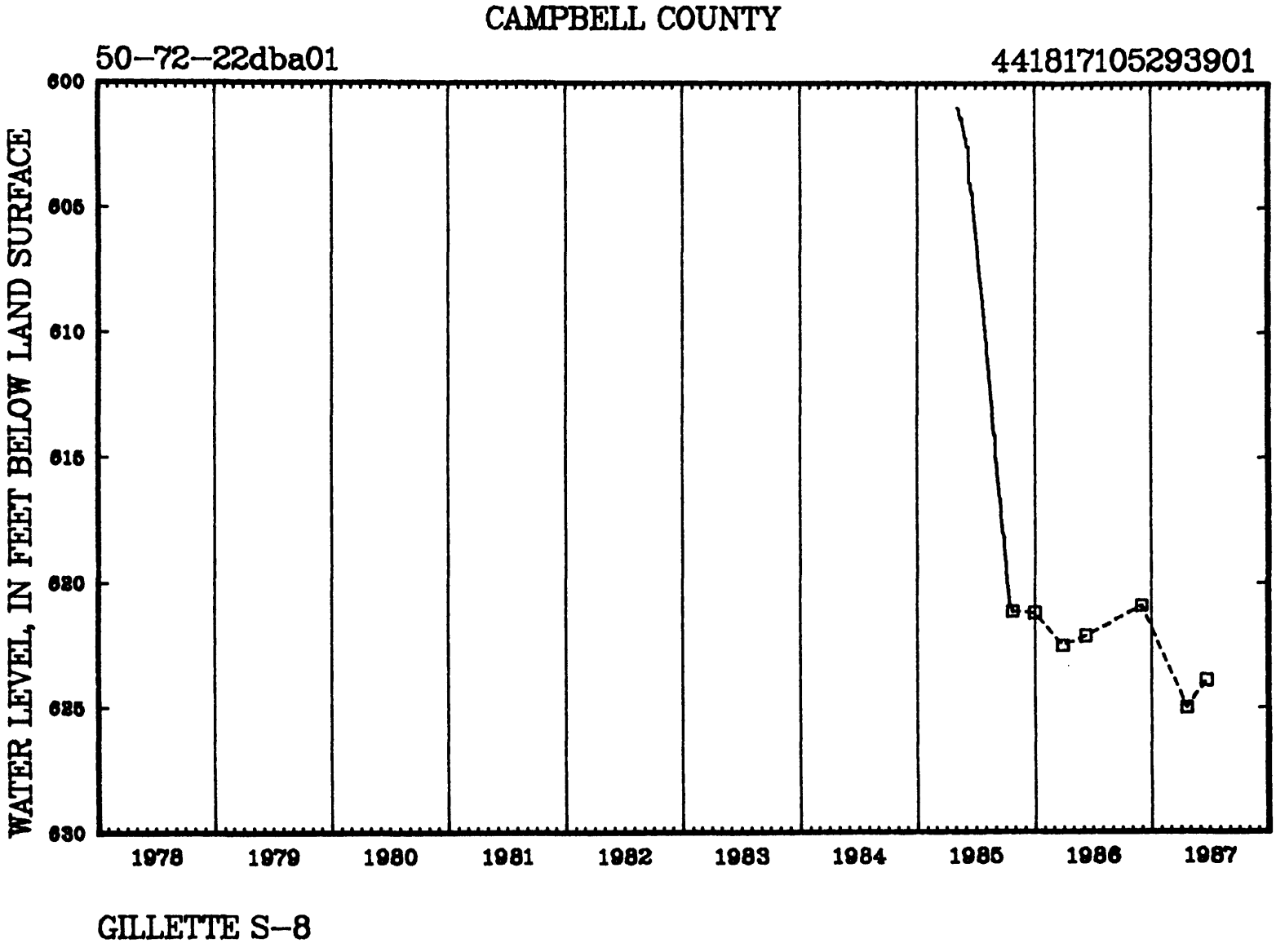
80
85
90
95
100
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
GILLETTE H-13


CAMPBELL COUNTY
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441817105293901
WATER LEVEL, IN FEET BELOW LAND SURFACE
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605
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615
620
625
630
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
GILLETTE S-8

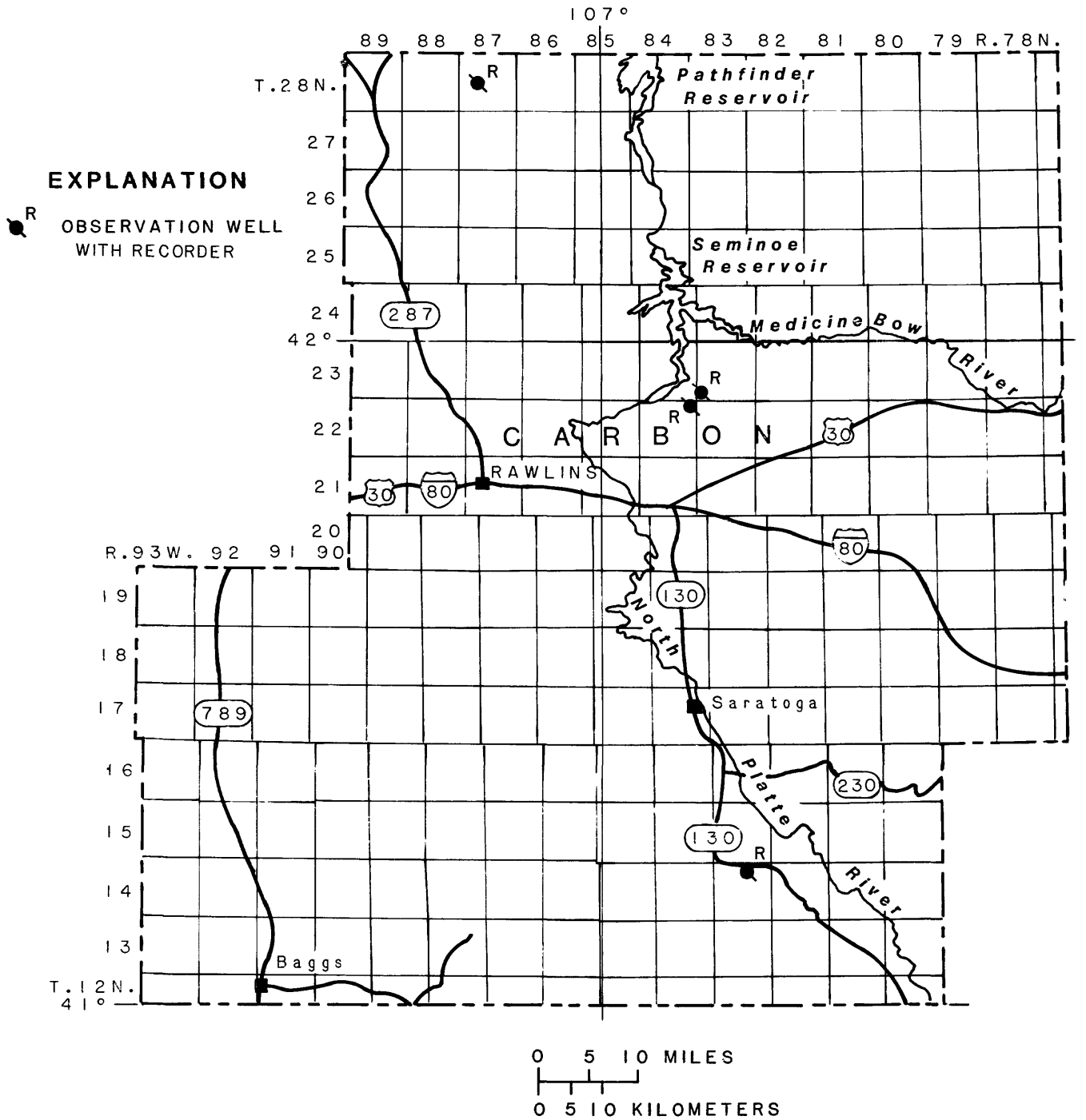
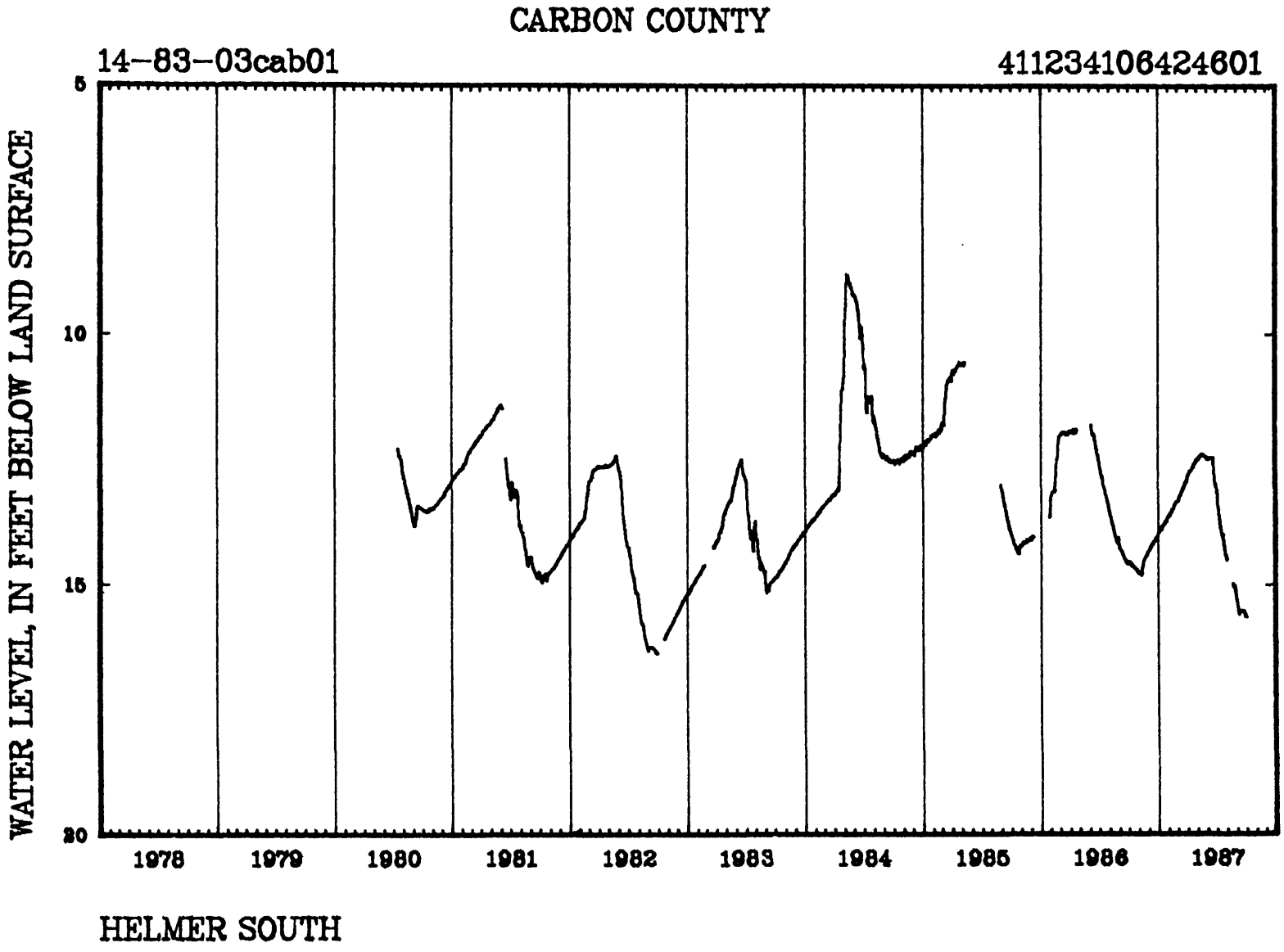


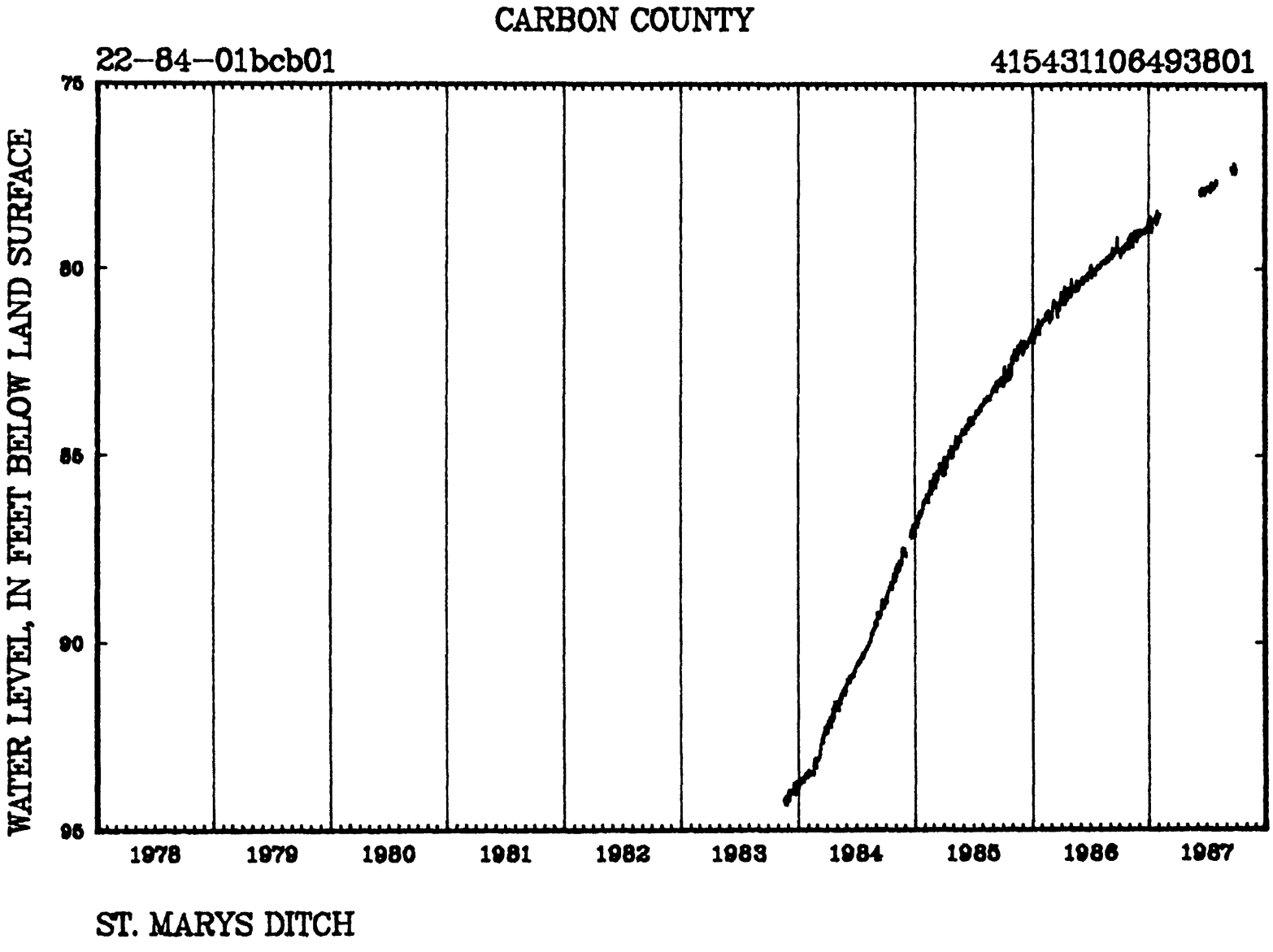
Figure 4.--Location of observation wells in Carbon County, Wyoming.

Records of observation wells in Carbon County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
14-83-03cab01	58	I	121NRPK	1980-87	8.77	05-84	16.40	09-82
22-84-01bcb01	150	U	111SPBK	1983-87	77.17	09-87	94.33	11-83
23-83-31bbb01	140	U	125FRRS	1985-87	70.24	01-85	85.18	04-85
28-87-16cca01	812	U	122ARKR	1981-87	162.80	05-84	[3]182.66	10-81

[3] Nearby well being pumped


CARBON COUNTY
14-83-03cab01
411234106424601
WATER LEVEL, IN FEET BELOW LAND SURFACE
5
10
15
20
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
HELMER SOUTH


CARBON COUNTY
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WATER LEVEL, IN FEET BELOW LAND SURFACE
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80
85
90
95
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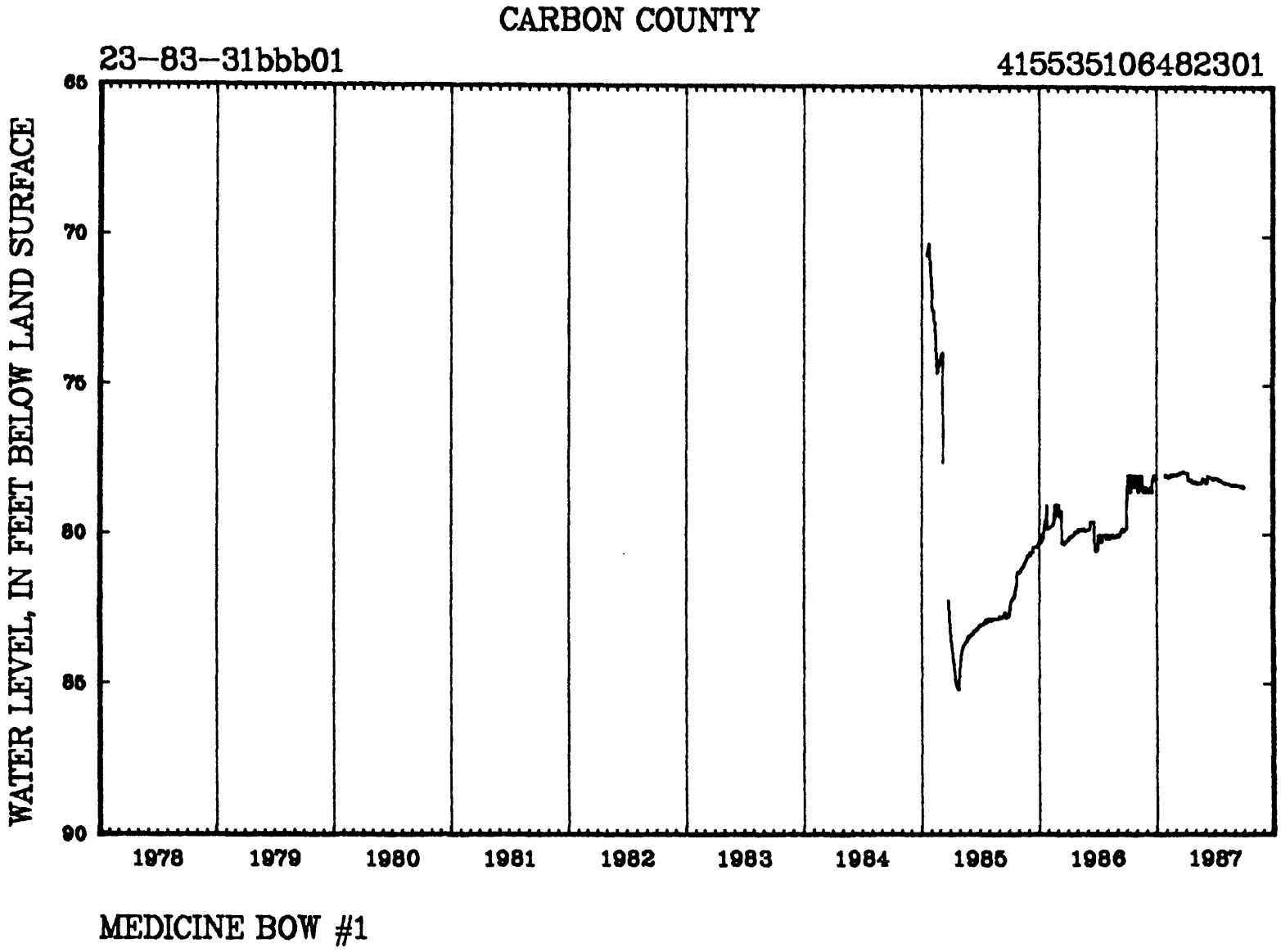
1985
1986
1987
ST. MARYS DITCH


CARBON COUNTY
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WATER LEVEL, IN FEET BELOW LAND SURFACE
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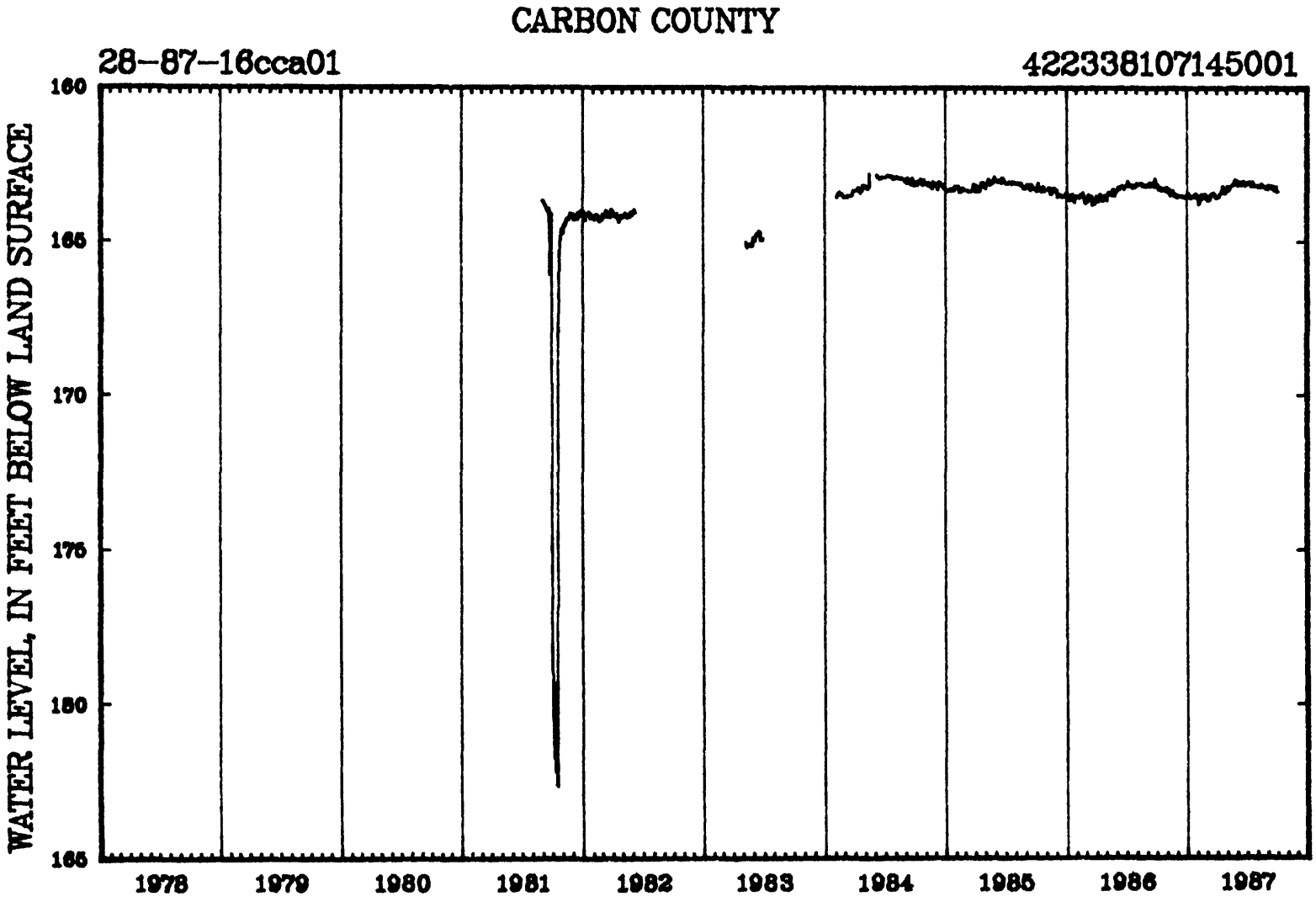
70
75
80
85
90
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
MEDICINE BOW #1


CARBON COUNTY
28-87-16cca01
422338107145001
WATER LEVEL, IN FEET BELOW LAND SURFACE
160
165
170
175
180
185
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
SPLIT ROCK #2

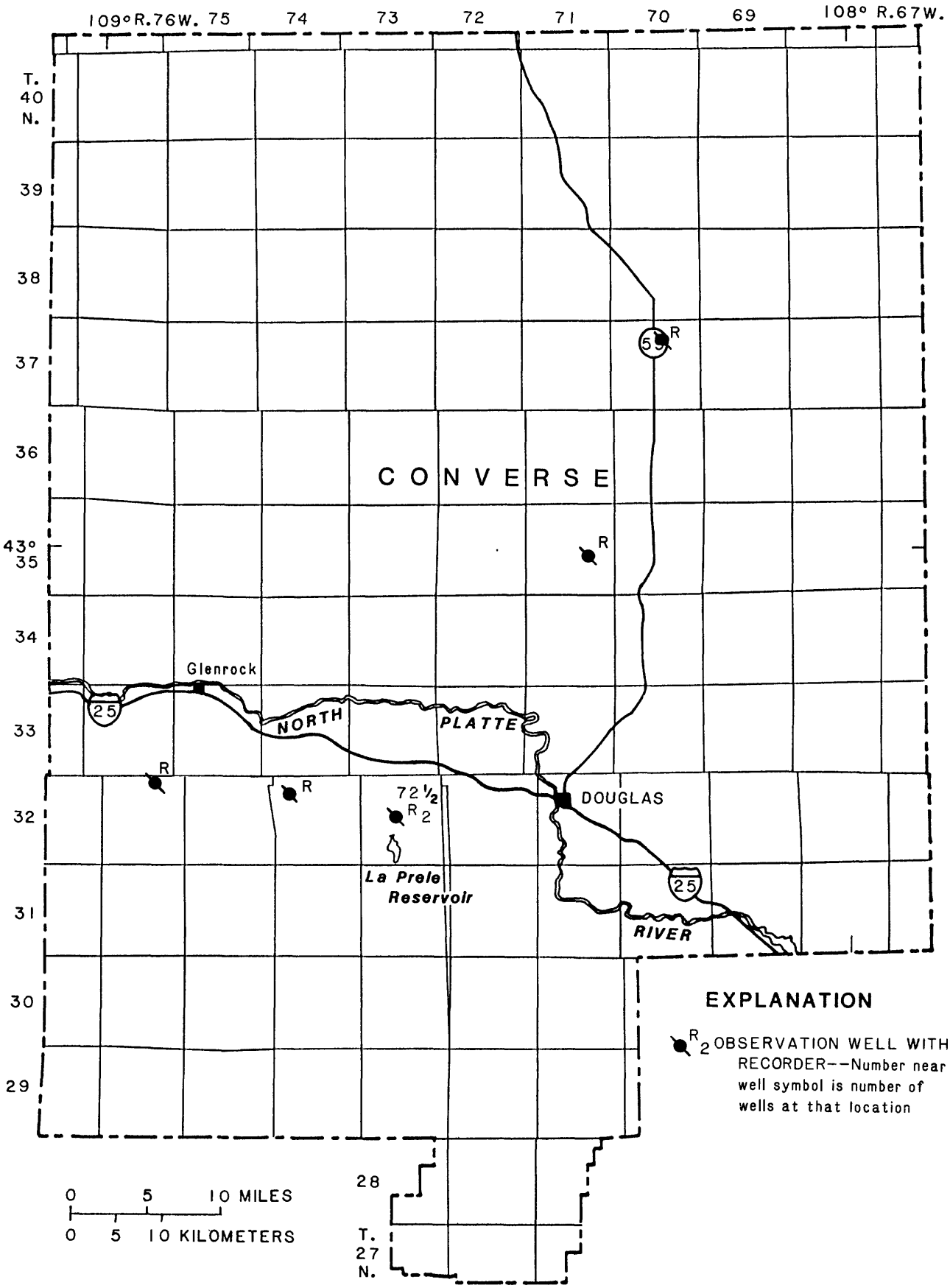
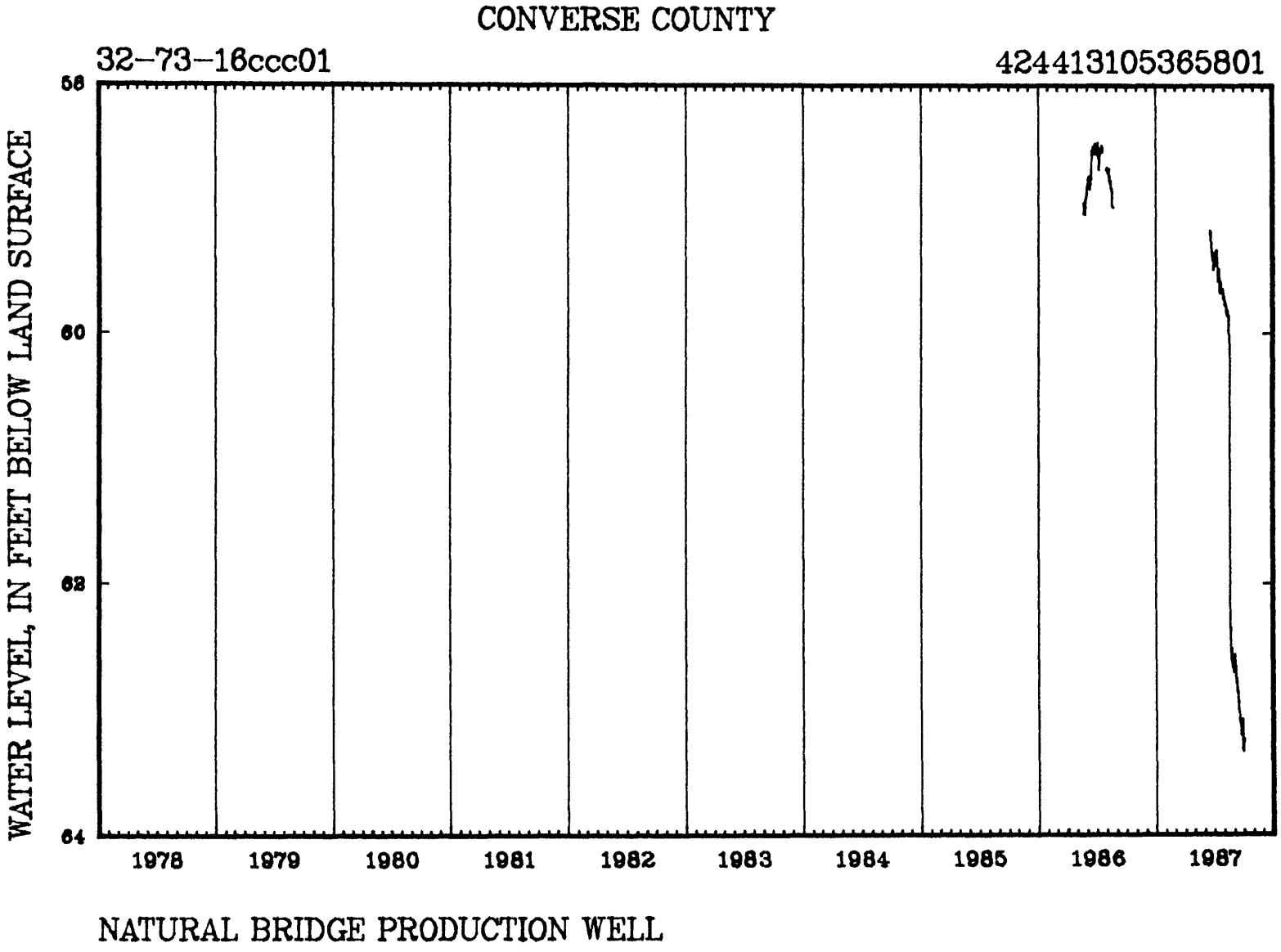


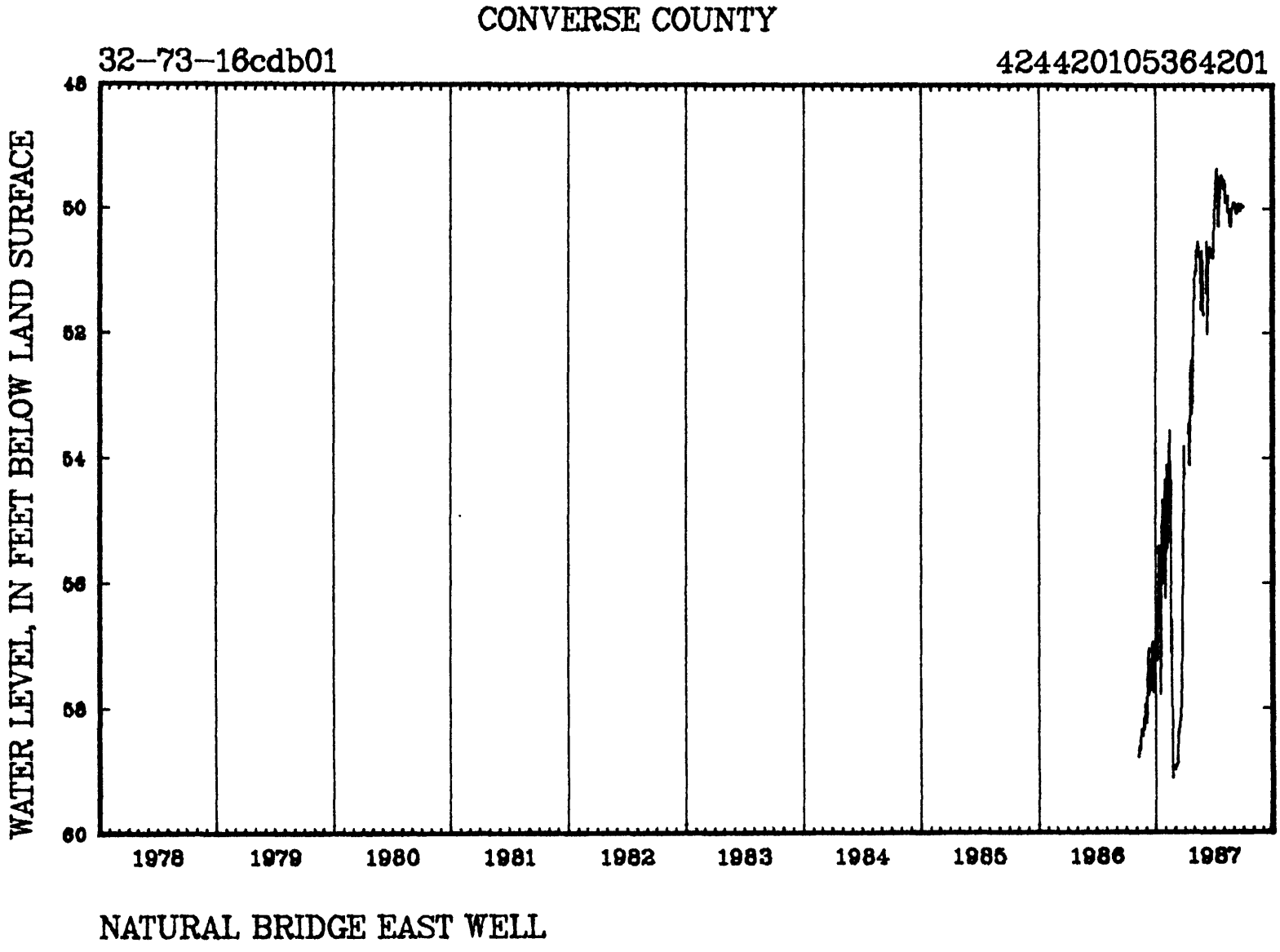
Figure 5.--Location of observation wells in Converse County, Wyoming.

Records of observation wells in Converse County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
32-73-16ccc01	902	U	317CSPR	1986-87	58.45	07-86	63.34	09-87
32-73-16cdb01	220	U	317CSPR	1986-87	49.35	07-87	59.12	02-87
32-74-08dbc01	100	U	331MDSN	1980-87	5.51	05-83	58.50	09-82
32-76-03ccd01	490	U	317CSPR	1986-87[2]	10.39	06-86	37.06	10-86
35-71-23ccd01	6,330	U	211FXHL	1986-87	707.09	01-87	707.91	09-86
37-70-10cbb01	268	U	124WSTC	1986-87	18.85	04-87	23.80	08-87

[2] Discontinued


CONVERSE COUNTY
32-73-16ccc01
424413105365801
WATER LEVEL, IN FEET BELOW LAND SURFACE
58
60
62
64
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
NATURAL BRIDGE PRODUCTION WELL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WATER LEVEL, IN FEET BELOW LAND SURFACE
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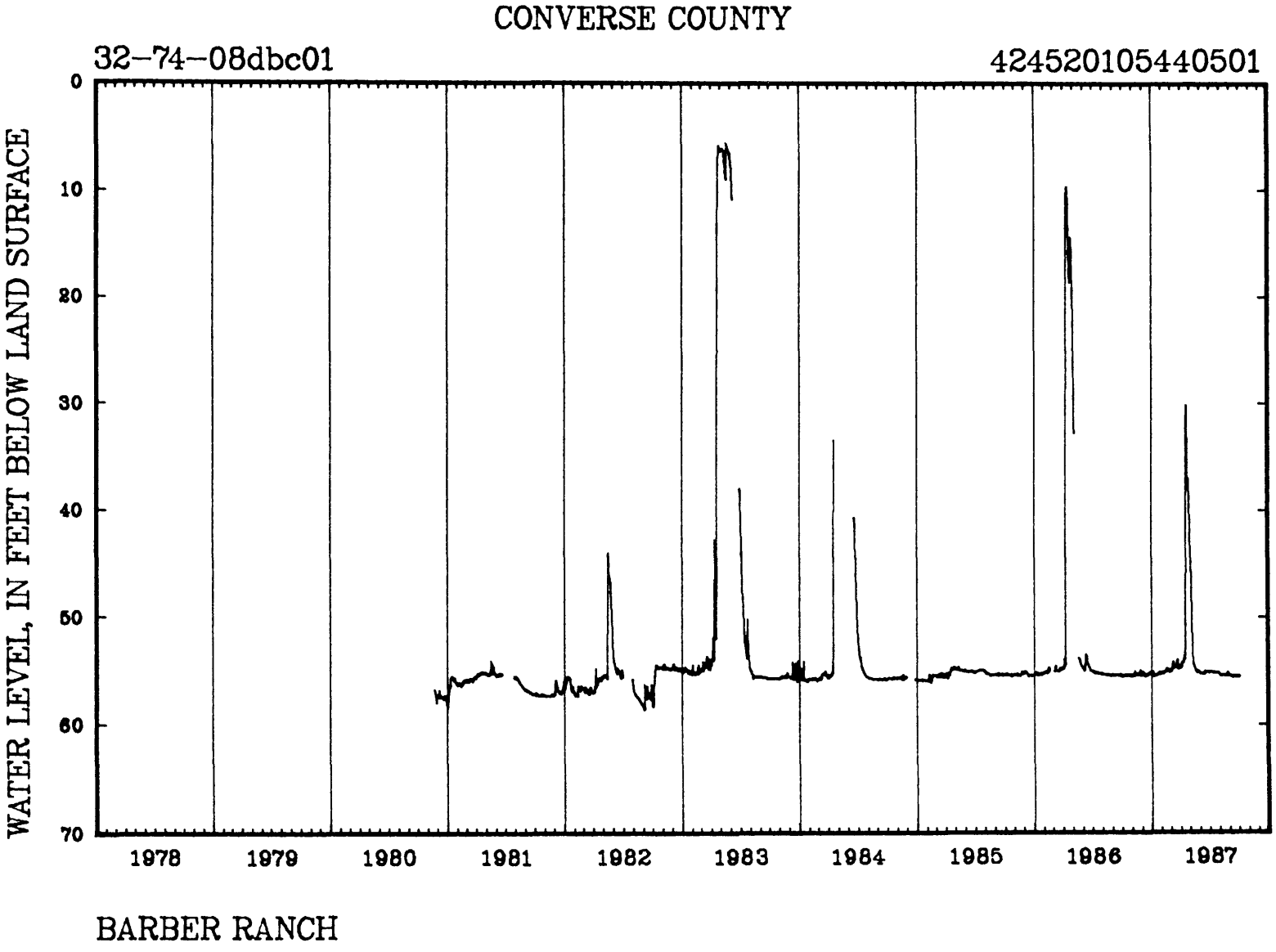
50
52
54
56
58
60
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
NATURAL BRIDGE EAST WELL


CONVERSE COUNTY
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WATER LEVEL, IN FEET BELOW LAND SURFACE
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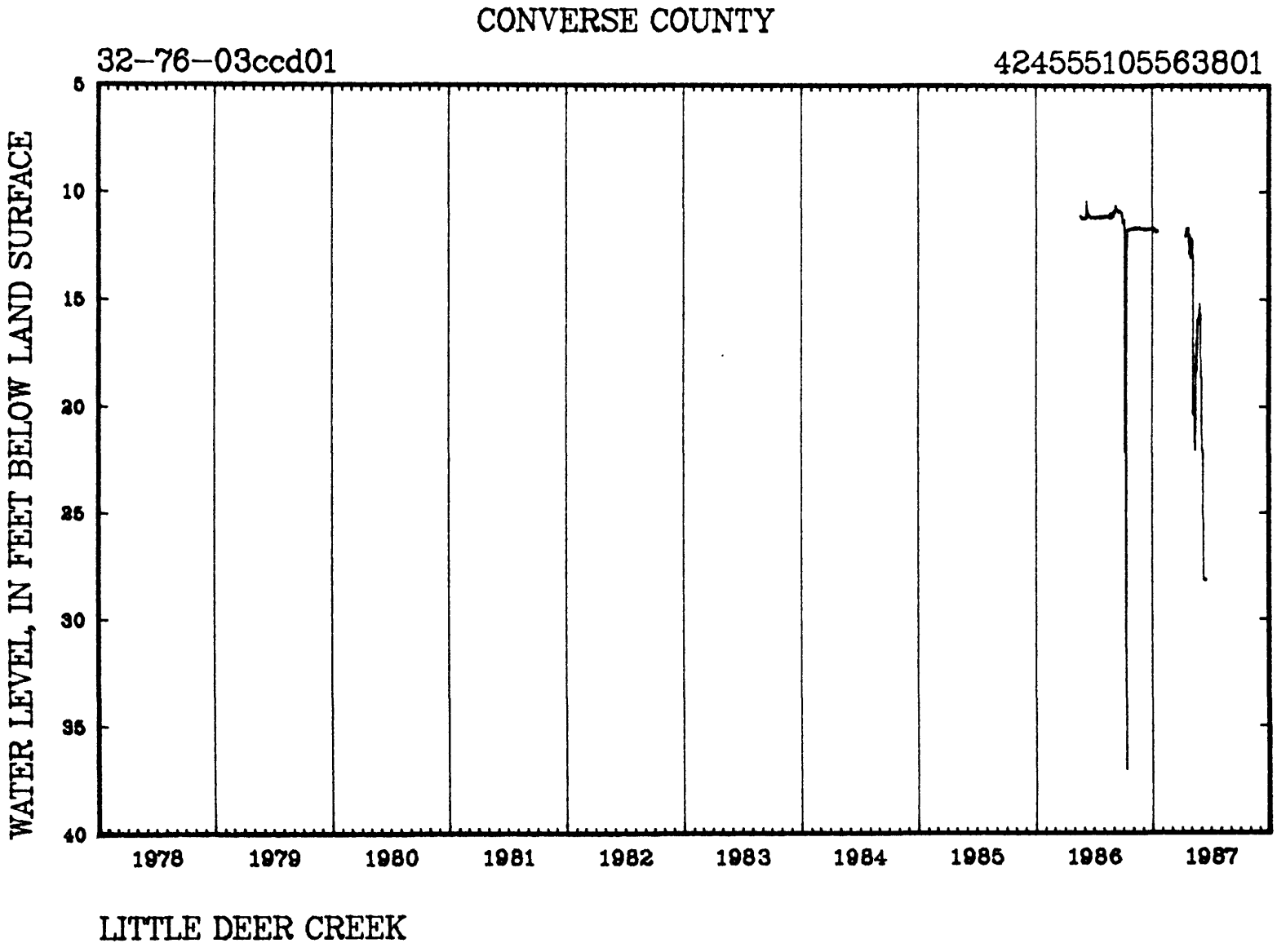
10
20
30
40
50
60
70
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
BARBER RANCH


CONVERSE COUNTY
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WATER LEVEL, IN FEET BELOW LAND SURFACE
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15
20
25
30
35
40
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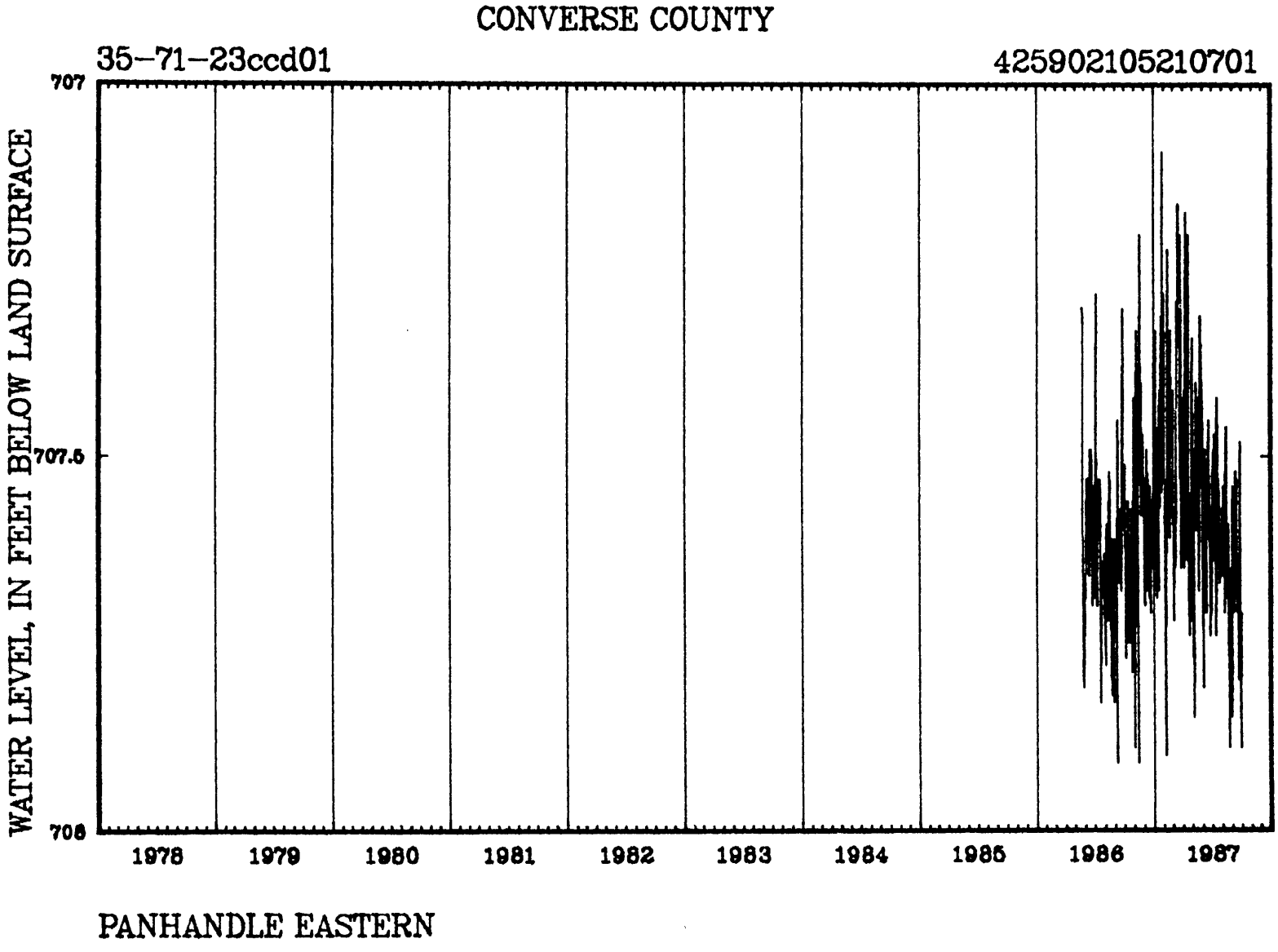
1979
1980
1981
1982
1983
1984
1985
1986
1987
LITTLE DEER CREEK


CONVERSE COUNTY
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707
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708
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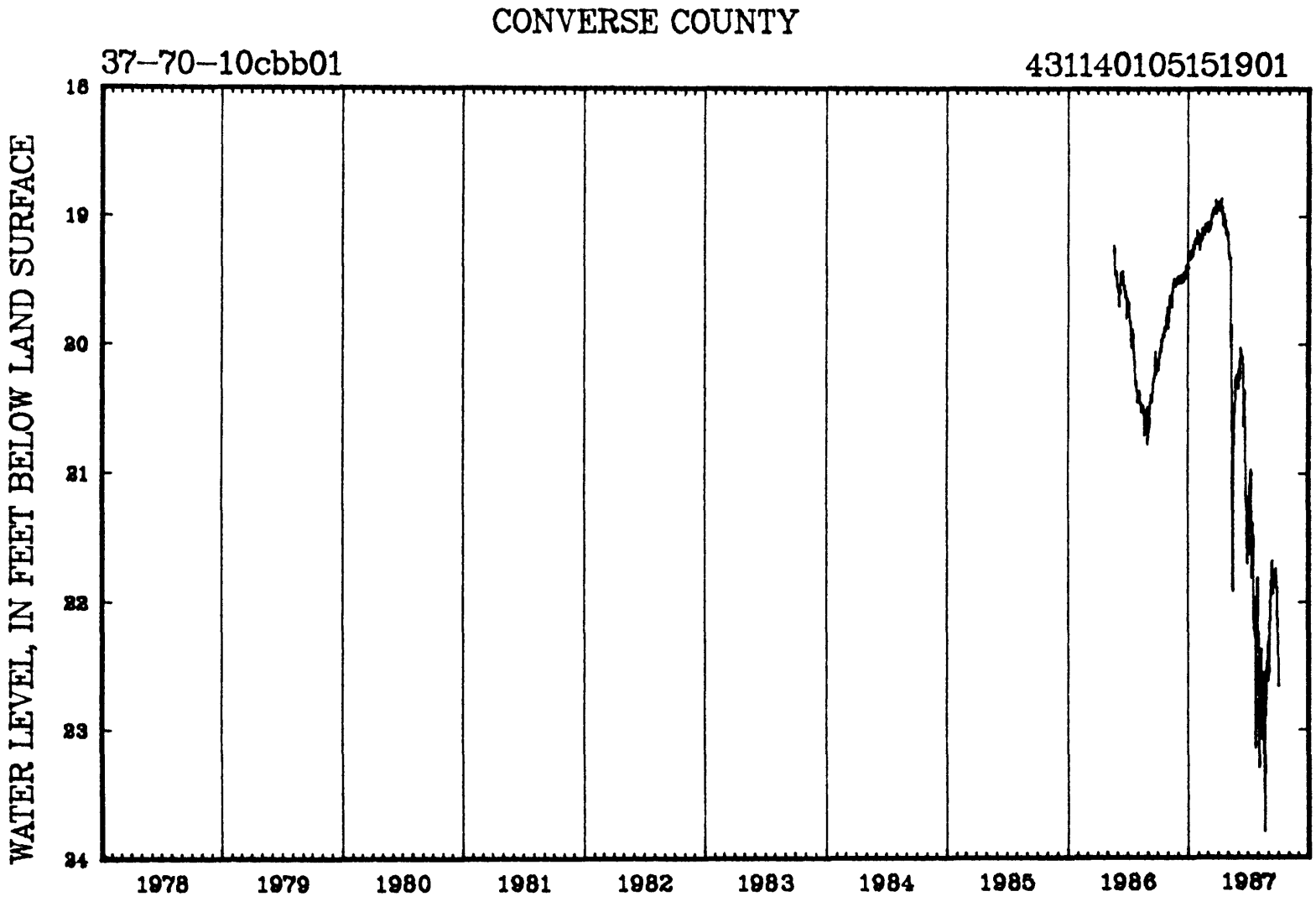
1979
1980
1981
1982
1983
1984
1985
1986
1987
PANHANDLE EASTERN


CONVERSE COUNTY
37–70–10cbb01
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WATER LEVEL, IN FEET BELOW LAND SURFACE
18
19
20
21
22
23
24
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987

BILL #6

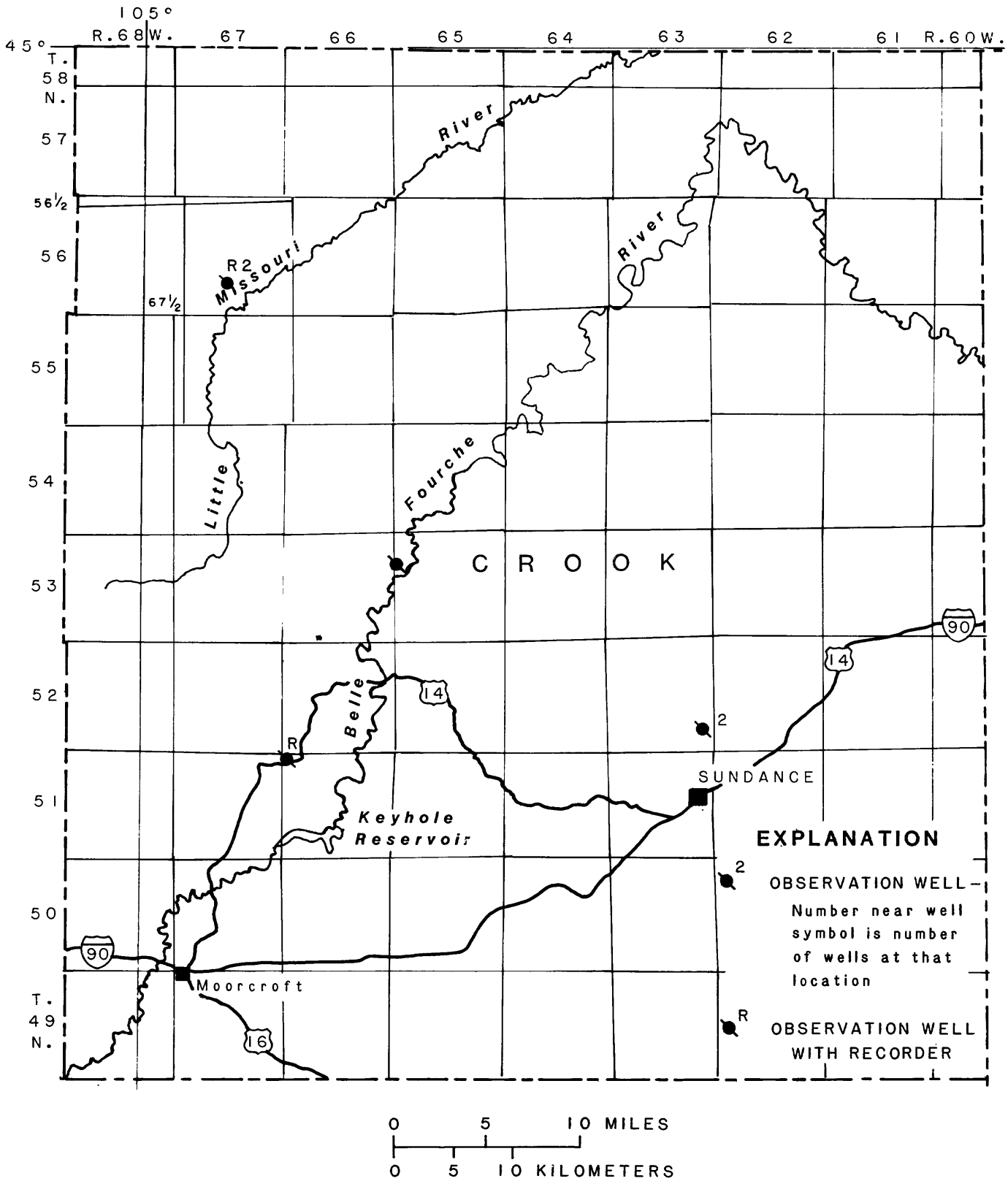
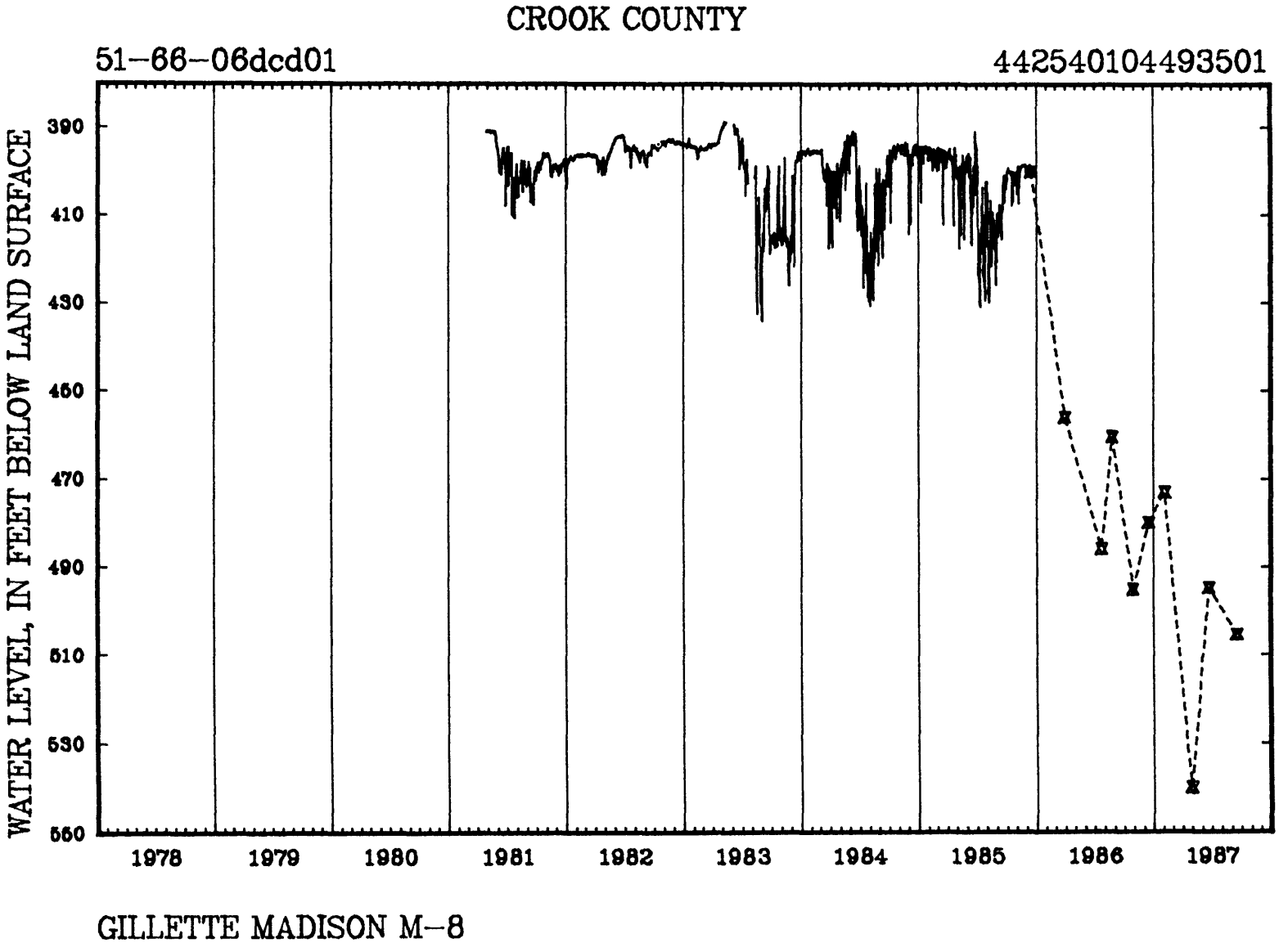


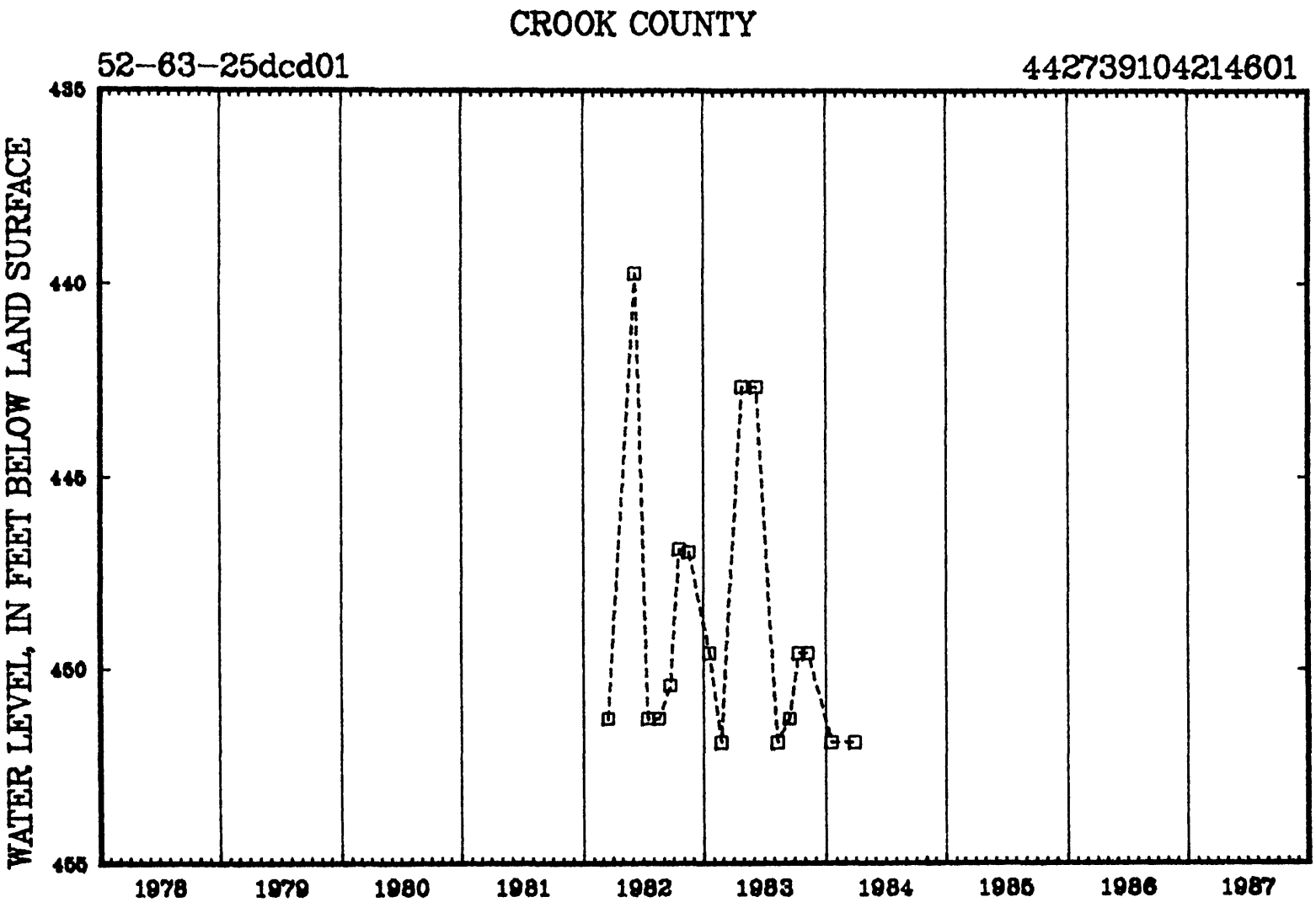
Figure 6.--Location of observation wells in Crook County, Wyoming.

Records of observation wells in Crook County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

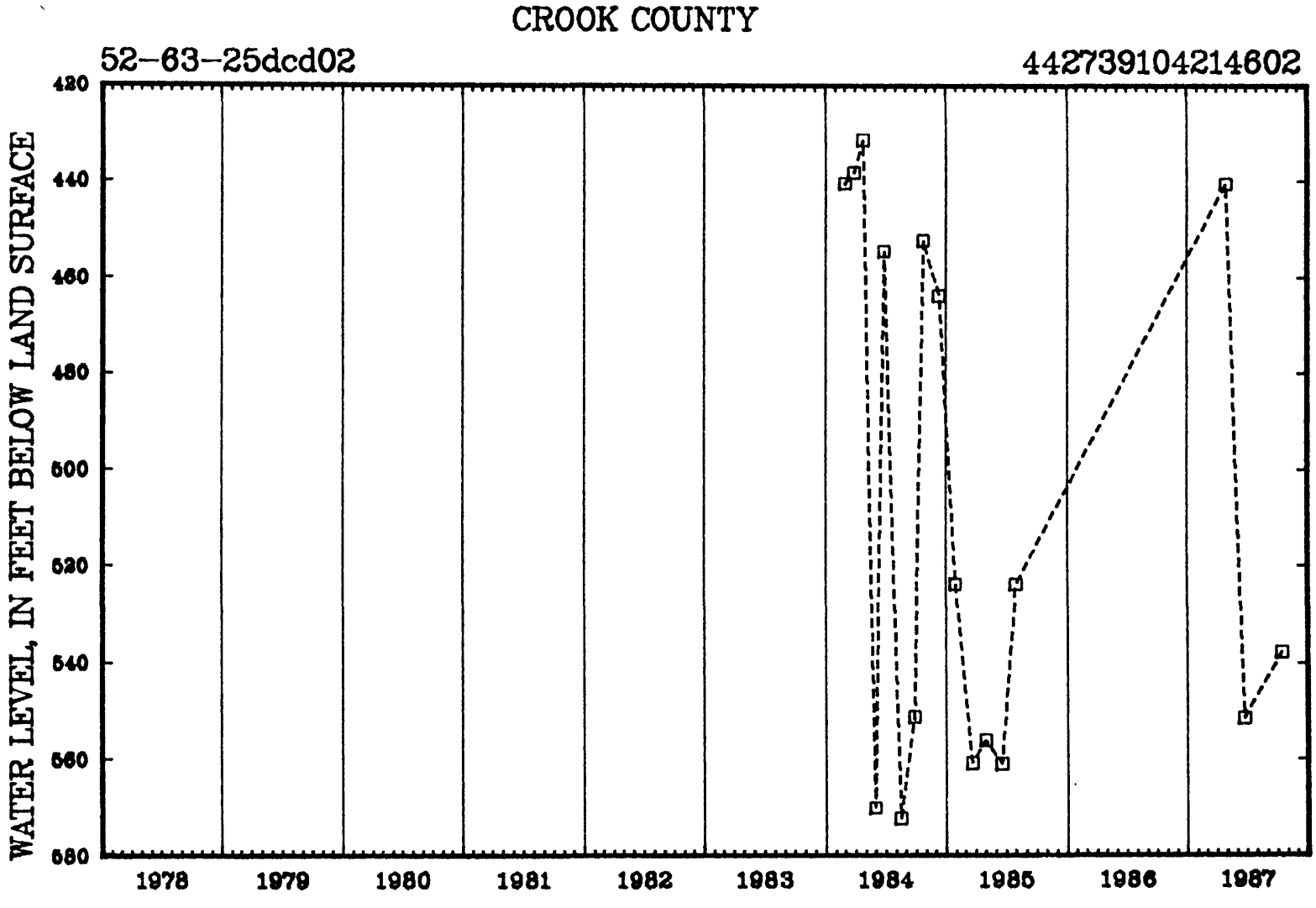
Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
51-66-06dcd01	3,001	P	331MDSN	1981-87	388.66	05-83	[1,4]539.97	04-87
52-63-25dcd01	1,123	P	331MDSN	1982-84	[1]439.73	06-82	[1,4]451.89	02-83, 08-83, 01-84, 03-84
52-63-25dcd02	1,236	P	331MDSN	1984-87	[1]431.45	04-84	[1,4]572.36	08-84
53-65-18bbd02	1,341	P	337PHSP	1962-87	[1]3.90	09-76	[1,4]26.33	01-74
56-67-28aab01	3,320	U	331MDSN	1982-87	151.65	11-84	155.36	05-86
56-67-28aab02	2,240	U	331MDSN	1983-87	128.18	05-87	135.17	07-86

[1] From hand-measured data
[4] Well being pumped

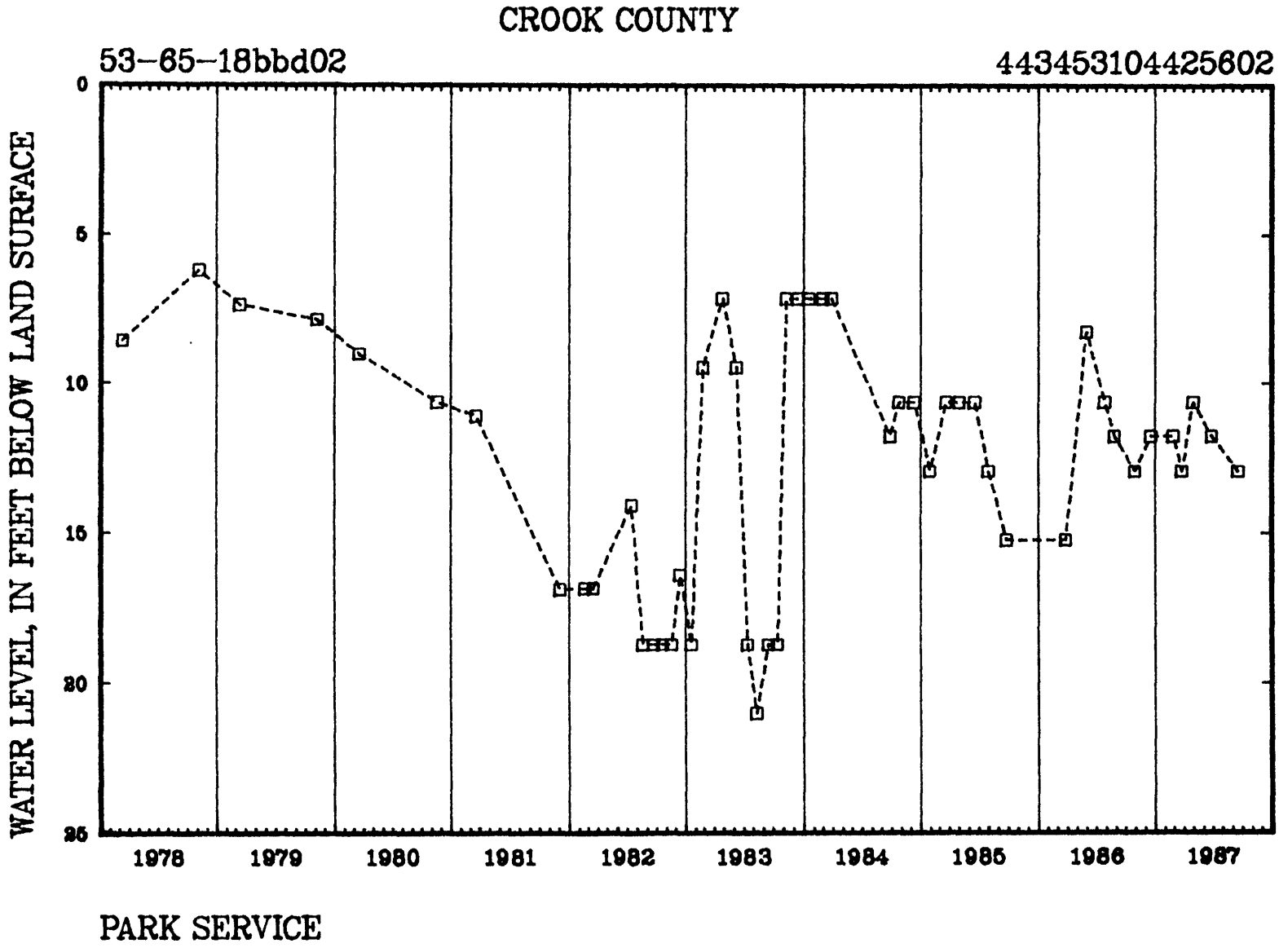

CROOK COUNTY
51-66-06dcd01
442540104493501
WATER LEVEL, IN FEET BELOW LAND SURFACE
390
410
430
450
470
490
510
530
550
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
GILLETTE MADISON M-8

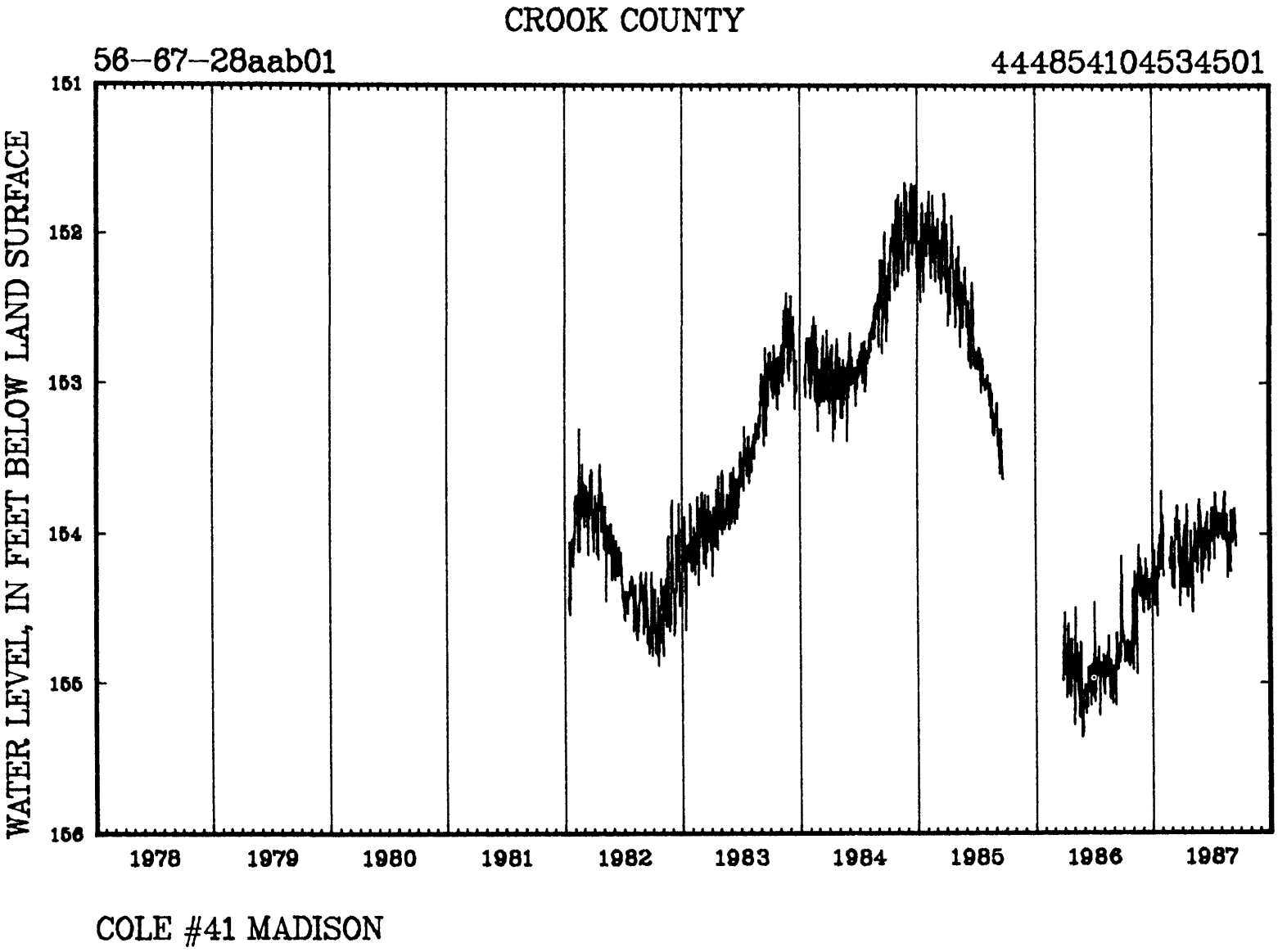


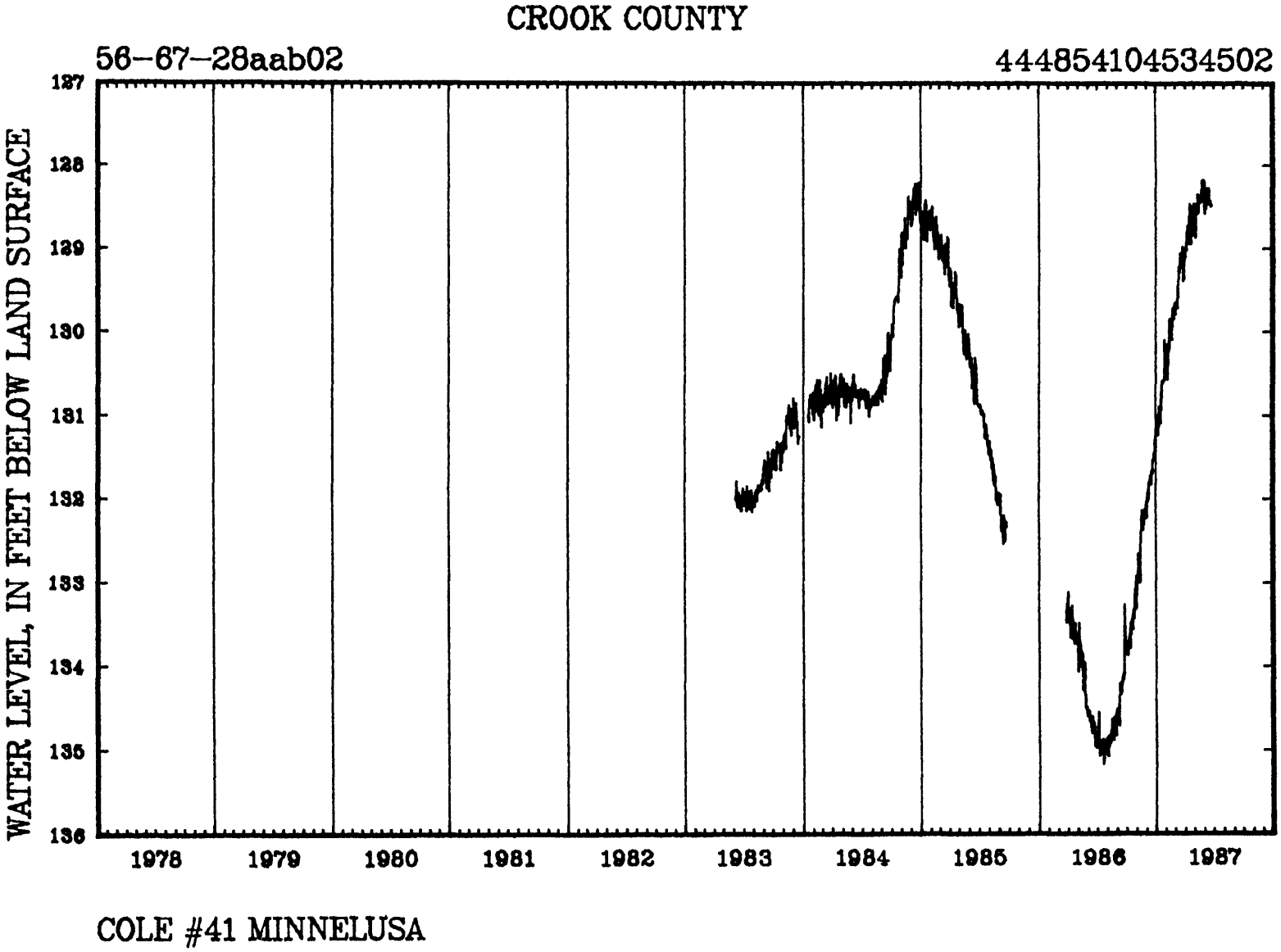
COLE #3A
DATA REFLECTS STATIC AND PUMPING WATER LEVELS



COLE #3B
DATA REFLECTS STATIC AND PUMPING WATER LEVELS


CROOK COUNTY
53-65-18bbd02
443453104425602
WATER LEVEL, IN FEET BELOW LAND SURFACE
0
5
10
15
20
25
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
PARK SERVICE


CROOK COUNTY
56–67–28aab01
444854104534501
WATER LEVEL, IN FEET BELOW LAND SURFACE
151
152
153
154
155
156
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
COLE #41 MADISON


CROOK COUNTY
56-67-28aab02
444854104534502
WATER LEVEL, IN FEET BELOW LAND SURFACE
127
128
129
130
131
132
133
134
135
136
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
COLE #41 MINNELUSA

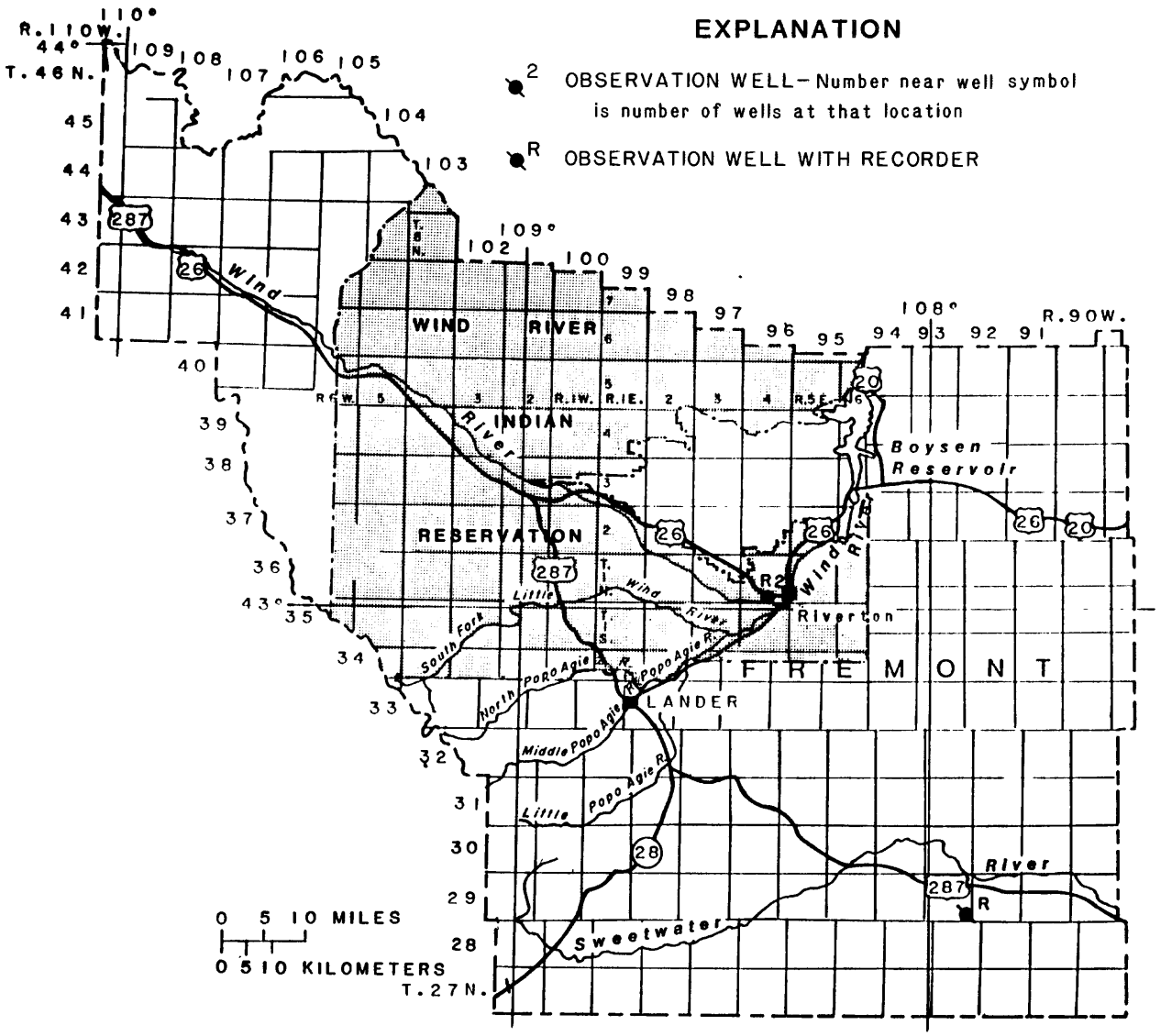
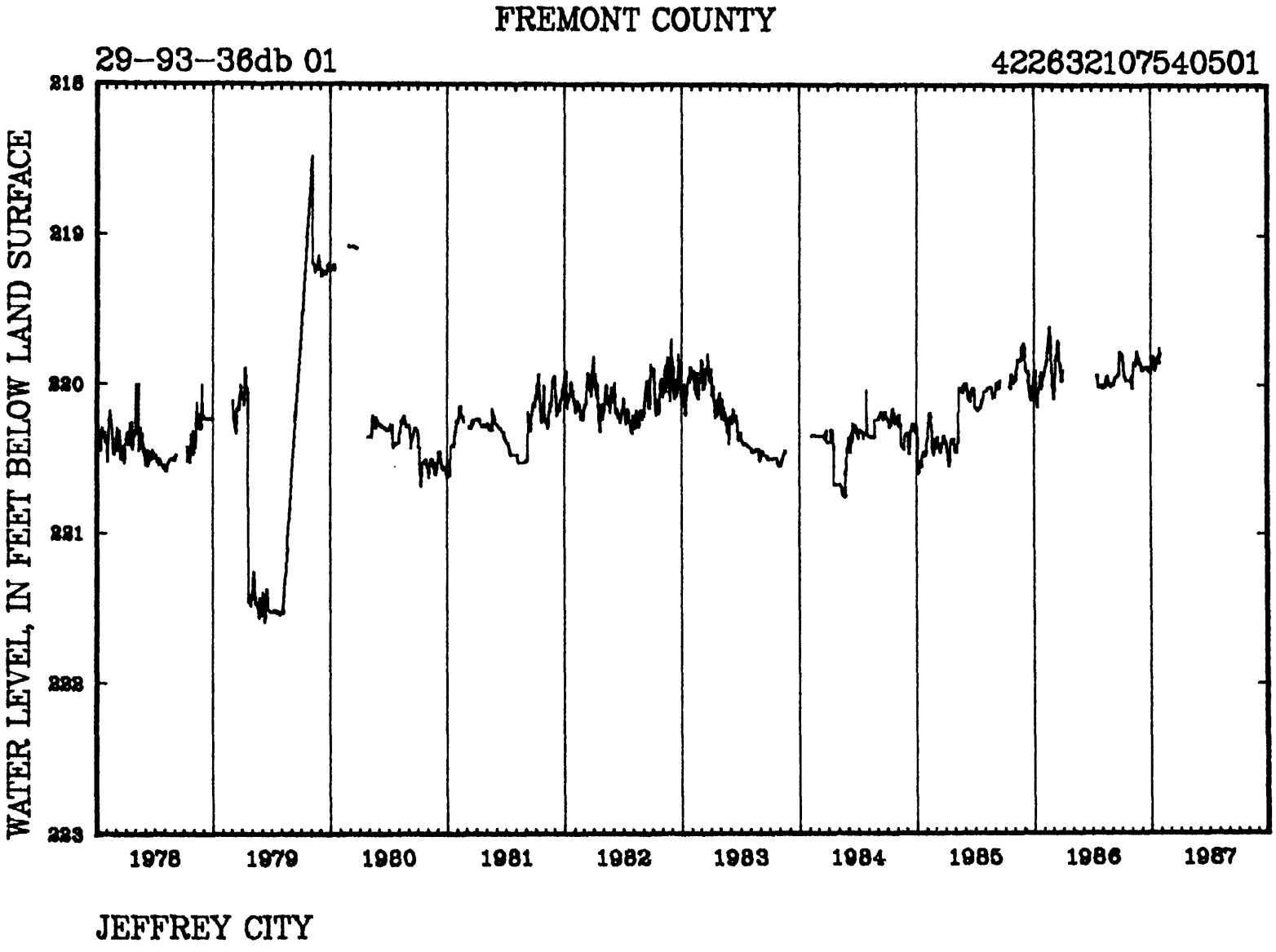


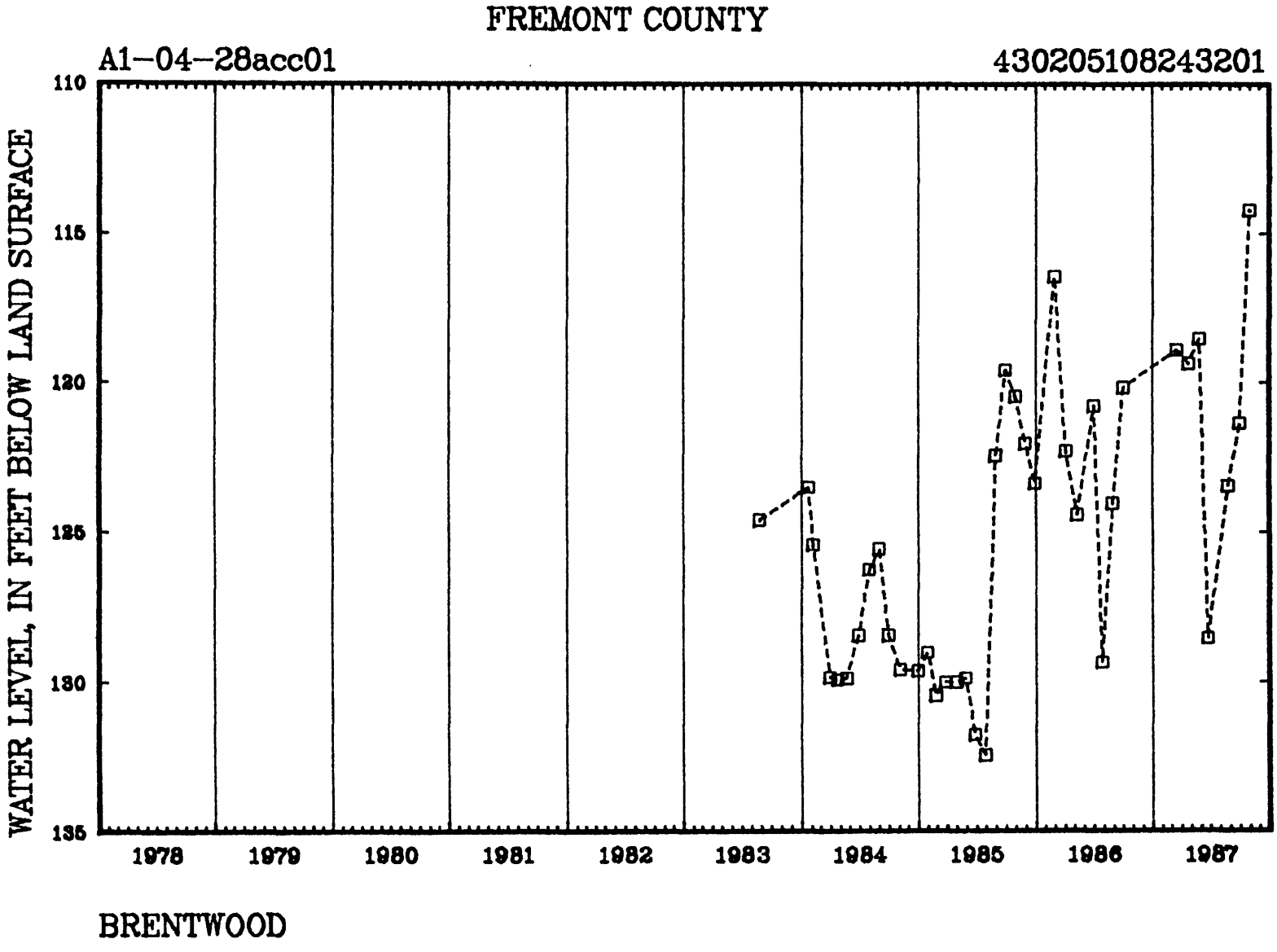
Figure 7.--Location of observation wells in Fremont County, Wyoming.

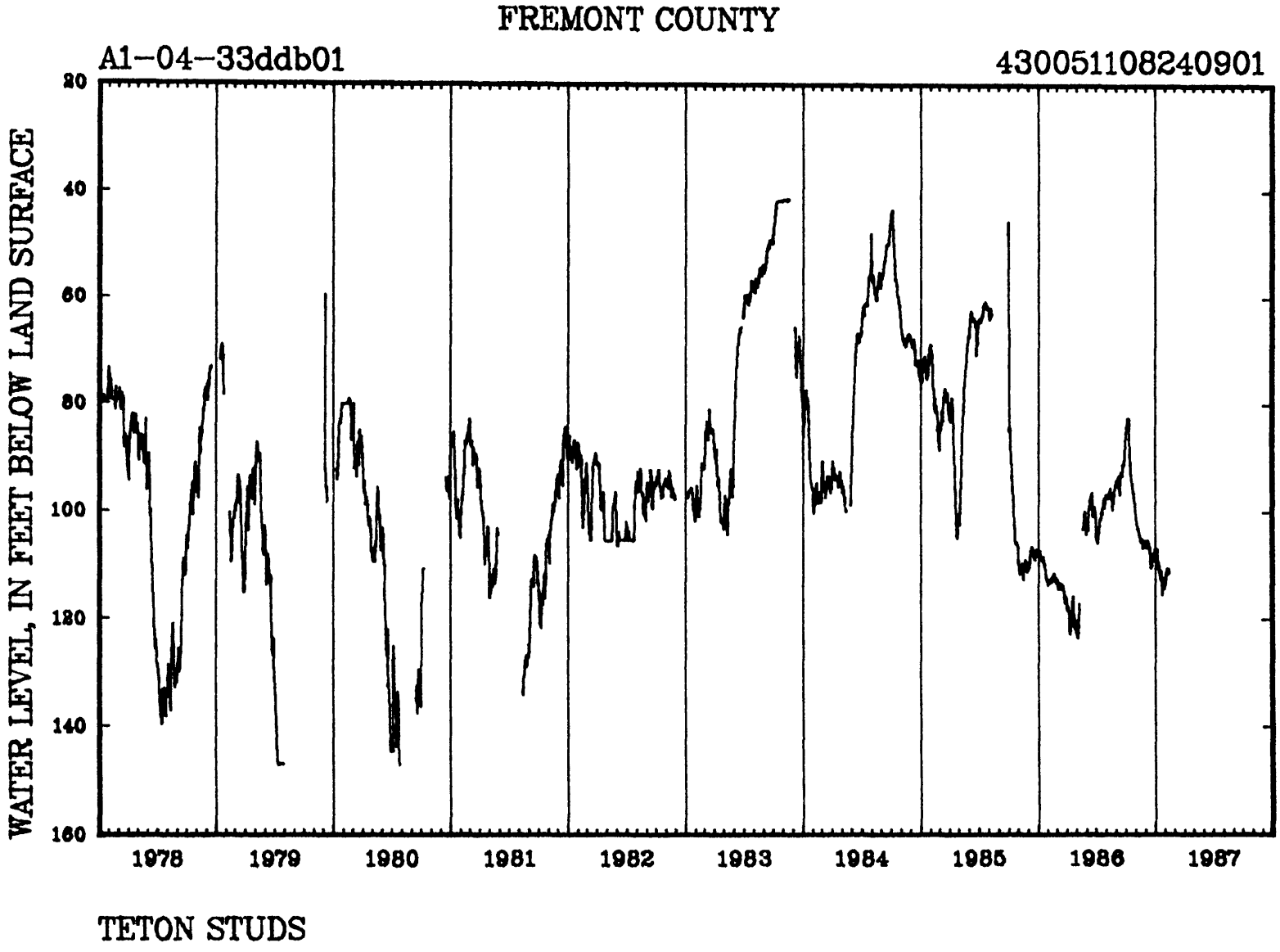
Records of observation wells in Fremont County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
29-93-36db 01	1,000	U	122ARKR	1974-87[2]	218.48	11-79	221.95	05-76
A1-04-28acc01	440	U	124WDRV	1983-87	[1]114.22	10-87	[1]132.44	07-85
A1-04-33ddb01	435	U	124WDRV	1951, 1961-87[2]	29.51	03-51	152.43	09-62

[1] From hand-measured data
[2] Discontinued


FREMONT COUNTY
29-93-36db 01
422632107540501
WATER LEVEL, IN FEET BELOW LAND SURFACE
218
219
220
221
222
223
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
JEFFREY CITY


FREMONT COUNTY
A1-04-28acc01
430205108243201
WATER LEVEL, IN FEET BELOW LAND SURFACE
110
115
120
125
130
135
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
BRENTWOOD


FREMONT COUNTY
A1-04-33ddb01
430051108240901
WATER LEVEL, IN FEET BELOW LAND SURFACE
20
40
60
80
100
120
140
160
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
TETON STUDS

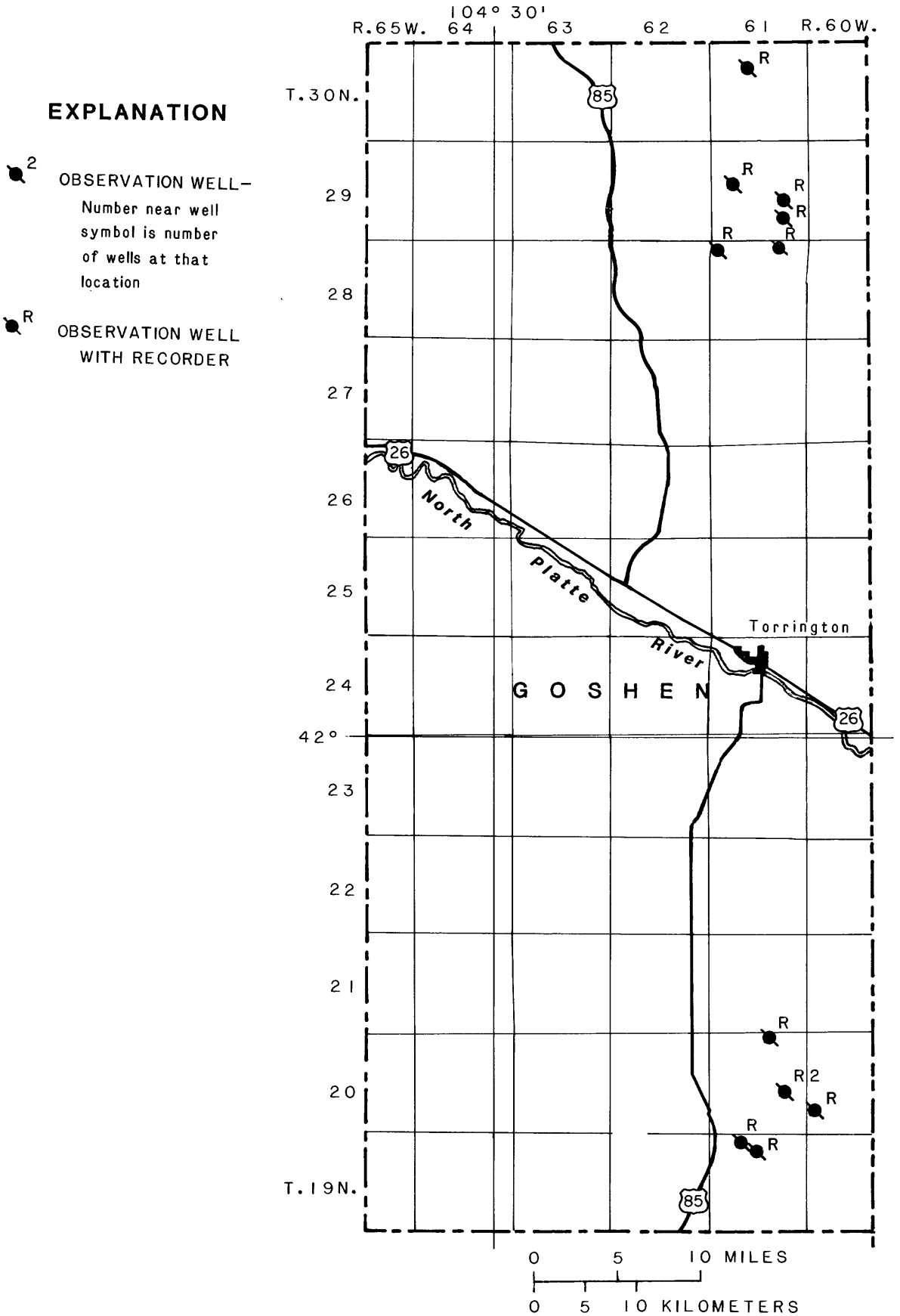
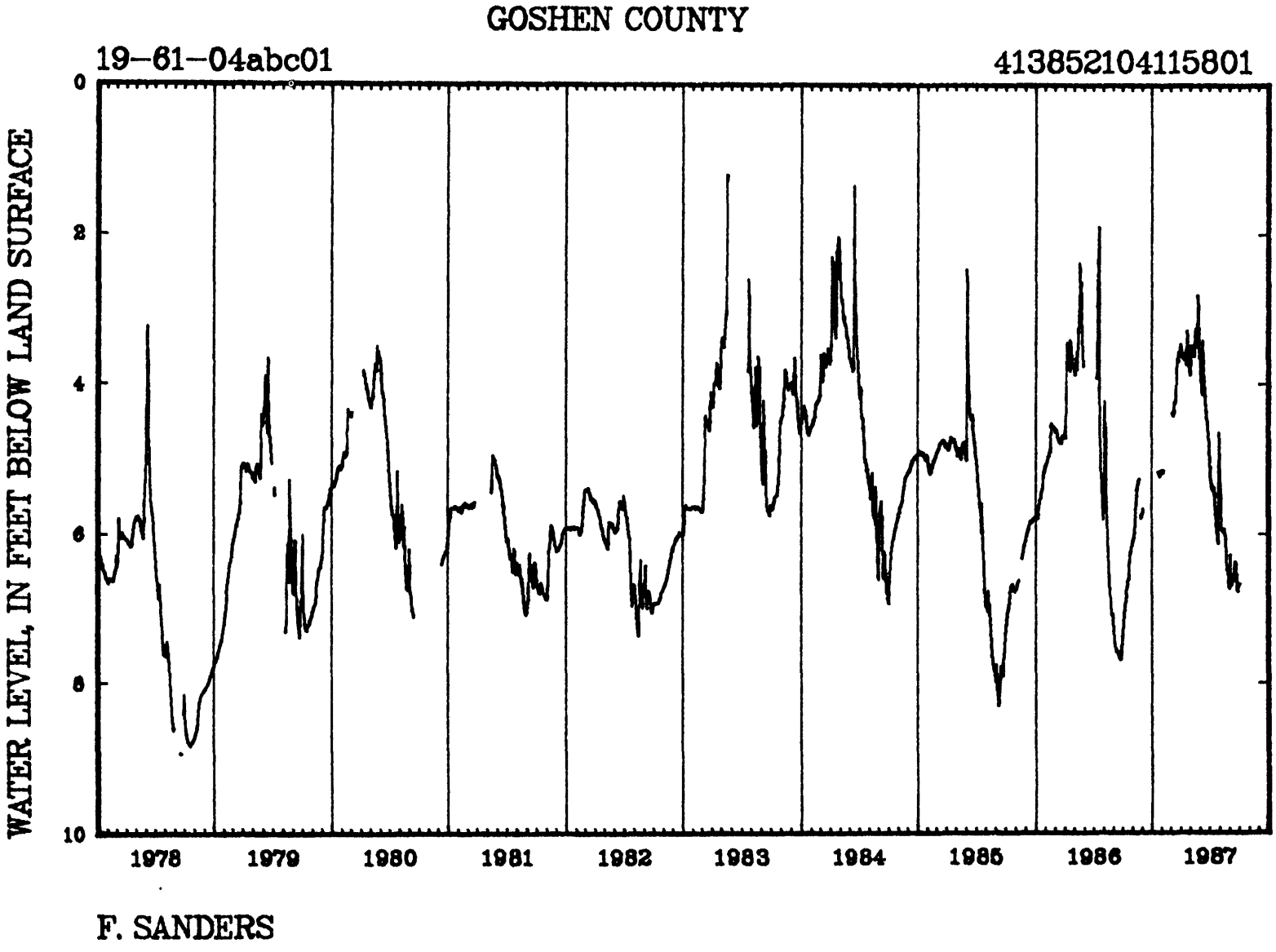


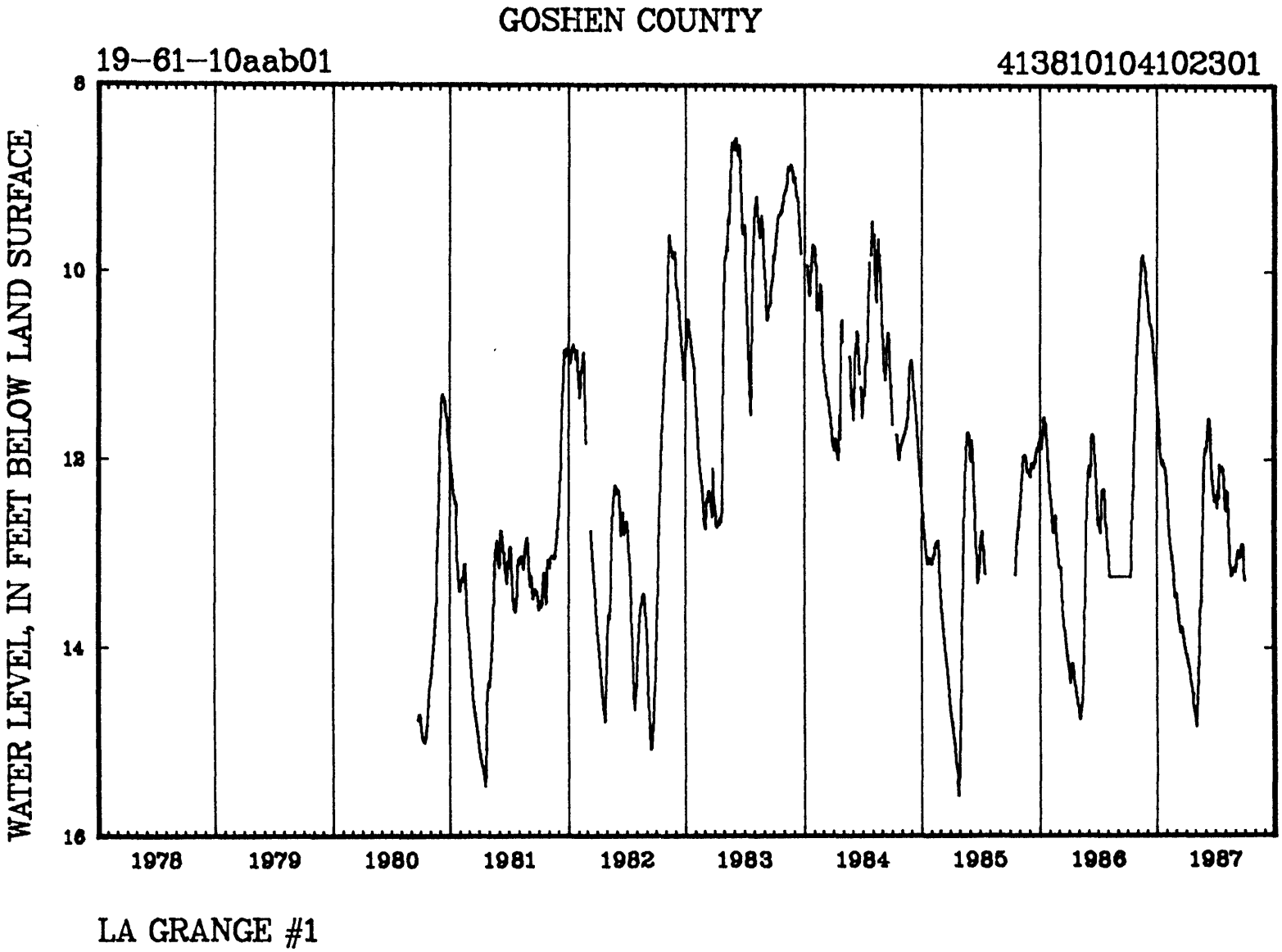
Figure 8.--Location of observation wells in Goshen County, Wyoming.

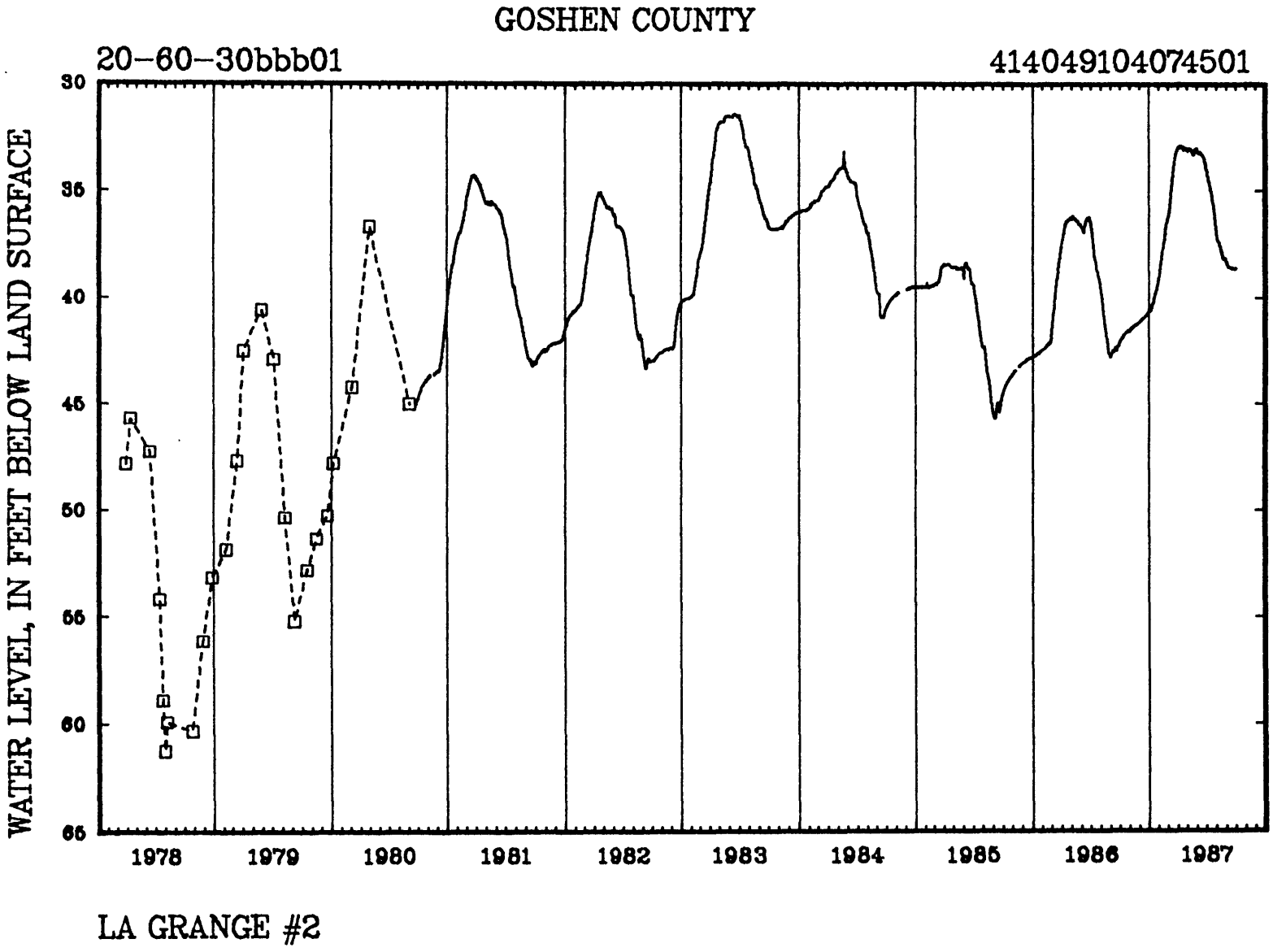
Records of observation wells in Goshen County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

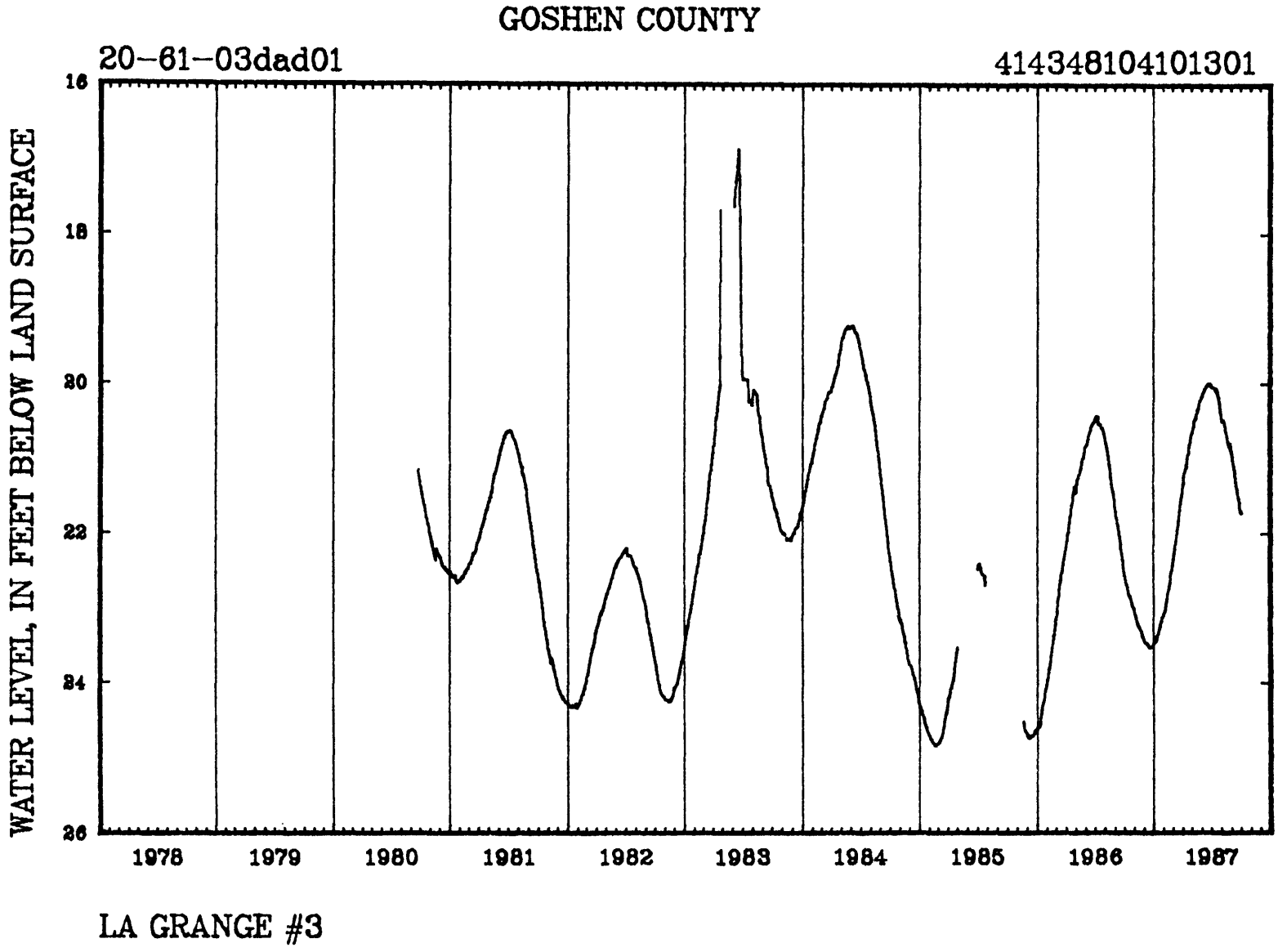
Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
19-61-04abc01	50	U	111ALVM	1972-87	1.20	05-83	12.73	08-77
19-61-10aab01	200	U	123BRUL	1980-87	8.56	06-83	15.58	04-85
20-60-30bbb01	70	U	123BRUL	1978-87	31.40	06-83	[1] 61.25	07-78
20-61-03dad01	100	U	123WRVR	1980-87	16.85	06-83	24.83	02-85
20-61-23bdb02	70	U	123BRUL	1978-87	2.10	04-84	[1] 26.74	09-78
20-61-23ccc01	82	U	111ALVM	1972-87	9.89	05-87	[1] 32.59	09-78
28-61-02ccd01	255	U	122ARKR	1986-87	161.31	05-86	162.68	09-87
28-61-06aba01	220	U	122ARKR	1979-87	127.23	05-79	132.85	04-86
29-61-17aad01	220	U	122ARKR	1980-87	124.50	01-81	127.28	05-86
29-61-23abb01	300	U	122ARKR	1979-87	198.29	06-87	212.23	06-87
29-61-26cbb01	200	U	122ARKR	1980-87	131.89	05-81	135.21	04-86
30-61-09bbb01	220	U	122ARKR	1981-87	80.61	05-81	83.92	08-87, 09-87

[1] From hand-measured data

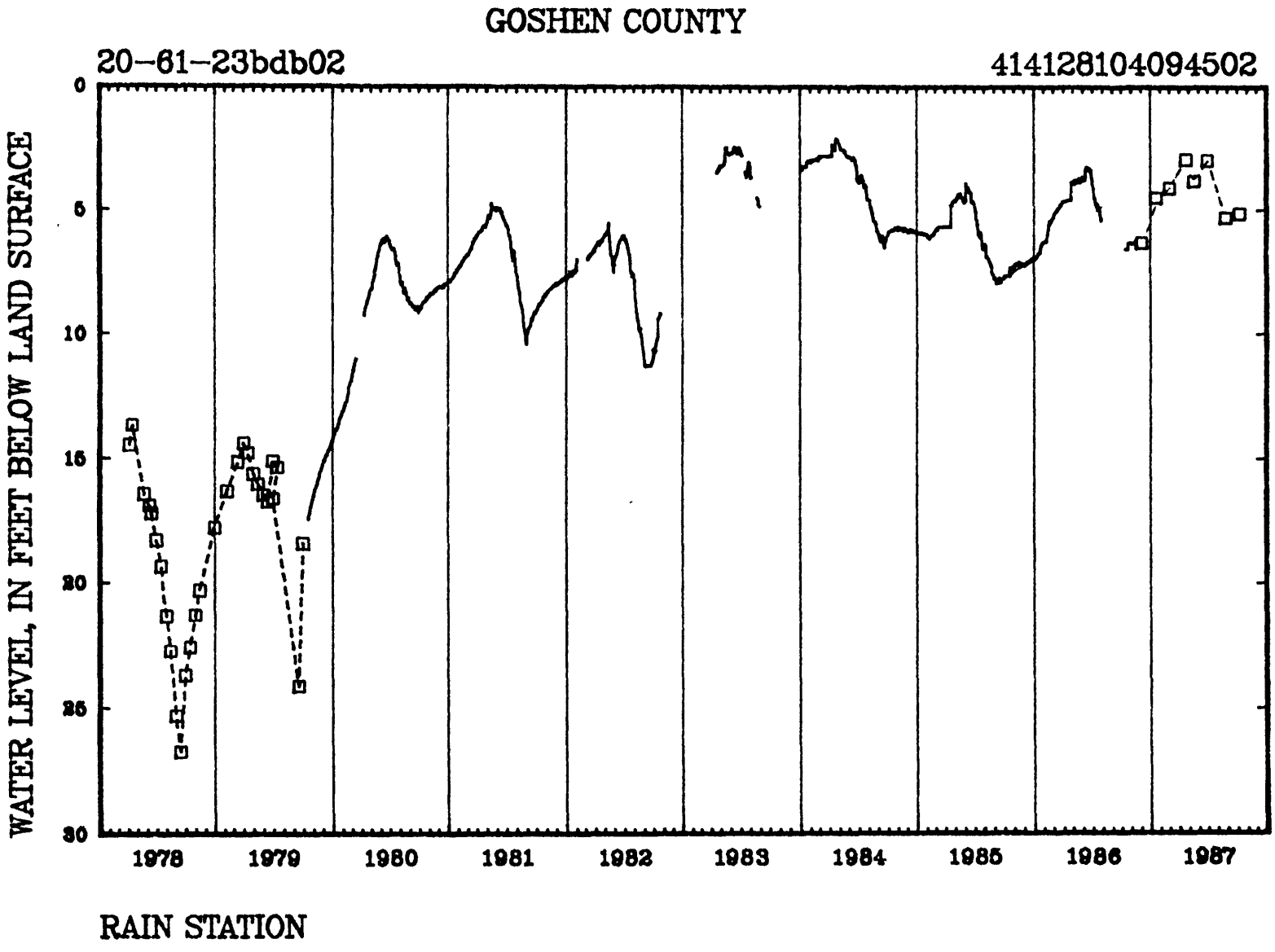

GOSHEN COUNTY
19-61-04abc01
413852104115801
WATER LEVEL, IN FEET BELOW LAND SURFACE
0
2
4
6
8
10
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
F. SANDERS

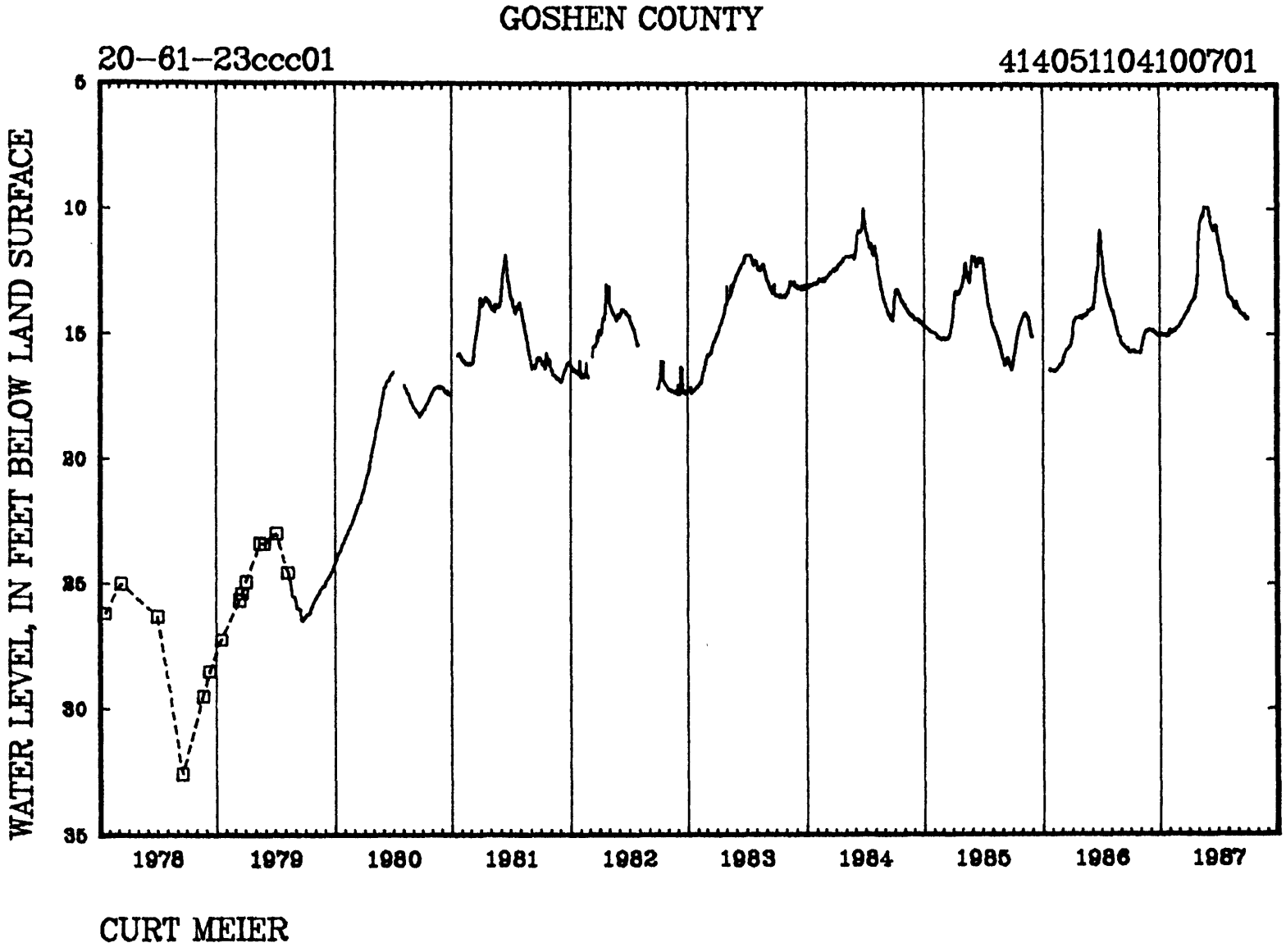

GOSHEN COUNTY
19-61-10aab01
413810104102301
WATER LEVEL, IN FEET BELOW LAND SURFACE
8
10
12
14
16
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
LA GRANGE #1

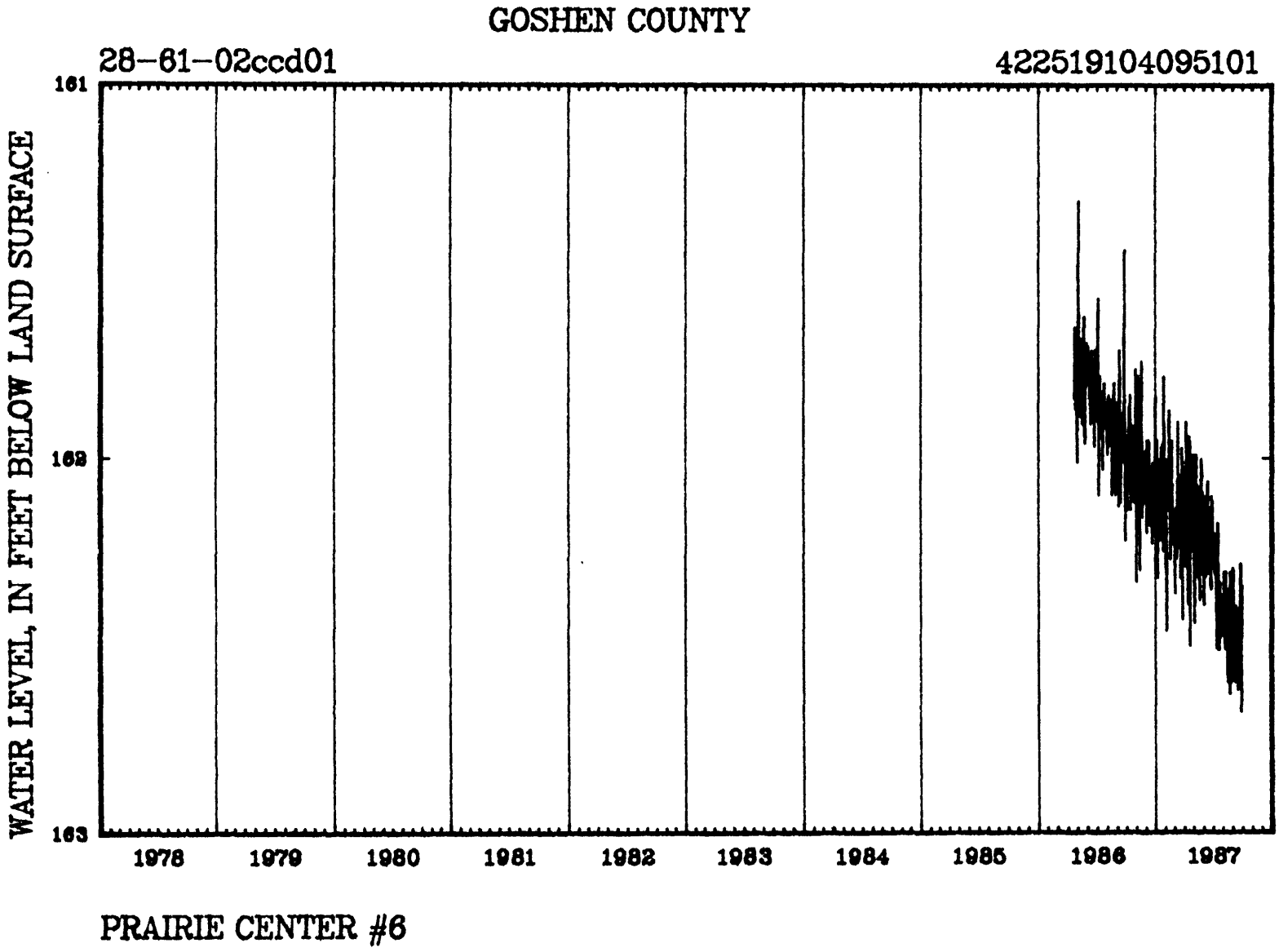

GOSHEN COUNTY
20-60-30bbb01
414049104074501
WATER LEVEL, IN FEET BELOW LAND SURFACE
30
35
40
45
50
55
60
65
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
LA GRANGE #2

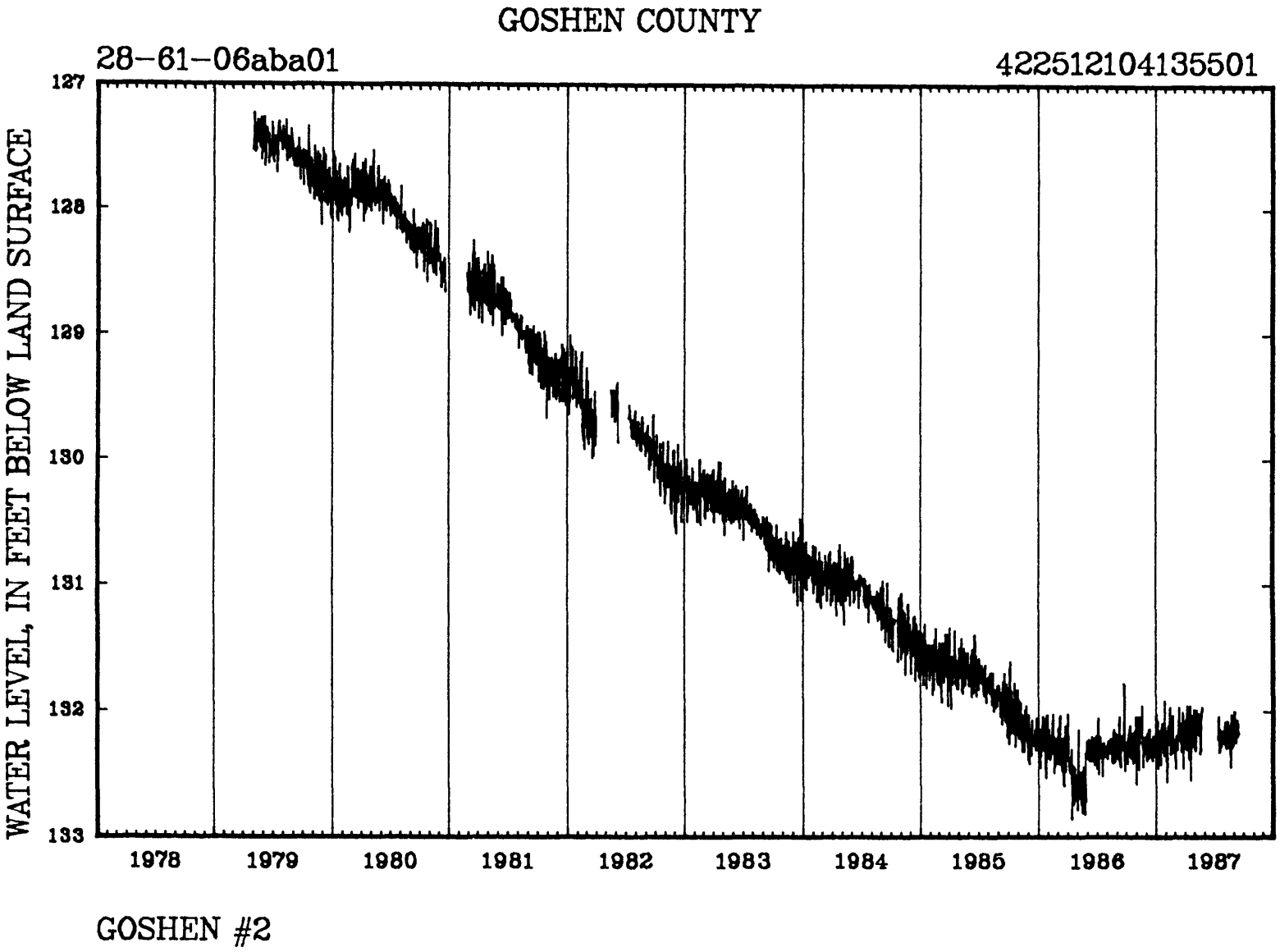

GOSHEN COUNTY
20-61-03dad01
414348104101301
WATER LEVEL, IN FEET BELOW LAND SURFACE
16
18
20
22
24
26
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987

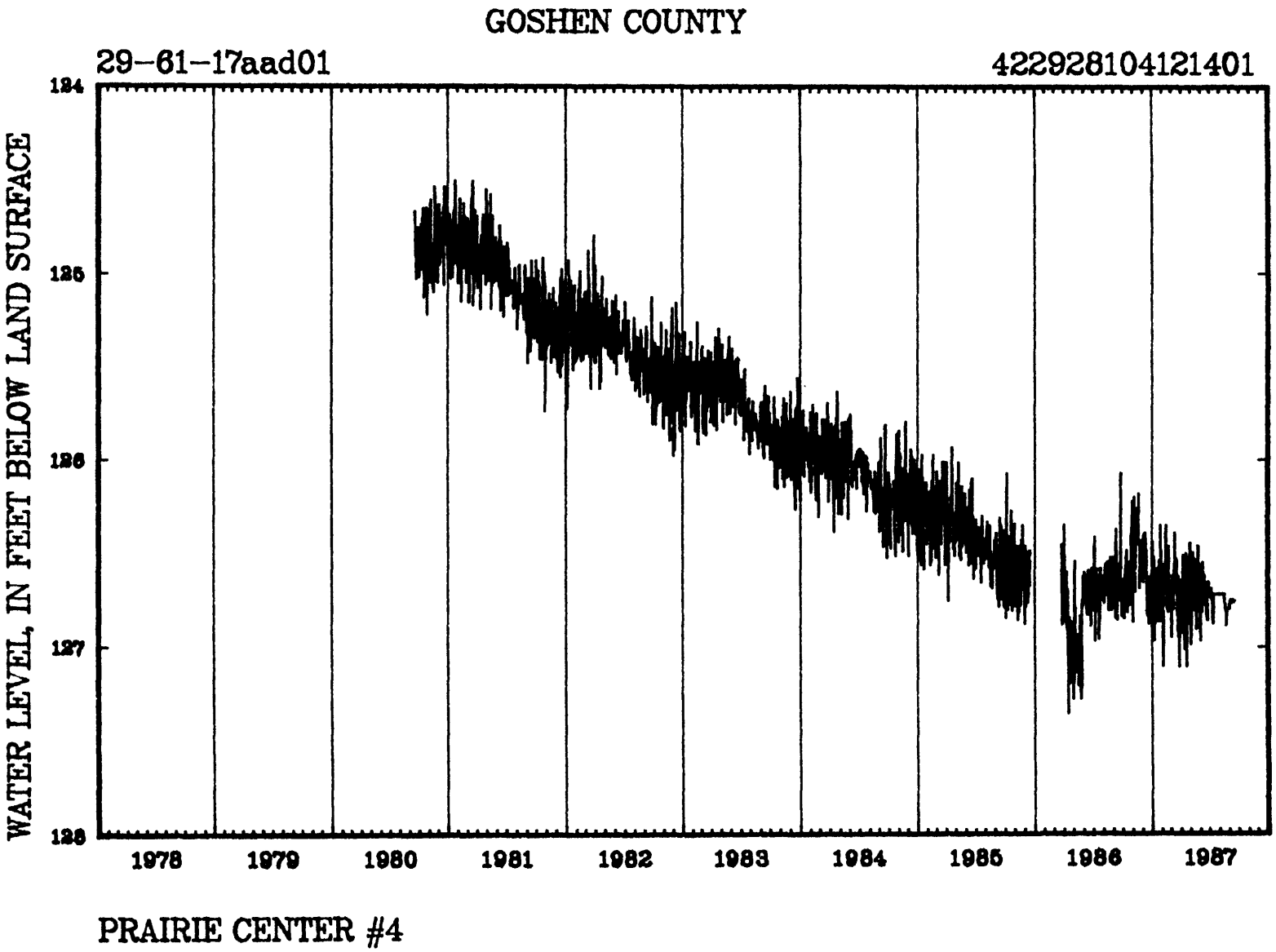
LA GRANGE #3

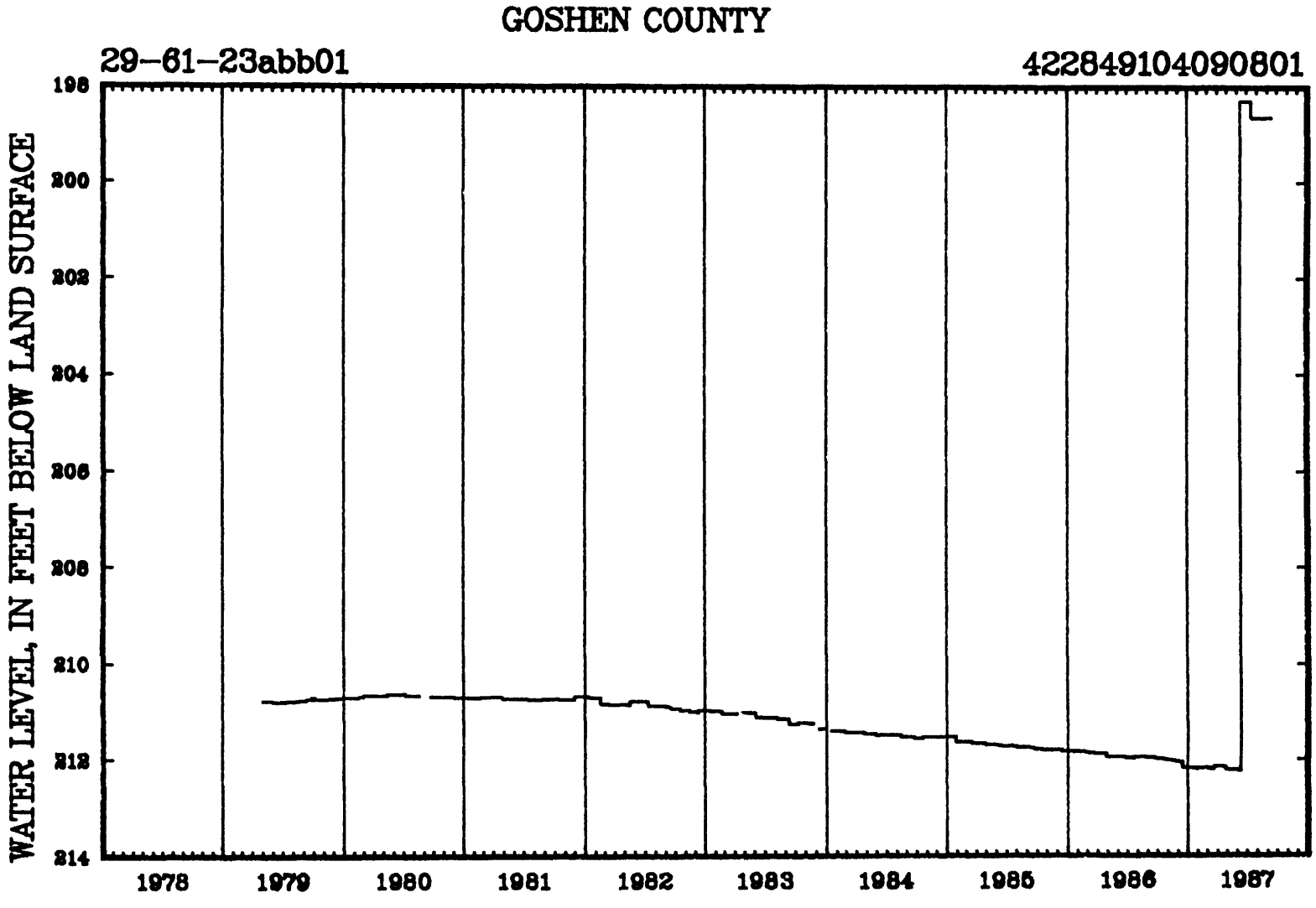

GOSHEN COUNTY
20-61-23bdb02
414128104094502
WATER LEVEL, IN FEET BELOW LAND SURFACE
0
5
10
15
20
25
30
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
RAIN STATION


GOSHEN COUNTY
20-61-23ccc01
414051104100701
WATER LEVEL, IN FEET BELOW LAND SURFACE
5
10
15
20
25
30
35
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
CURT MEIER

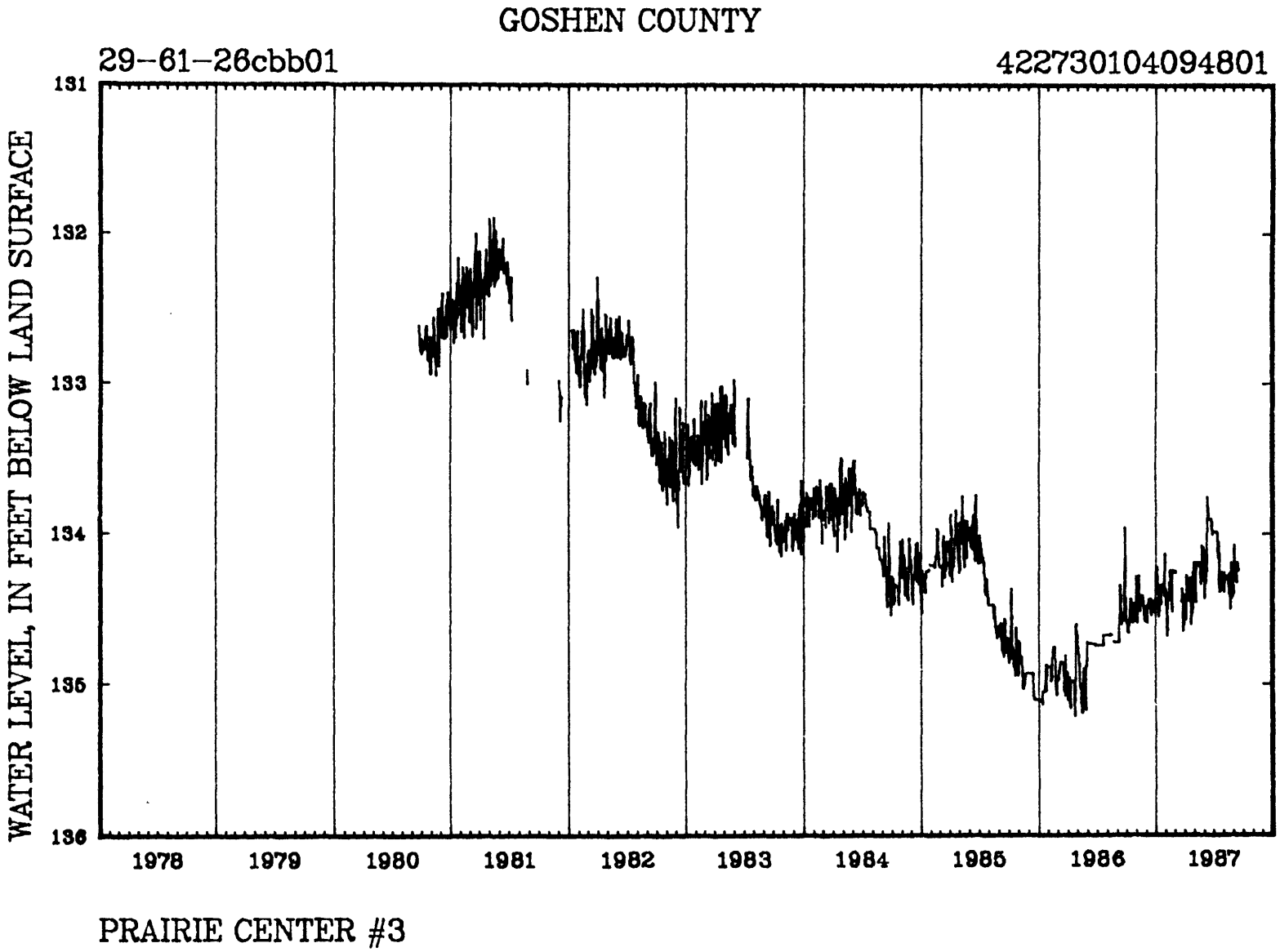

GOSHEN COUNTY
28-61-02ccd01
422519104095101
WATER LEVEL, IN FEET BELOW LAND SURFACE
161
162
163
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
PRAIRIE CENTER #6

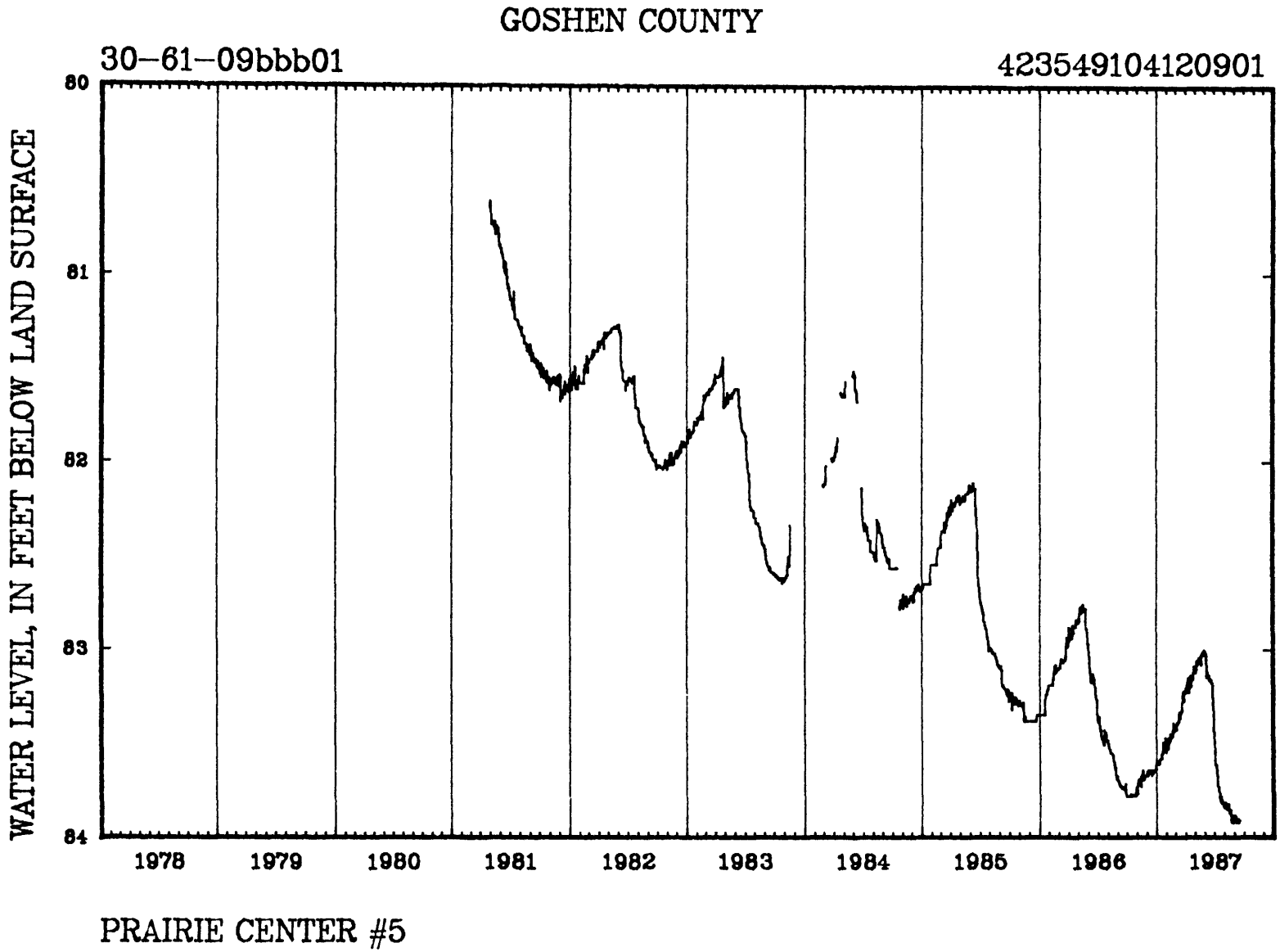

GOSHEN COUNTY
28-61-06aba01
422512104135501
WATER LEVEL, IN FEET BELOW LAND SURFACE
127
128
129
130
131
132
133
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
GOSHEN #2


GOSHEN COUNTY
29-61-17aad01
422928104121401
WATER LEVEL, IN FEET BELOW LAND SURFACE
124
125
126
127
128
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
PRAIRIE CENTER #4



GOSHEN #1
SLUG TESTED JUNE 1987 – DID NOT RESPOND


GOSHEN COUNTY
29-61-26cbb01
422730104094801
WATER LEVEL, IN FEET BELOW LAND SURFACE
131
132
133
134
135
136
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
PRAIRIE CENTER #3


GOSHEN COUNTY
30-61-09bbb01
423549104120901
WATER LEVEL, IN FEET BELOW LAND SURFACE
80
81
82
83
84
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
PRAIRIE CENTER #5

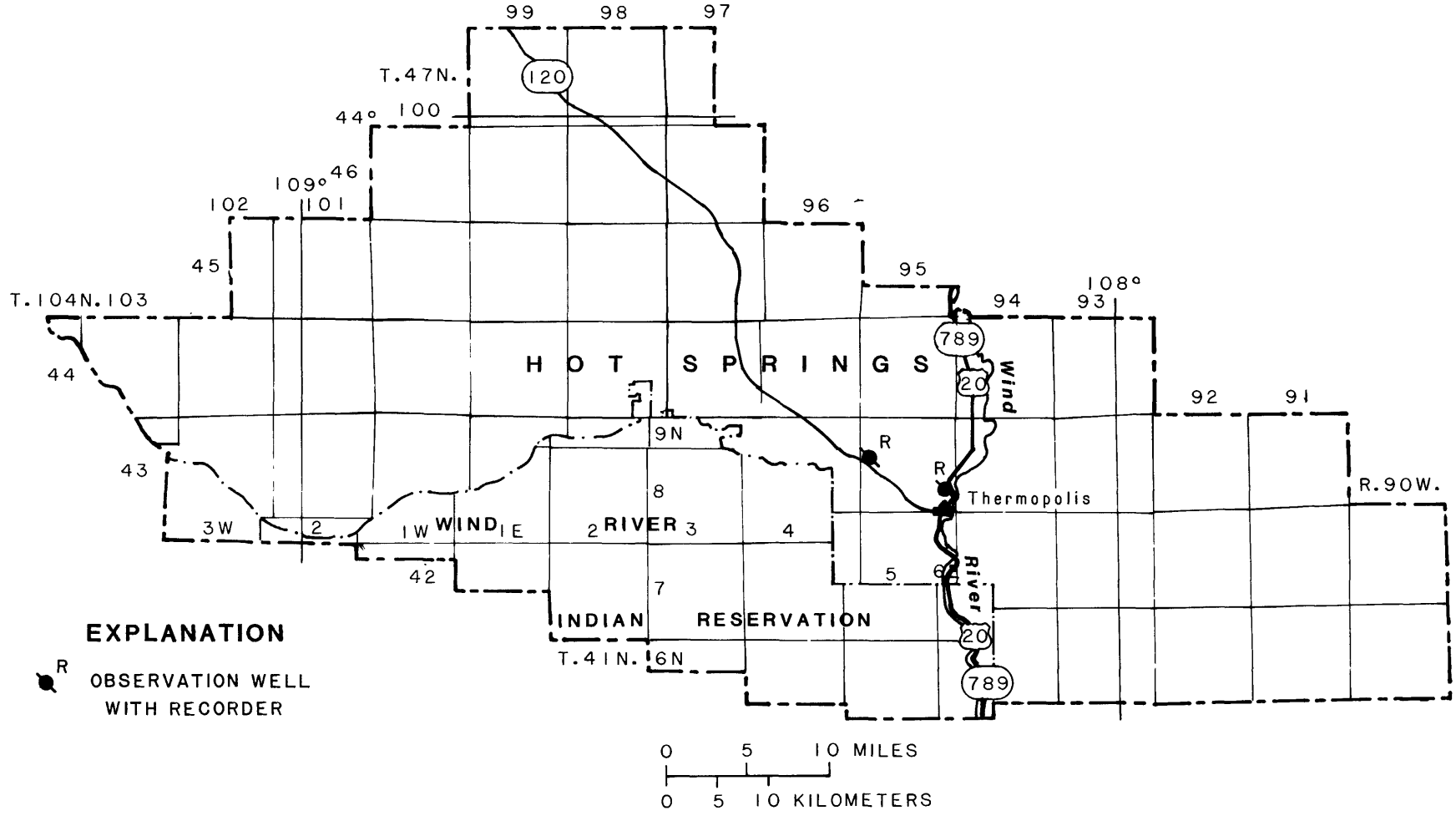
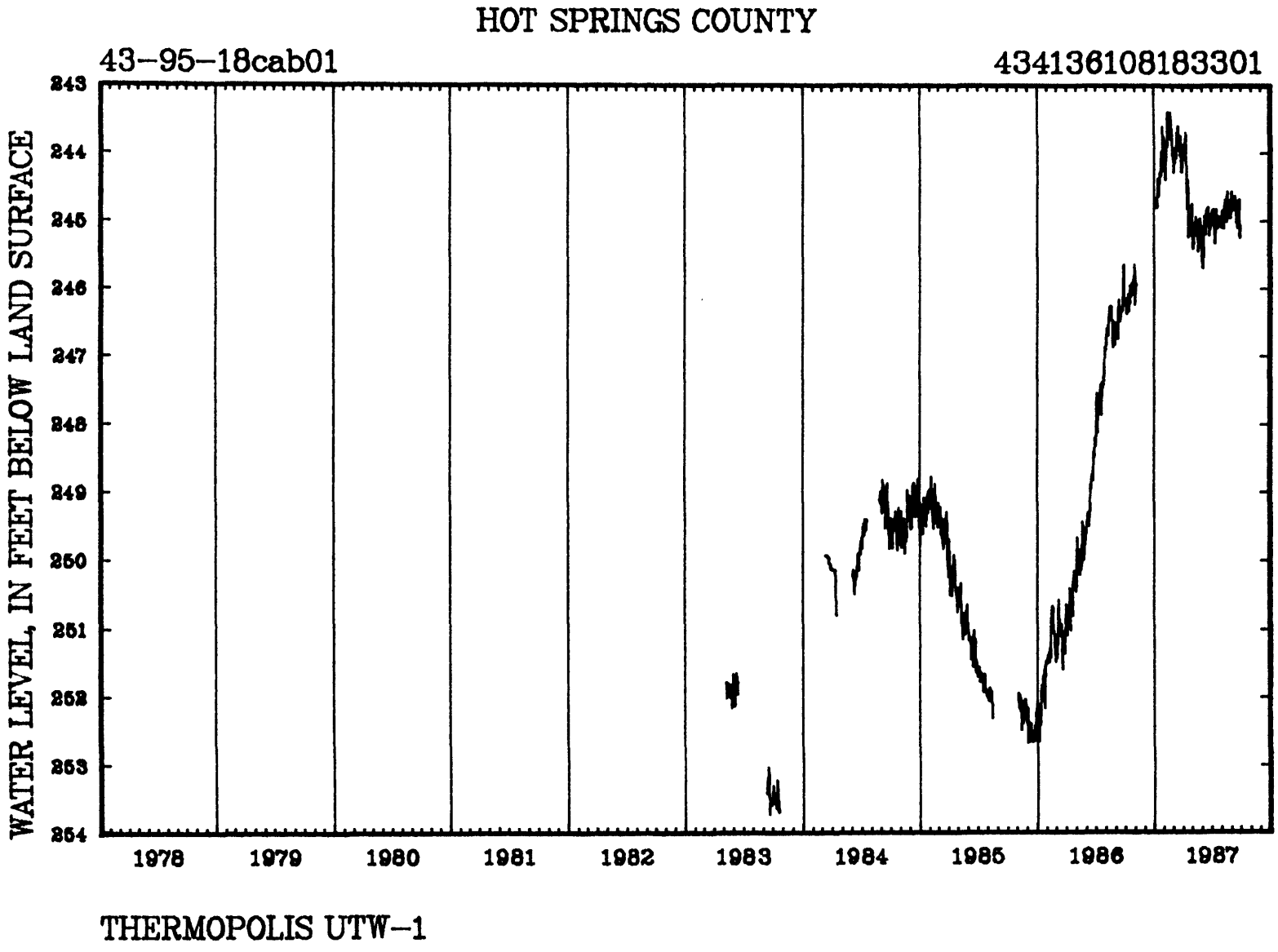
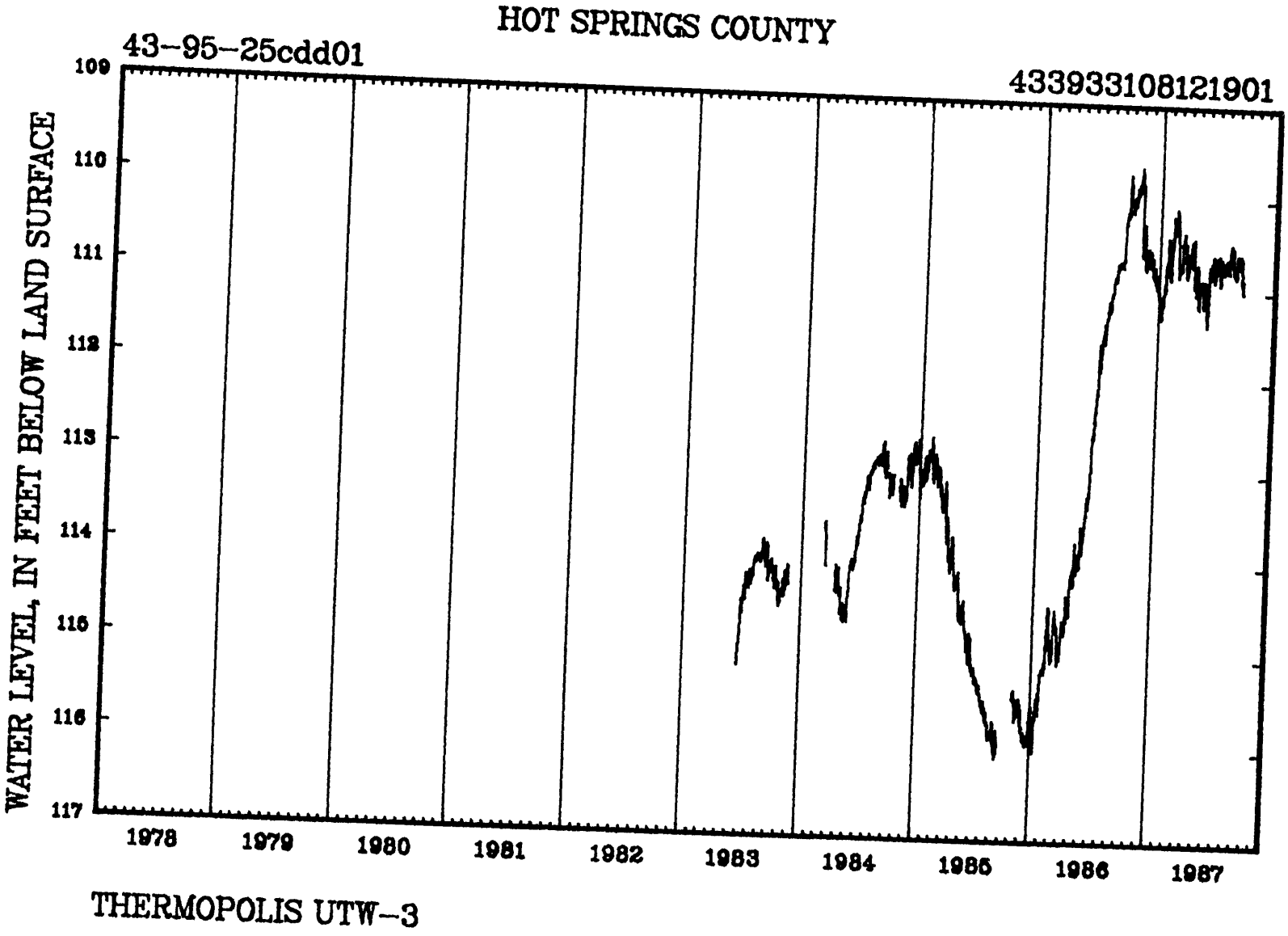


Figure 9.--Location of observation wells in Hot Springs County, Wyoming.

Records of observation wells in Hot Springs County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
43-95-18cab01	354	U	317TSLP	1983-87	243.38	02-87	253.74	09-83
43-95-25cdd01	228	U	311PRKC	1983-87	109.65	10-86	116.11	09-85


HOT SPRINGS COUNTY
43-95-18cab01
434136108183301
WATER LEVEL, IN FEET BELOW LAND SURFACE
243
244
245
246
247
248
249
250
251
252
253
254
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
THERMOPOLIS UTW-1


HOT SPRINGS COUNTY
43-95-25cdd01
433933108121901
WATER LEVEL, IN FEET BELOW LAND SURFACE
109
110
111
112
113
114
115
116
117
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
THERMOPOLIS UTW-3

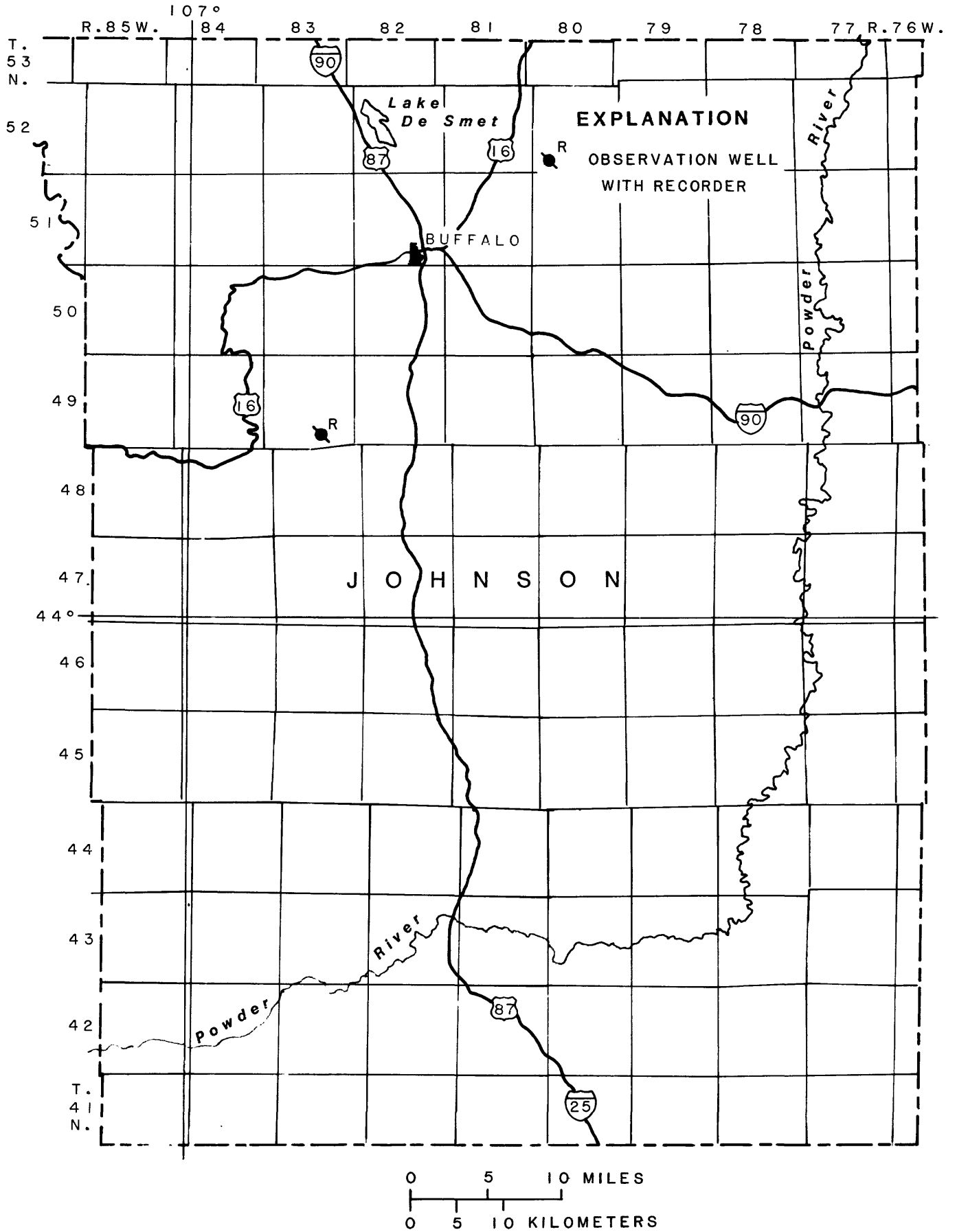
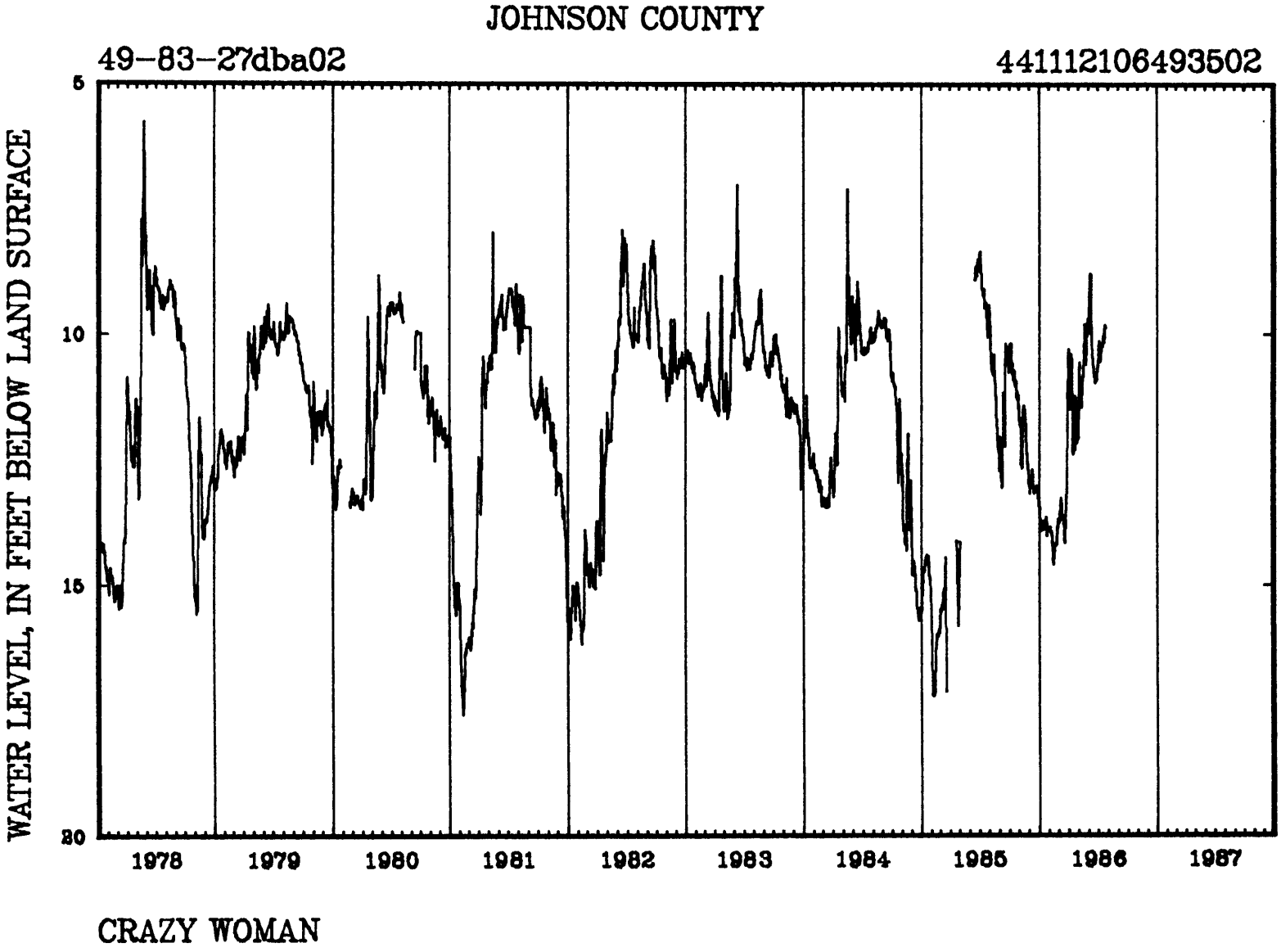


Figure 10.--Location of observation wells in Johnson County, Wyoming.

Records of observation wells in Johnson County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
49-83-27dba02	1,507	U	331MDSN	1974-86[2]	5.76	05-78	19.23	01-77

[2] Discontinued


JOHNSON COUNTY
49-83-27dba02
441112106493502
WATER LEVEL, IN FEET BELOW LAND SURFACE
5
10
15
20
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
CRAZY WOMAN

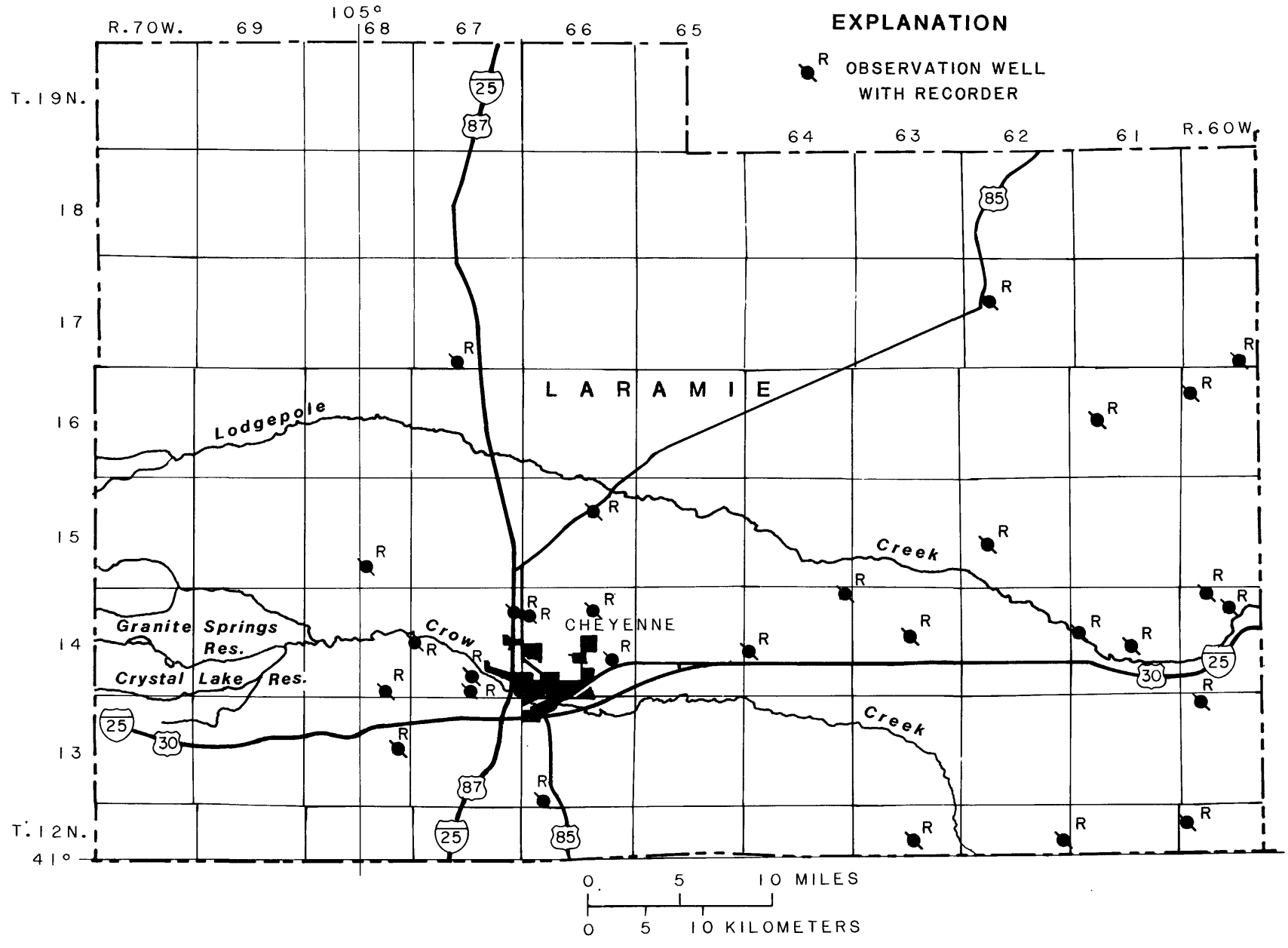


Figure 11.--Location of observation wells in Laramie County, Wyoming.

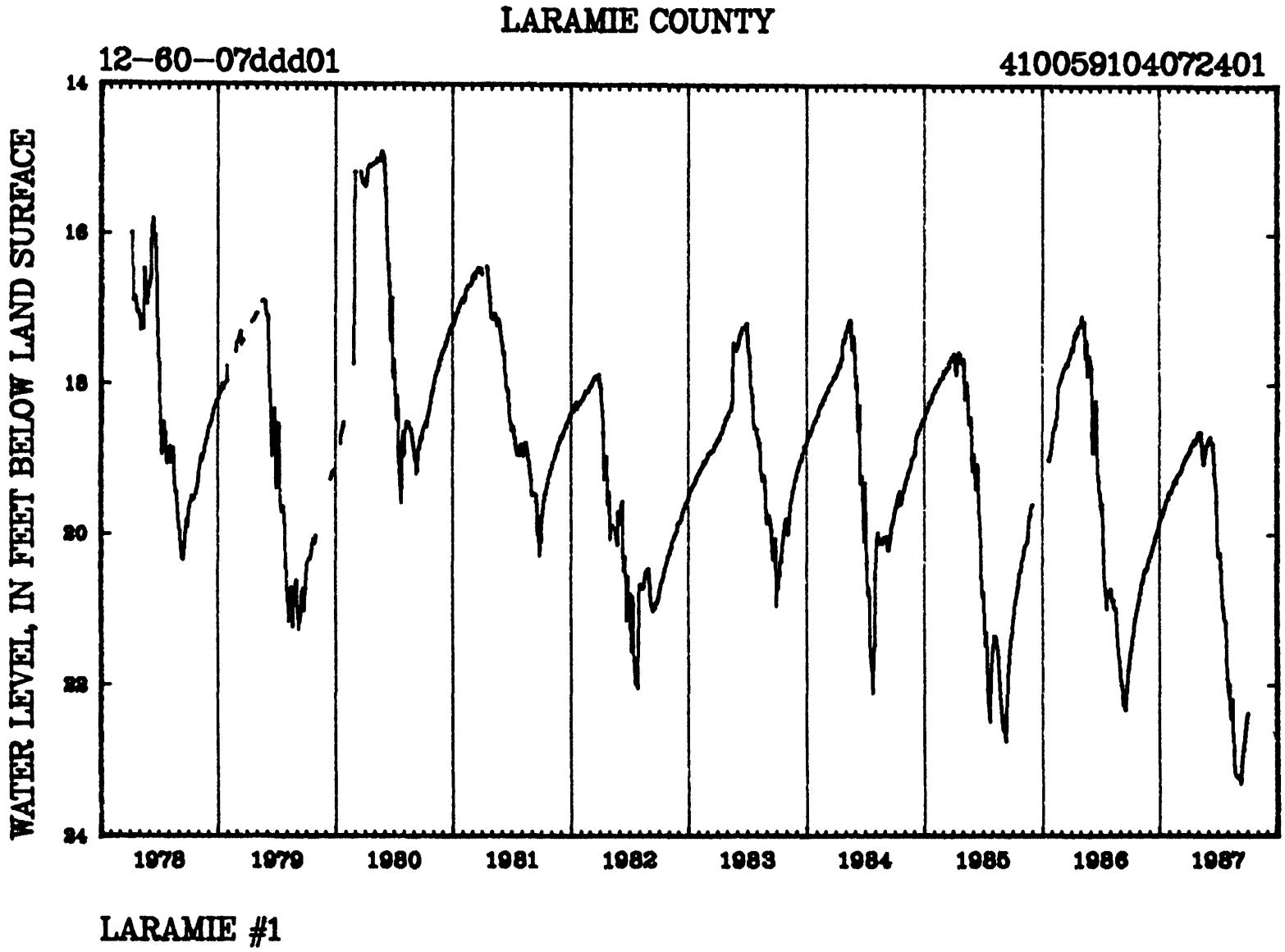
Records of observation wells in Laramie County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
12-60-07ddd01	105	U	123WRVR	1978-87	14.90	05-80	23.19	08-87
12-62-13baa01	198	U	111TRRC	1975-87	38.53	05-75	65.41	07-86
12-63-15aaa02	110	U	123BRUL	1971-87	14.11	04-74	46.86	09-78
13-60-05ccb01	100	U	123BRUL	1969-87	34.18	05-84	63.52	10-79
13-66-32bbd01	160	U	1210GLL	1986-87	45.05	11-86	46.99	07-87
13-68-13ccc01	---	U	1210GLL	1942-50, 1969-87	[1] 36.78	03-45	87.89	07-83
14-60-05bcb01	98	U	123BRUL	1957-87	28.96	04-85	56.62	07-77
14-60-10dbb01	80	U	123BRUL	1973-87 [2]	15.56	06-84	31.16	08-79
14-61-18ddd01	90	-	123WRVR	1977-87	9.08	06-84	22.79	10-79
14-61-22dcc01	---	U	123BRUL	1975-87 [2]	16.10	06-83	28.60	10-79
14-63-15aaa01	165	U	122ARKR	1977-87	45.48	06-80	48.35	09-86
14-64-01dcb01	200	-	1210GLL	1977-87	[1] 102.12	05-77	112.15	08-87
14-64-19bcc01	180	-	1210GLL	1977-87	157.54	09-86	158.99	10-81
14-66-07add01	350	U	1210GLL	1984-87	82.86	04-87	98.49	07-85
14-66-10aba01	190	-	1210GLL	1977-87	125.82	02-79	130.39	08-86, 08-87
14-66-23ddd01	216	U	1210GLL	1986-87	140.70	08-87	141.40	04-86
14-67-12abb01	220	U	1210GLL	1985-87	94.02	02-86	108.94	07-85
14-67-18ddc01	229	U	1210GLL	1956-87	12.48	09-57	48.07	08-78
14-67-27bac01	140	U	1210GLL	1986-87	20.71	04-86	22.83	09-87
14-67-34bbc01	162	U	1210GLL	1986-87	7.72	04-86	12.28	07-87
14-68-35ddc02	230	U	1210GLL	1969-87	98.82	04-70	113.26	09-81
15-62-20aaa01	165	-	1210GLL	1977-87	94.56	06-77	99.66	11-85
15-66-10bab01	210	-	1210GLL	1977-87	58.73	04-85	86.70	09-78

Records of observation wells in Laramie County, Wyoming, and highest and lowest recorded water levels, in feet below land surface--continued.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
15-68-27ccc01	300	U	1210GLL	1984-87	165.84	09-86	174.30	01-85
16-60-07bbb02	215	U	1210GLL	1983-87	147.74	04-85	149.55	09-83
16-61-17aaa01	285	-	1210GLL	1977-87	196.47	05-87	[1] 201.32	12-77
17-60-33cbb01	275	U	123BRUL	1975-87	177.52	05-75	214.18	11-86
17-62-17ccc01	360	U	1210GLL	1982-87	226.04	04-87, 05-87, 06-87	227.03	12-85
17-67-33baa01	200	U	1210GLL	1984-87	132.26	01-85	144.91	09-87

[1] From hand-measured data
[2] Discontinued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1983
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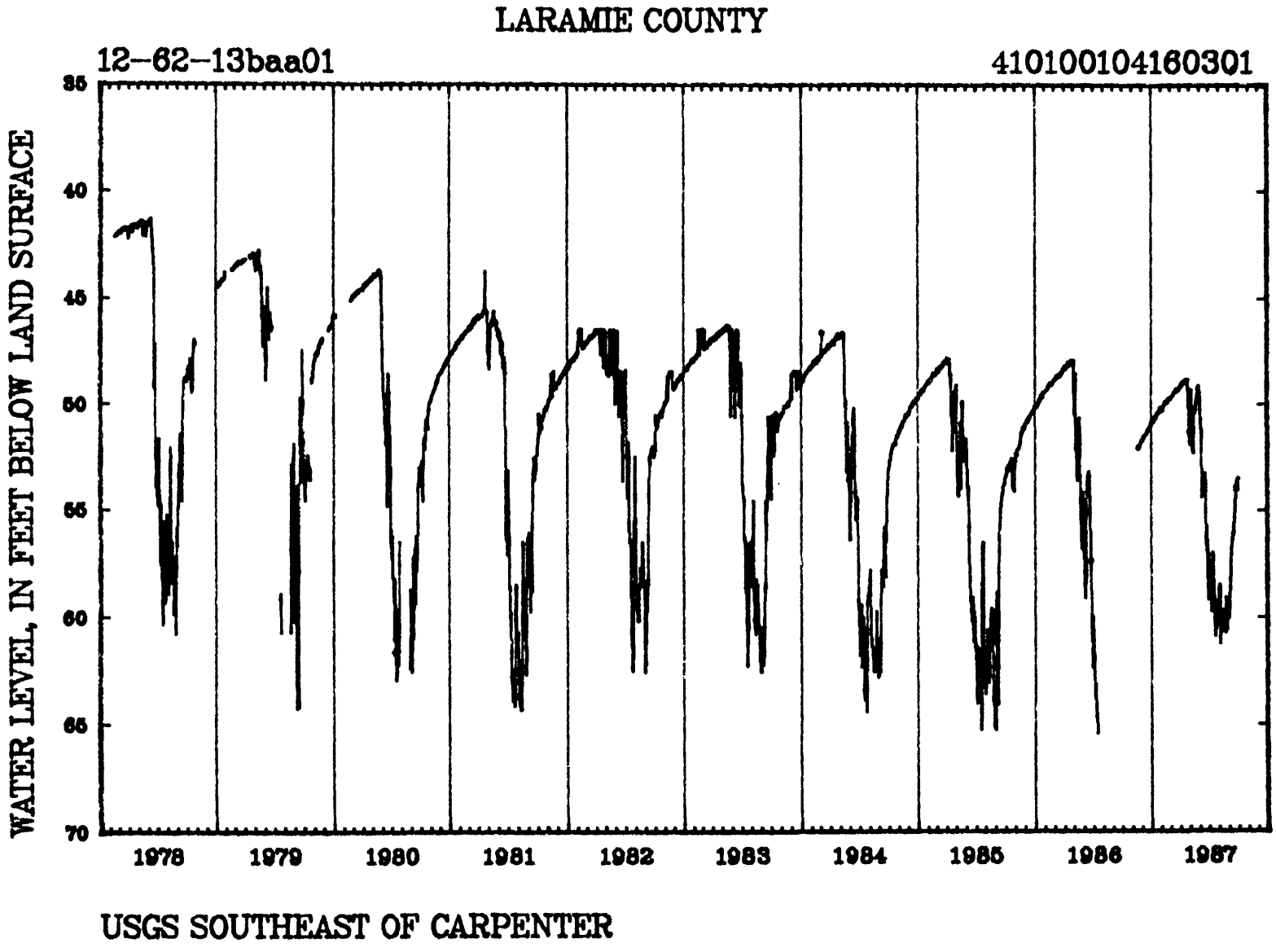
1986
1987
LARAMIE #1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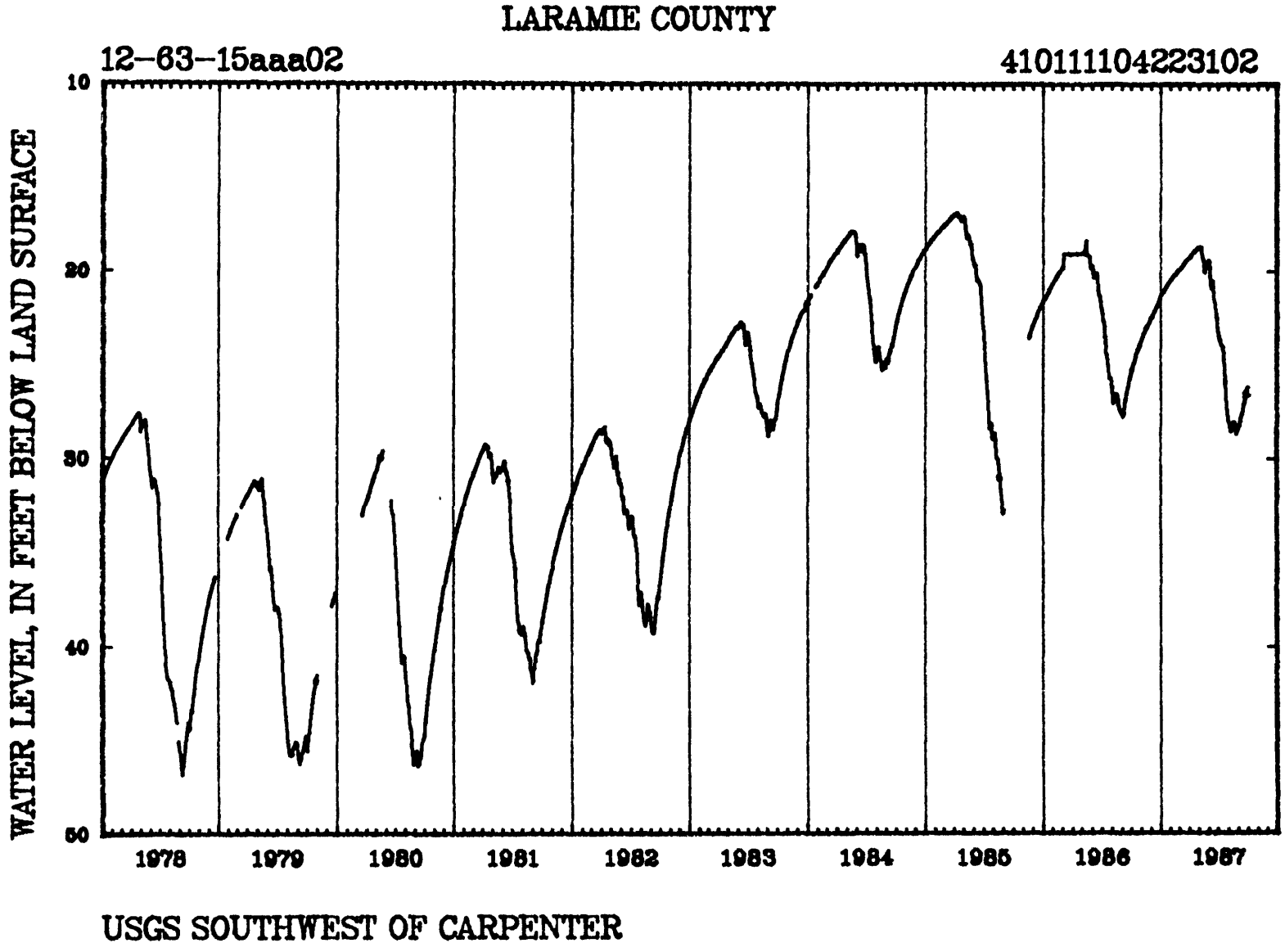
USGS SOUTHEAST OF CARPENTER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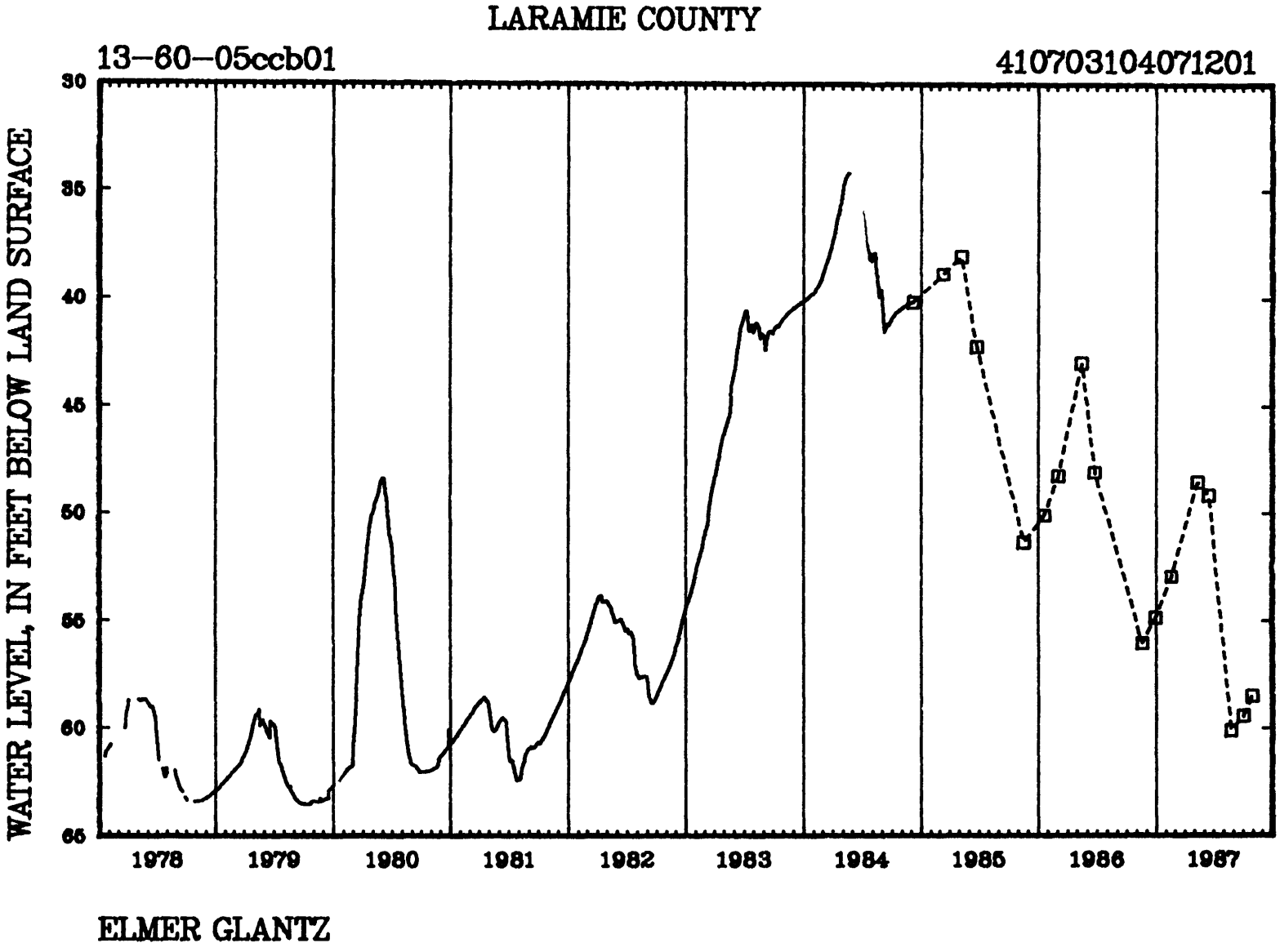
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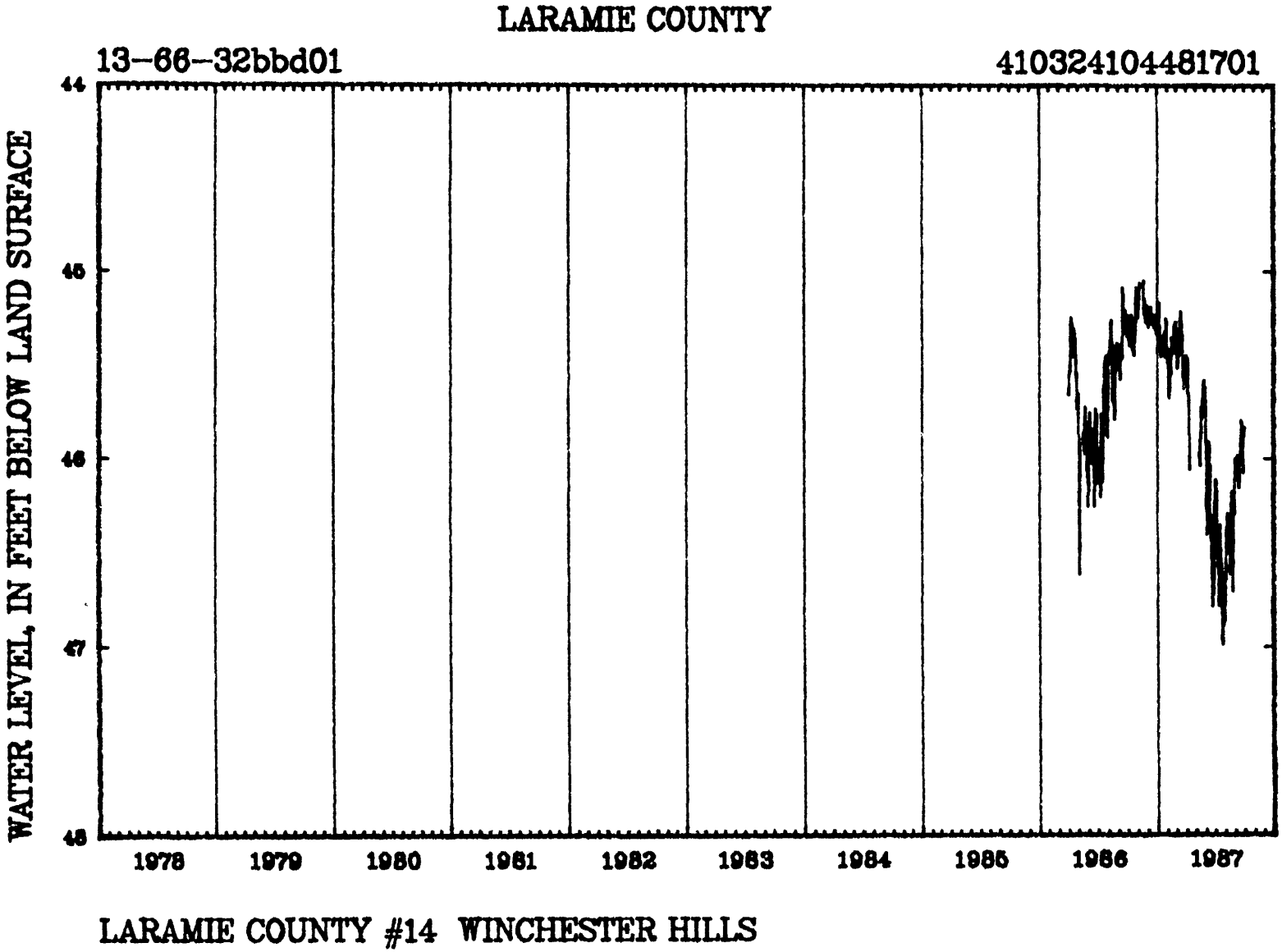
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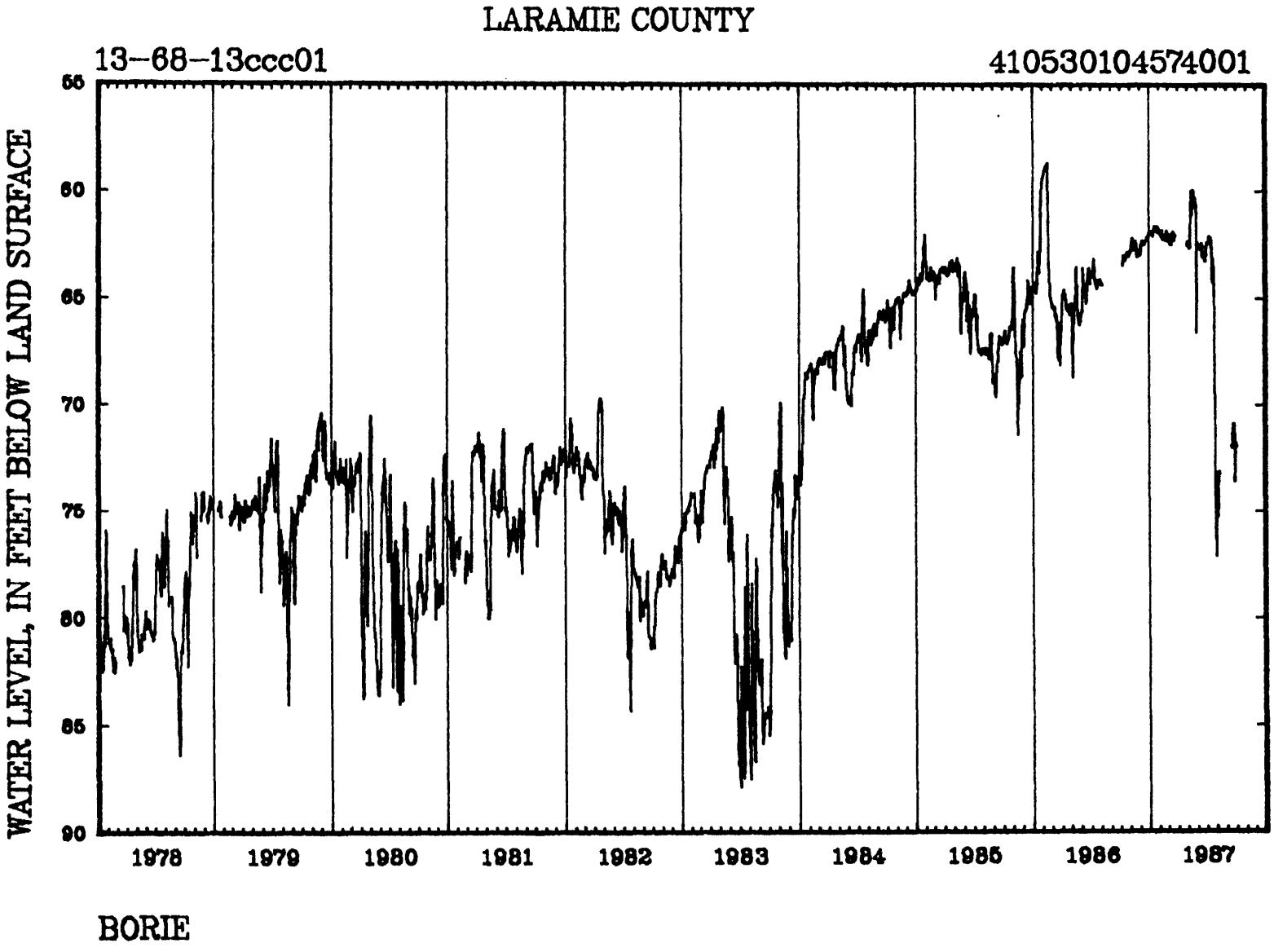
LARAMIE COUNTY #14 WINCHESTER HILLS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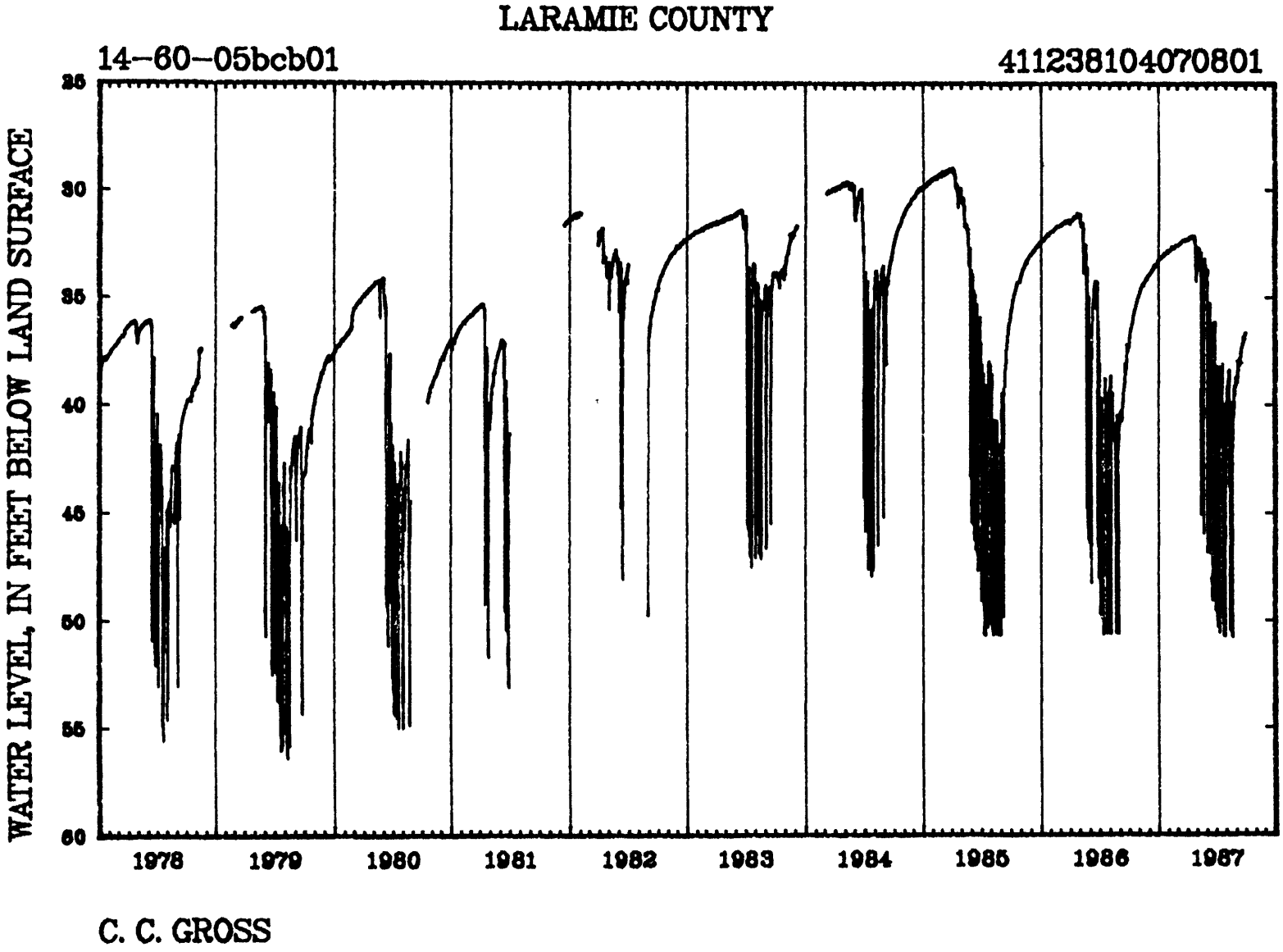
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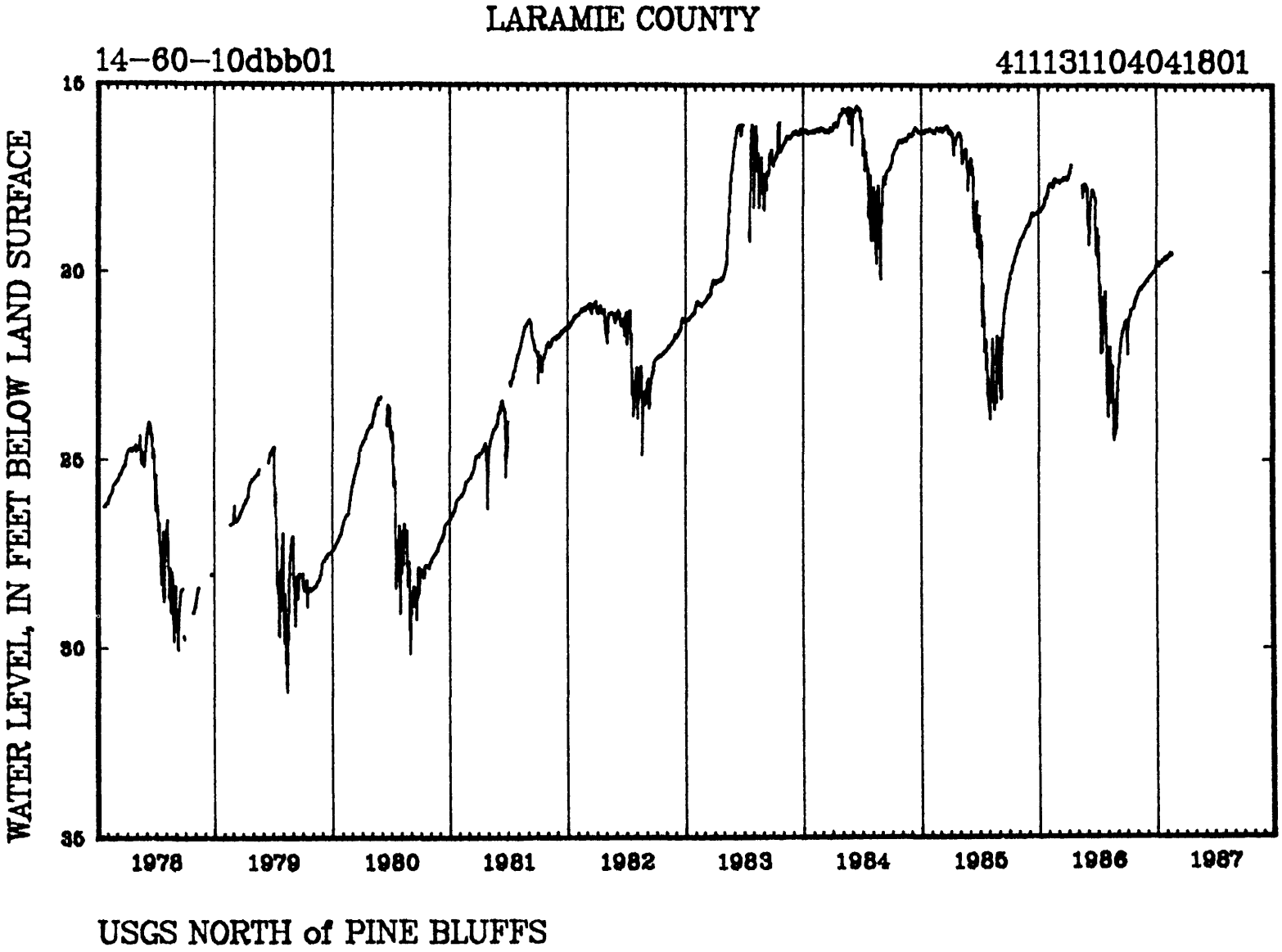
C. C. GROSS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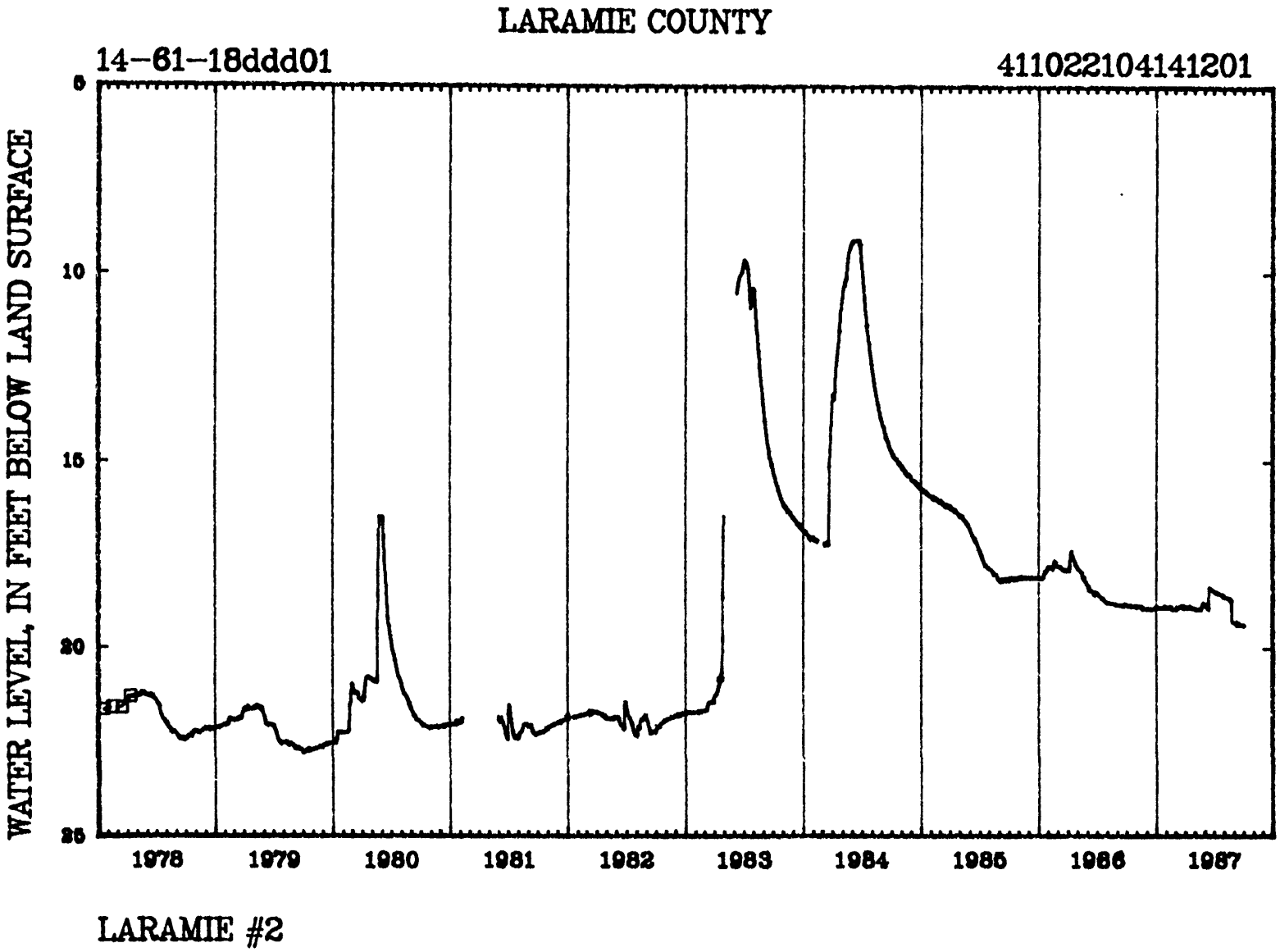
1987
USGS NORTH of PINE BLUFFS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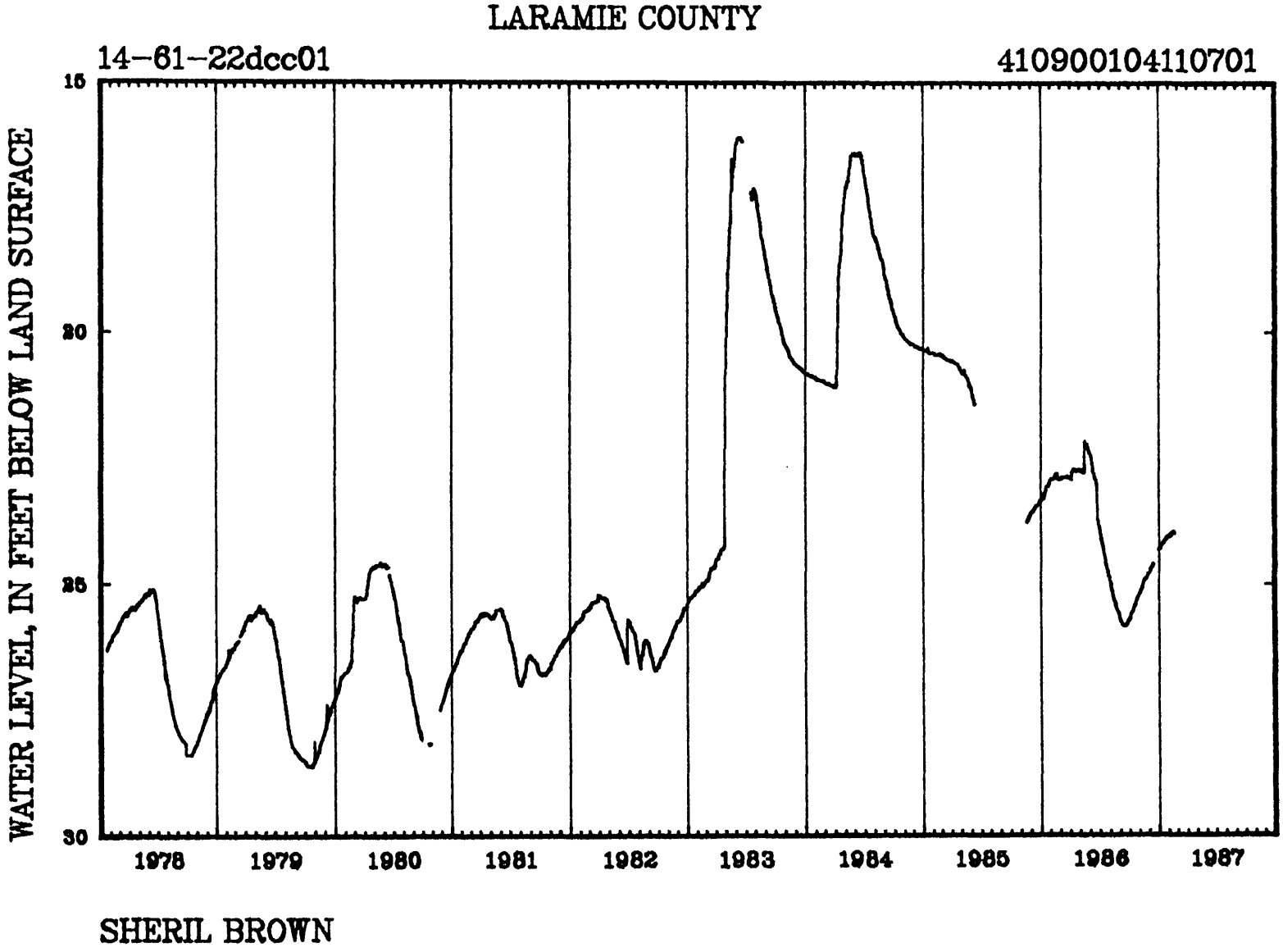
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WATER LEVEL, IN FEET BELOW LAND SURFACE
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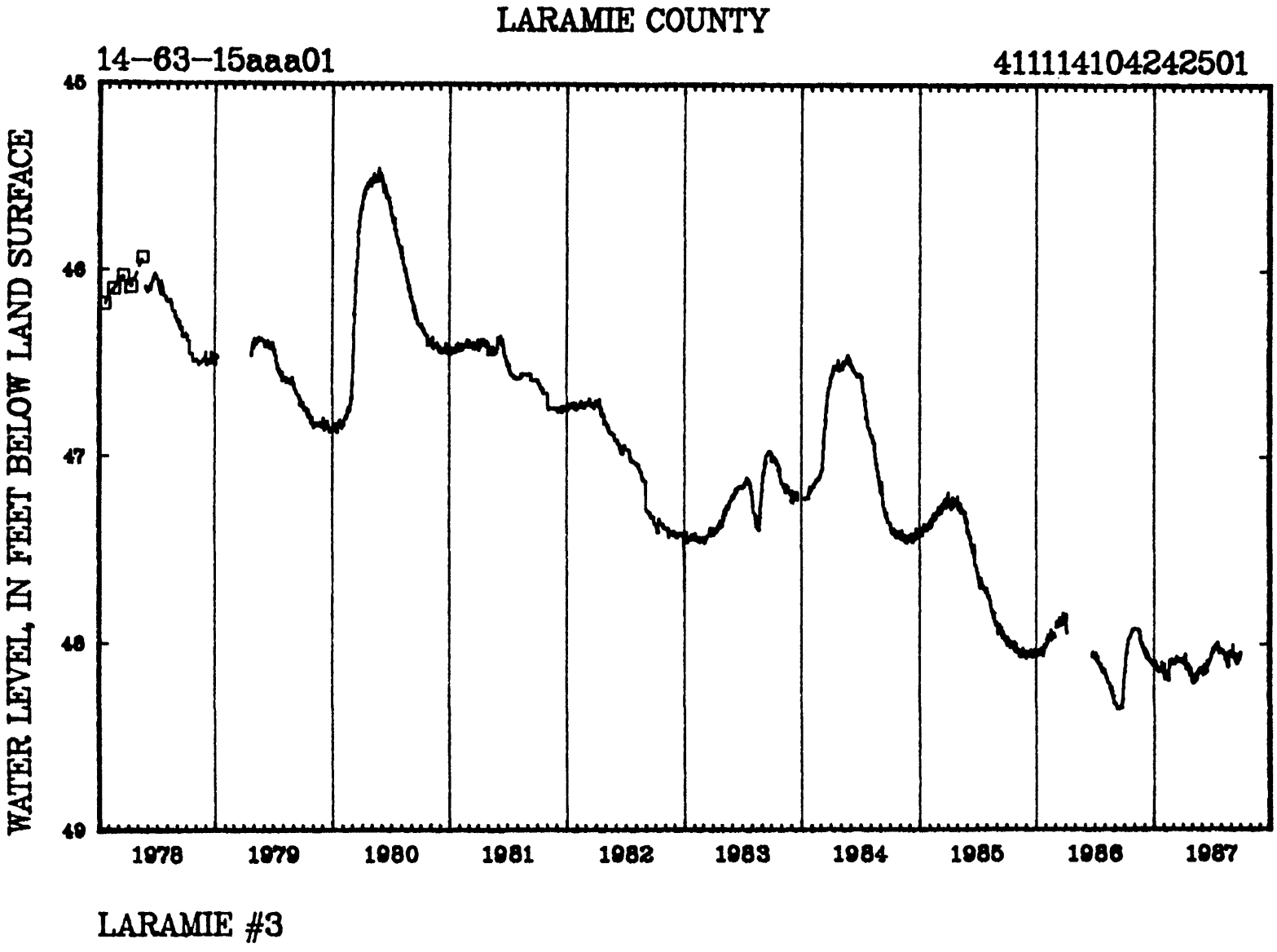
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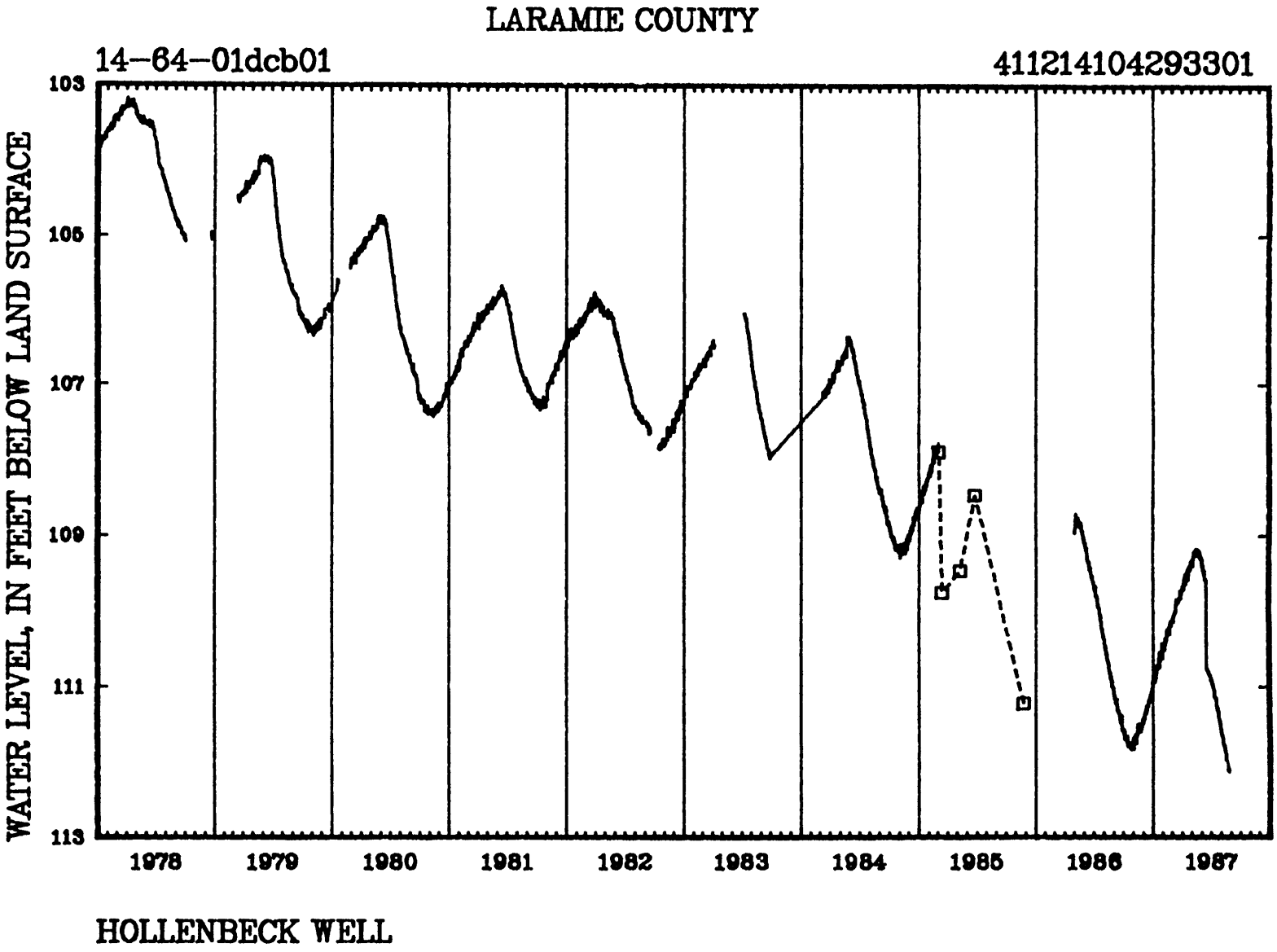
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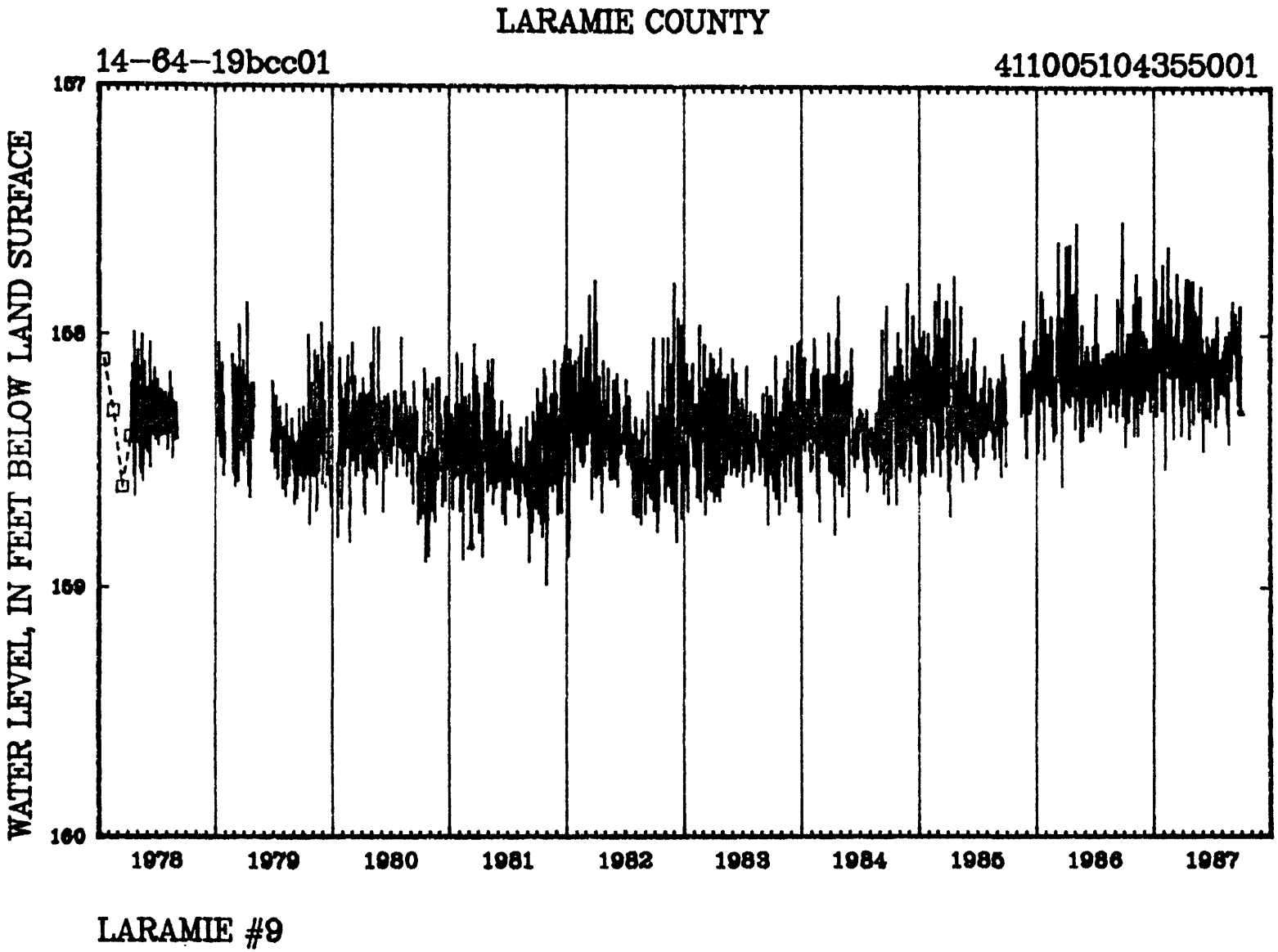
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WATER LEVEL, IN FEET BELOW LAND SURFACE
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159
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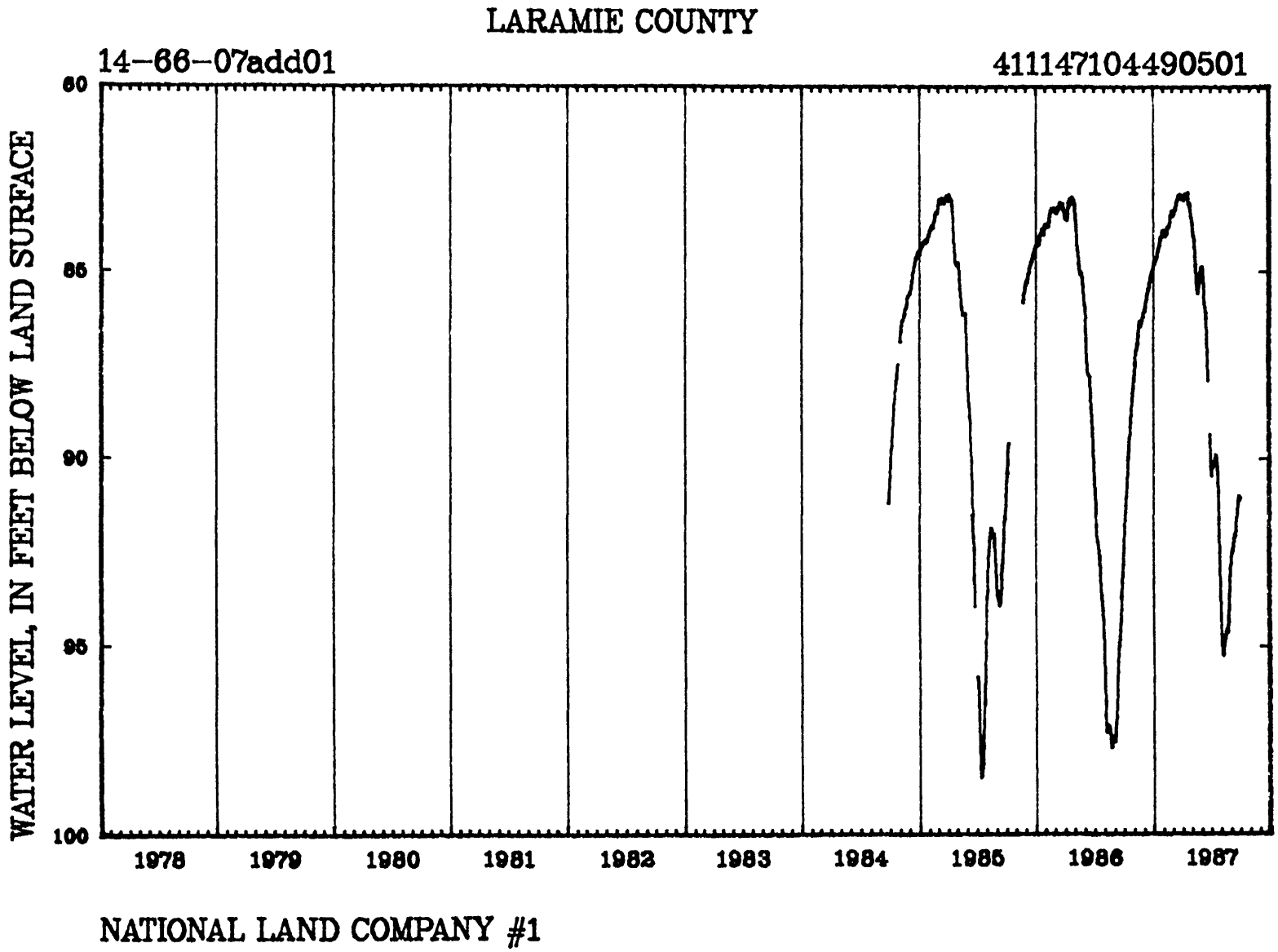
LARAMIE #9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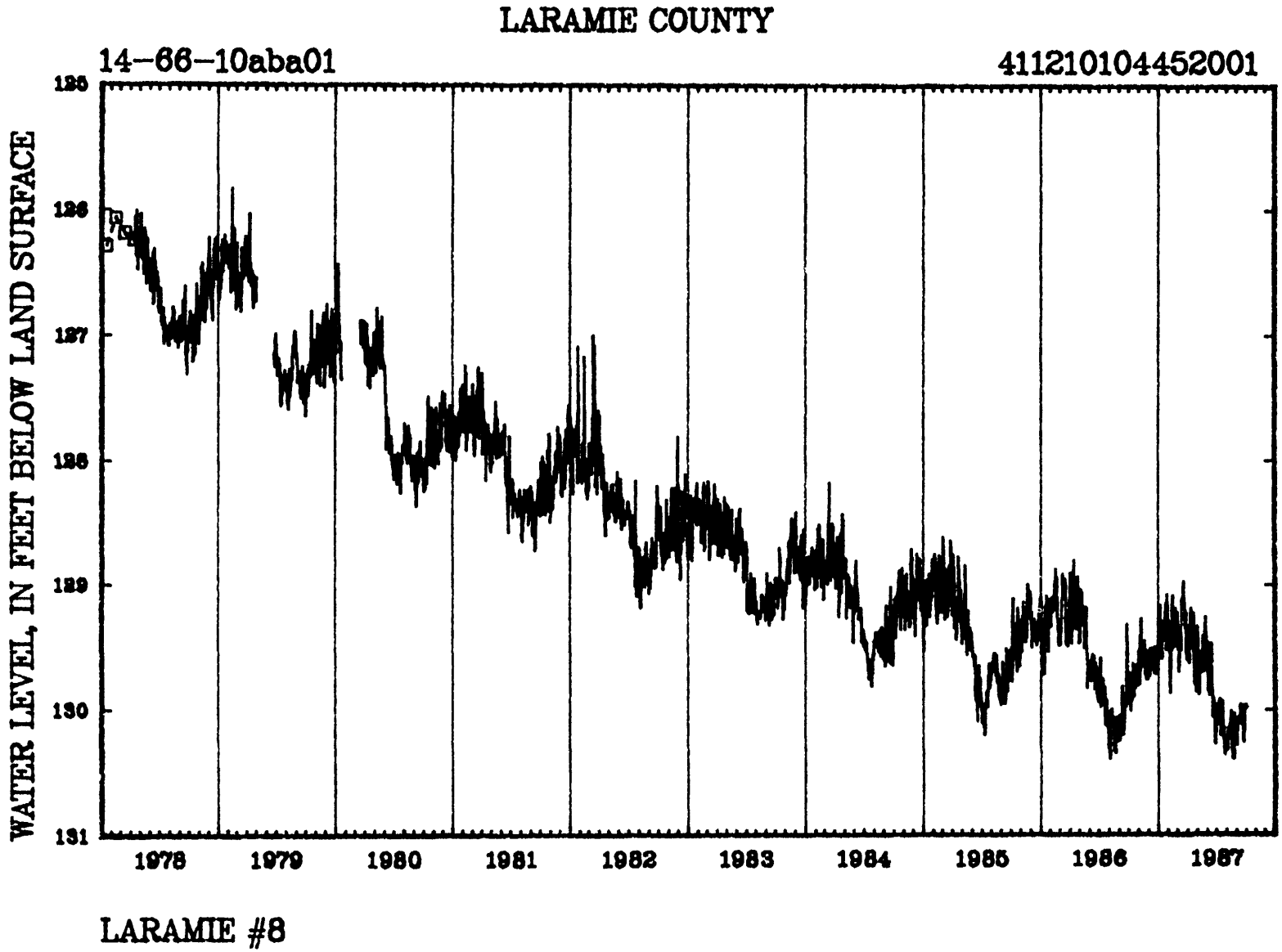
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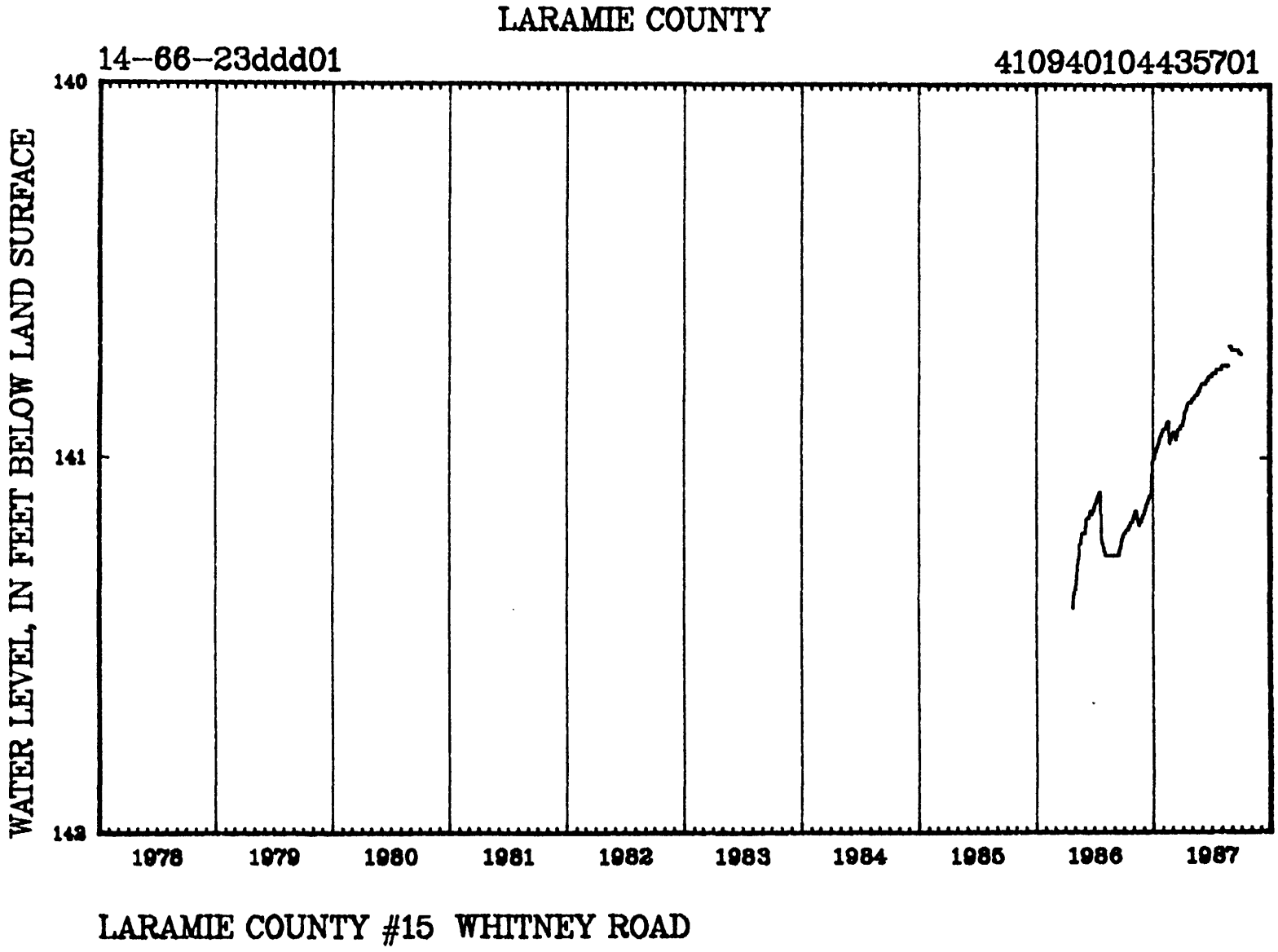
LARAMIE #8


LARAMIE COUNTY
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WATER LEVEL, IN FEET BELOW LAND SURFACE
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141
142
1978
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1986
1987
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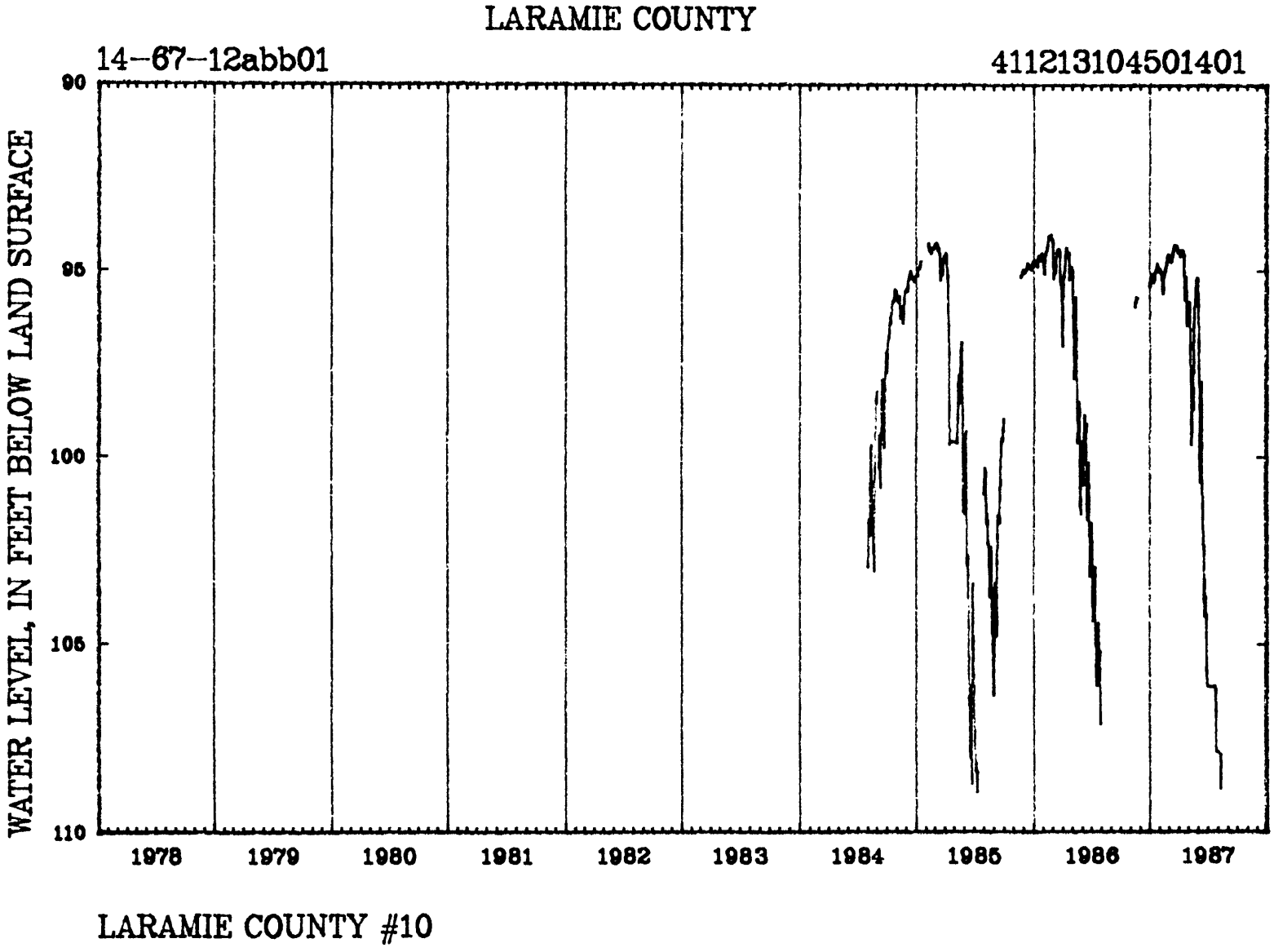
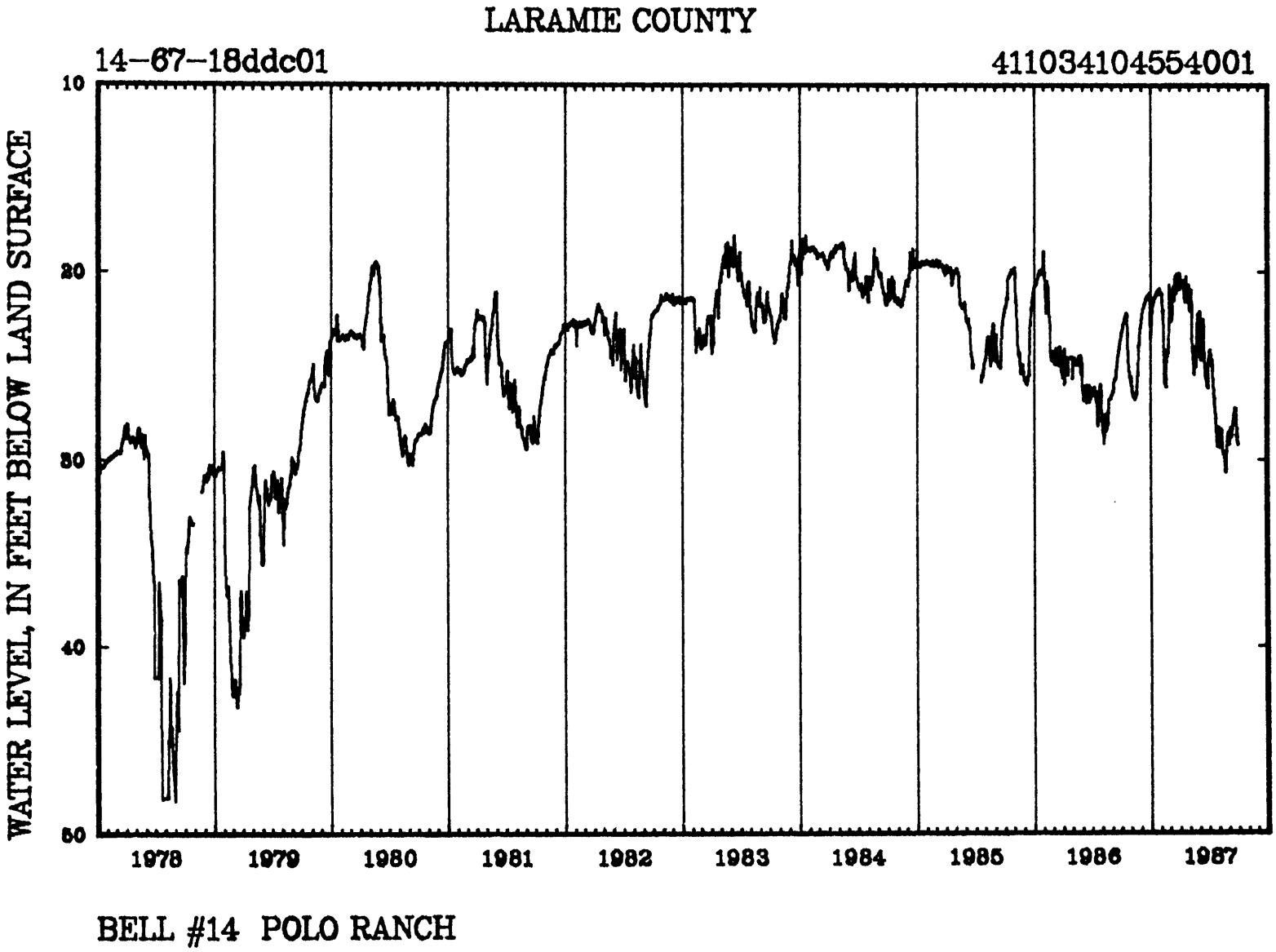


LARAMIE COUNTY #10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40
50
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1987
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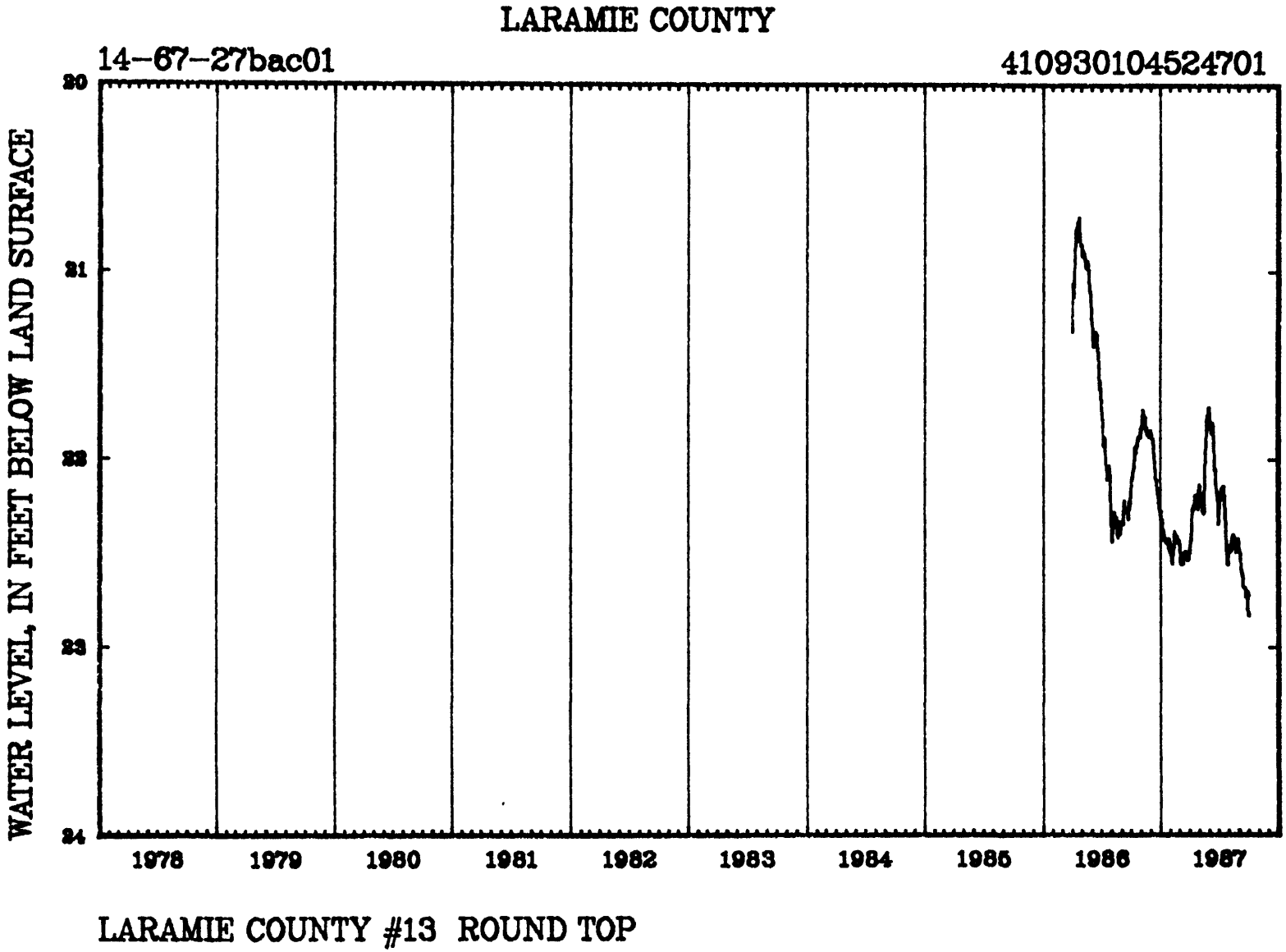
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WATER LEVEL, IN FEET BELOW LAND SURFACE
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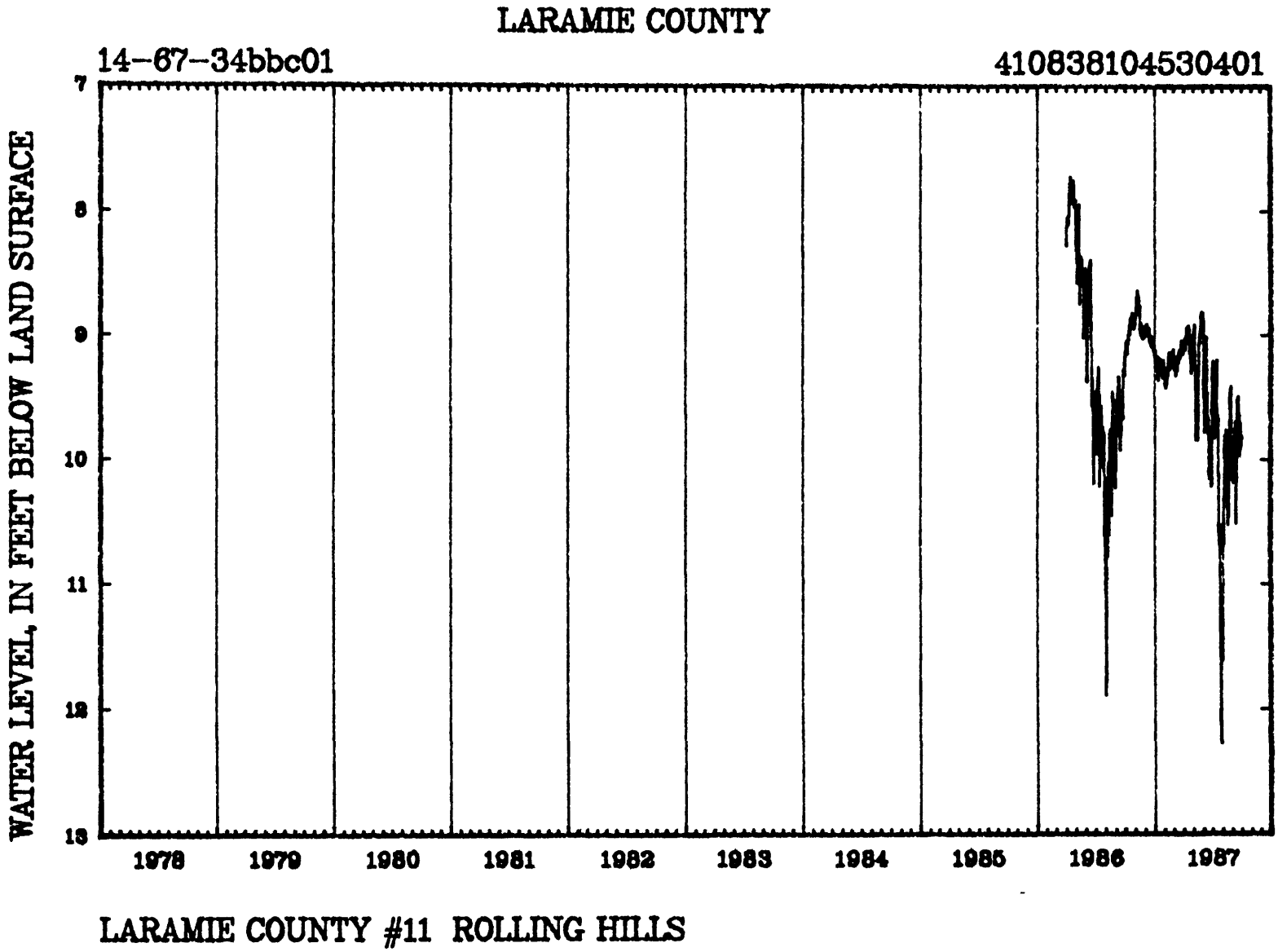
LARAMIE COUNTY
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WATER LEVEL, IN FEET BELOW LAND SURFACE
7
8
9
10
11
12
13
1978
1979
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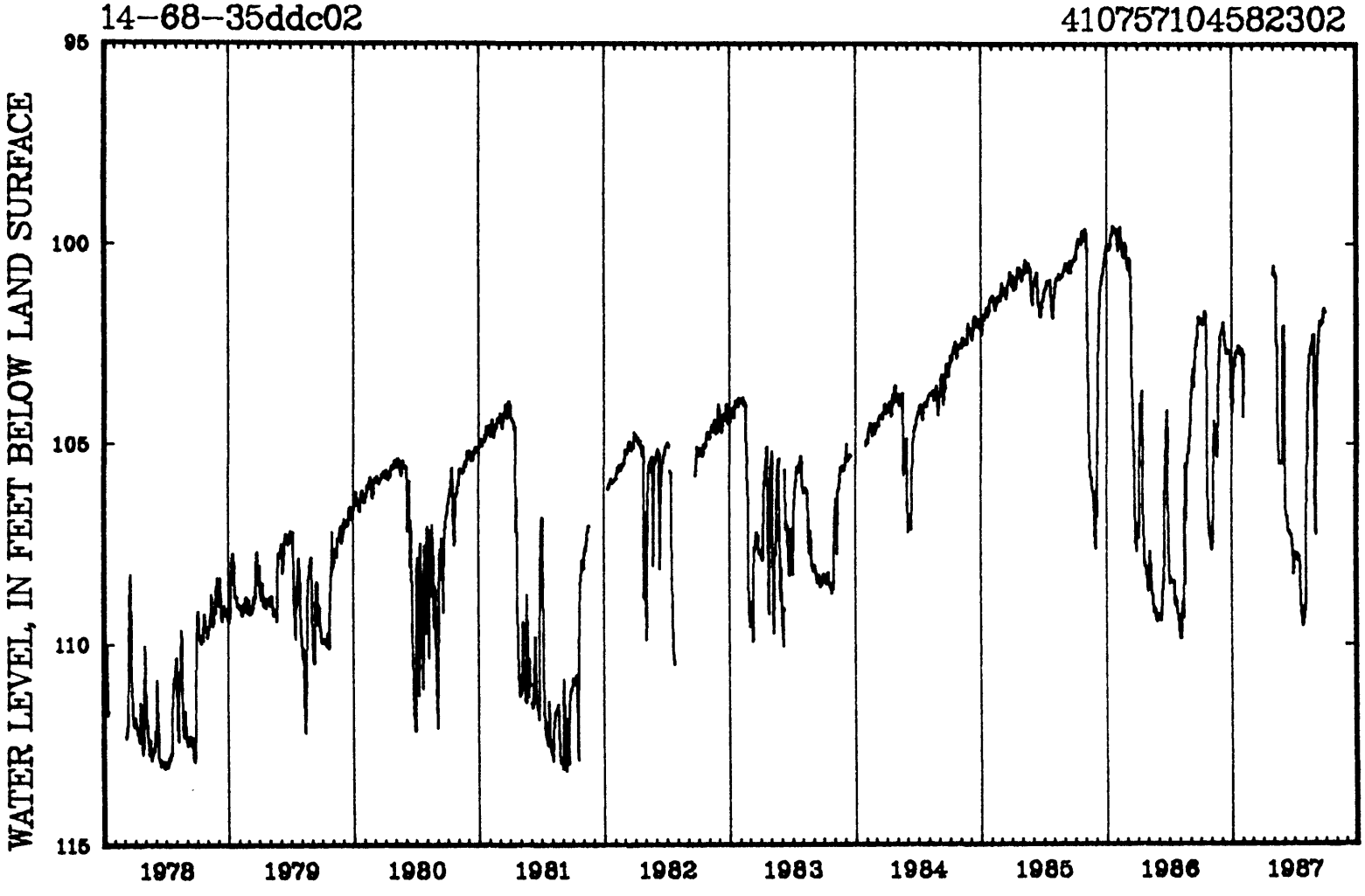
1987
LARAMIE COUNTY #11 ROLLING HILLS

LARAMIE COUNTY



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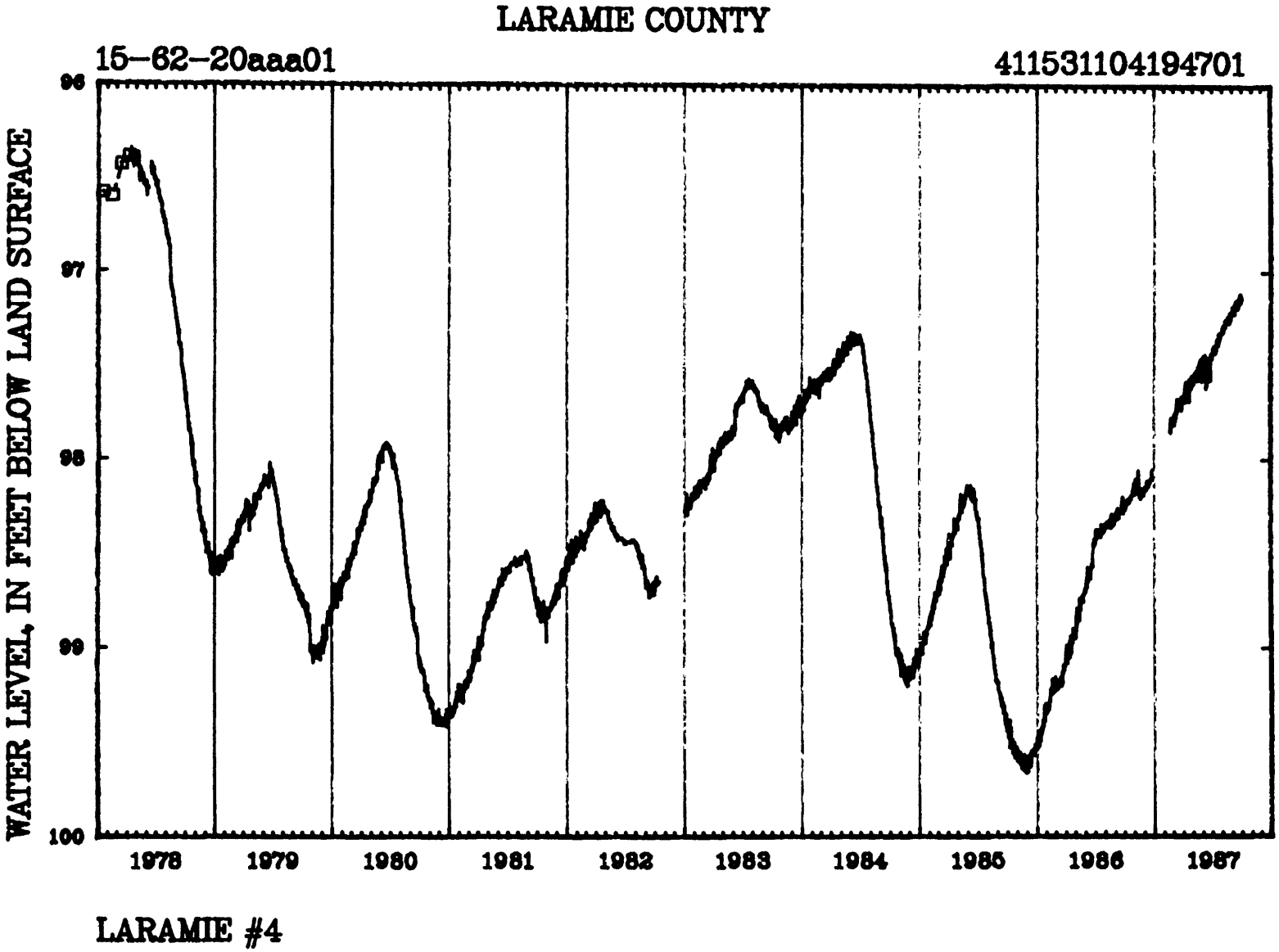
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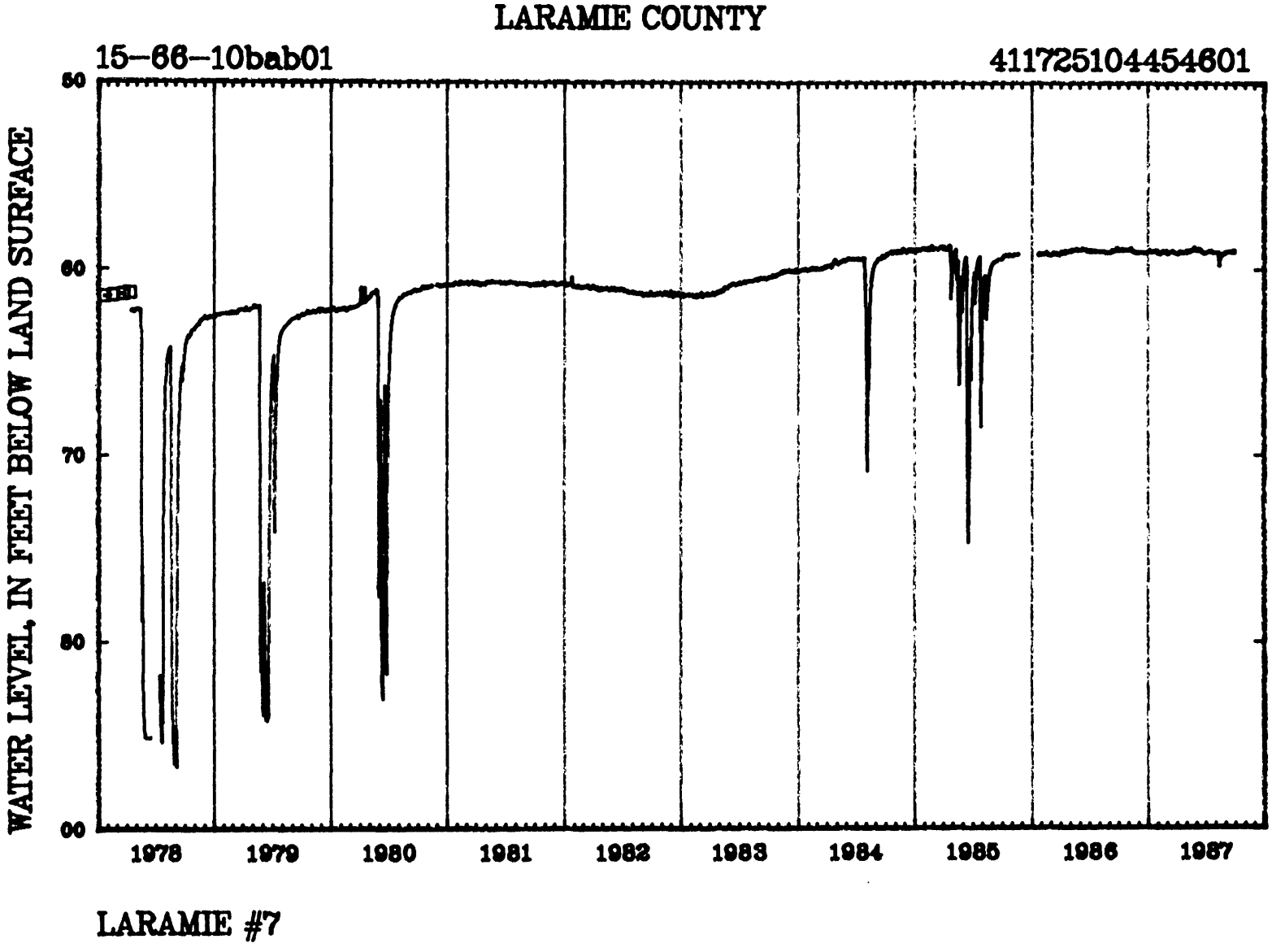
LARAMIE #4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1987
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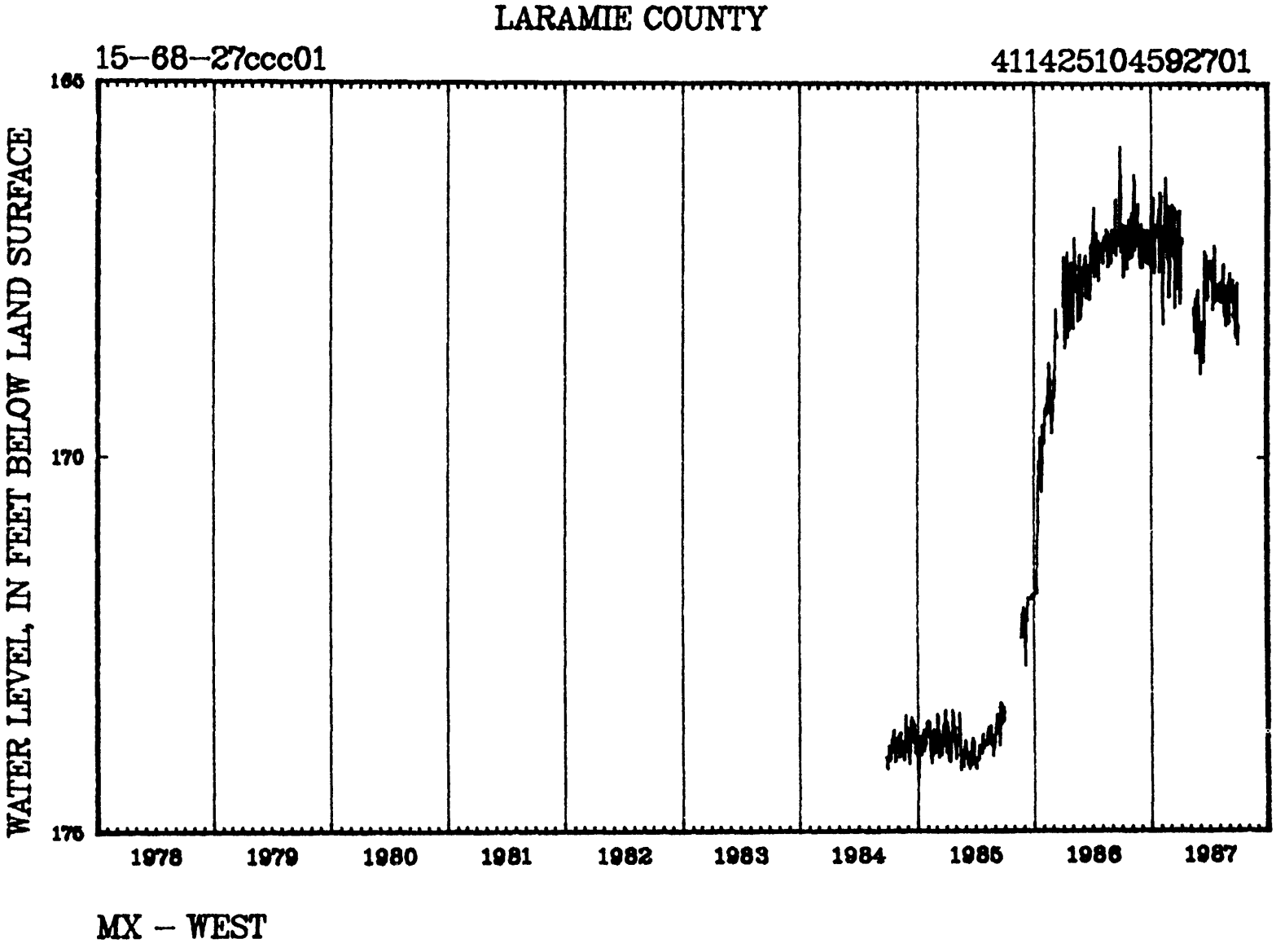
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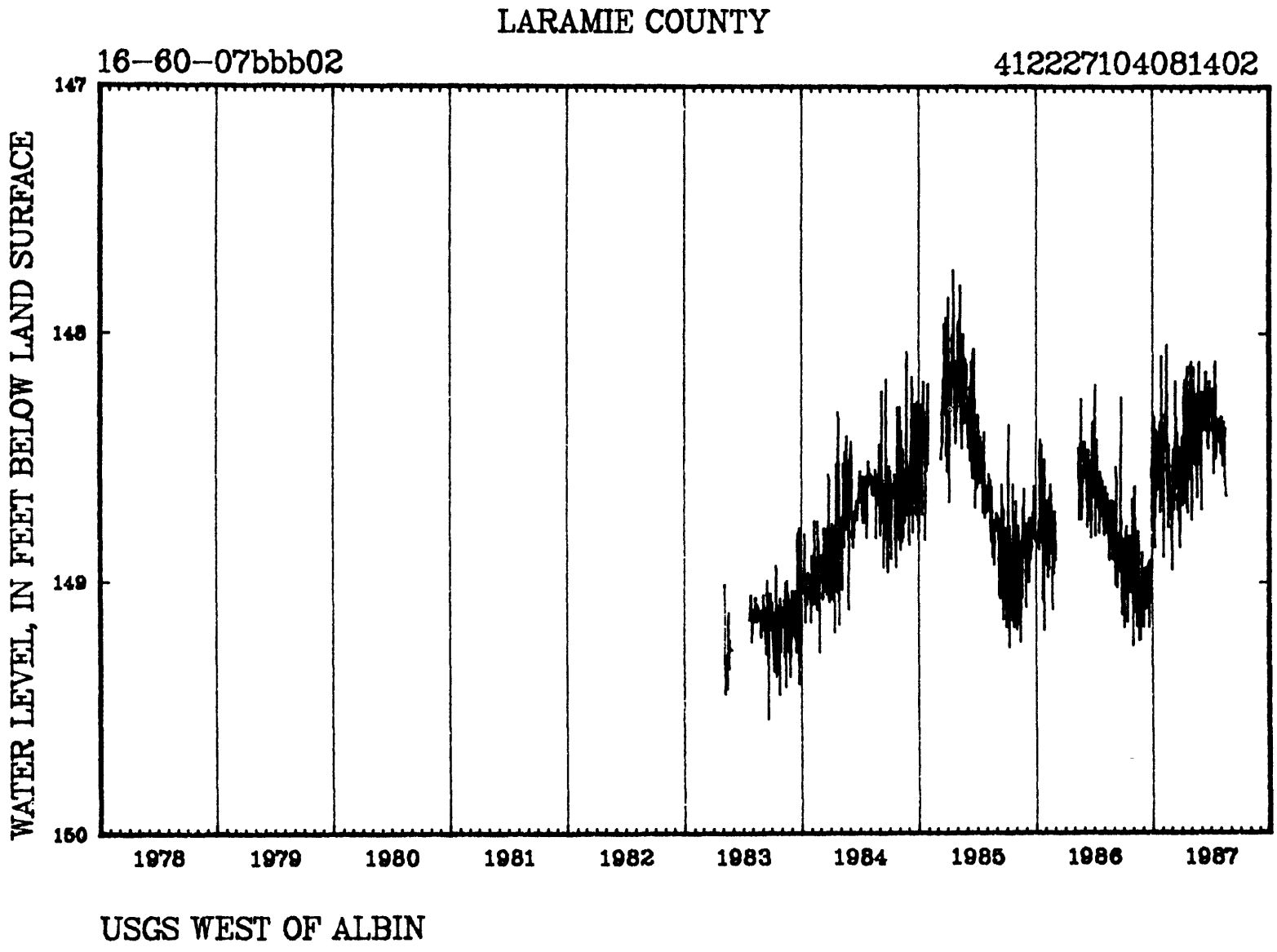
1986
1987
MX - WEST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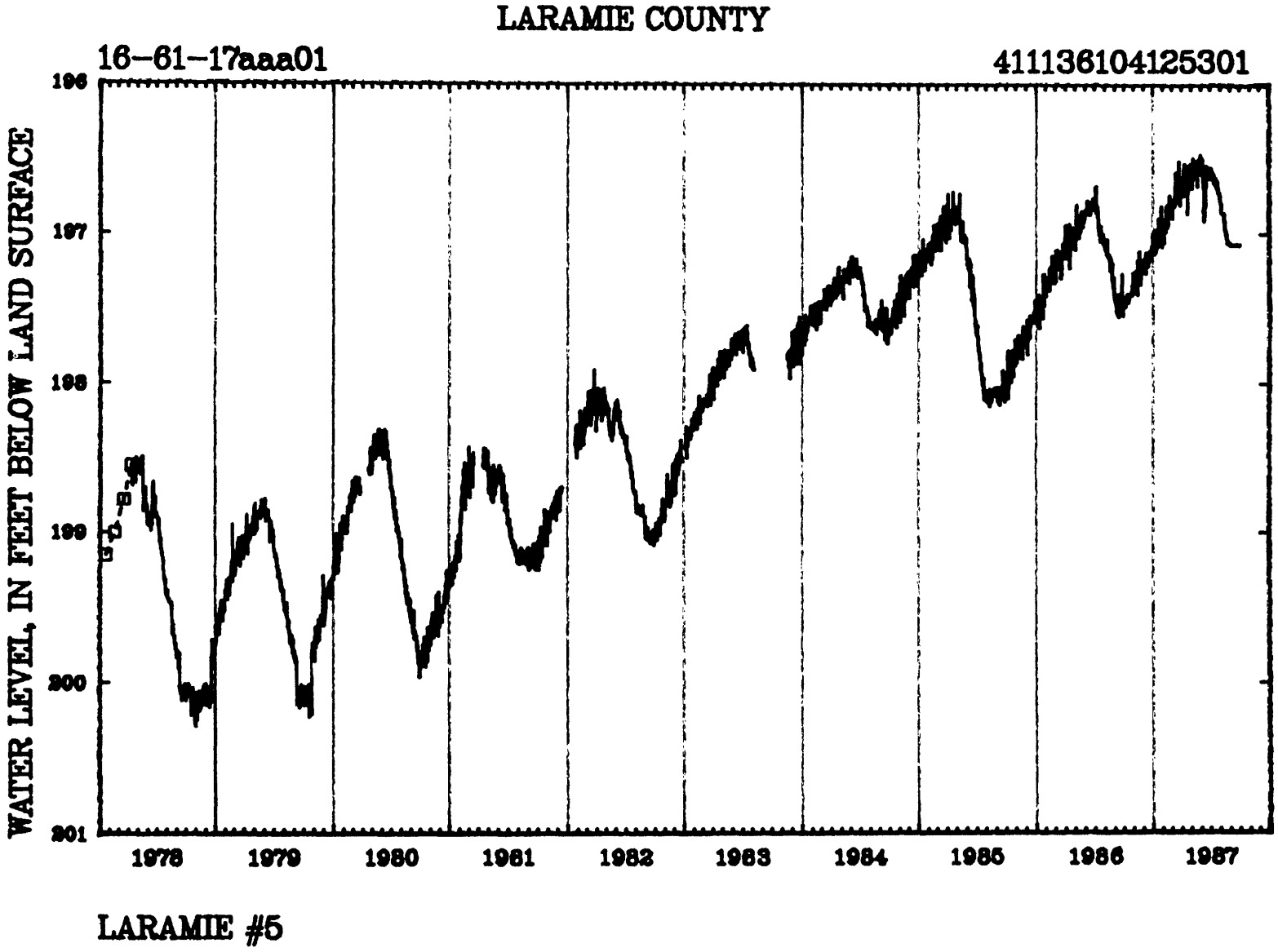
1987
USGS WEST OF ALBIN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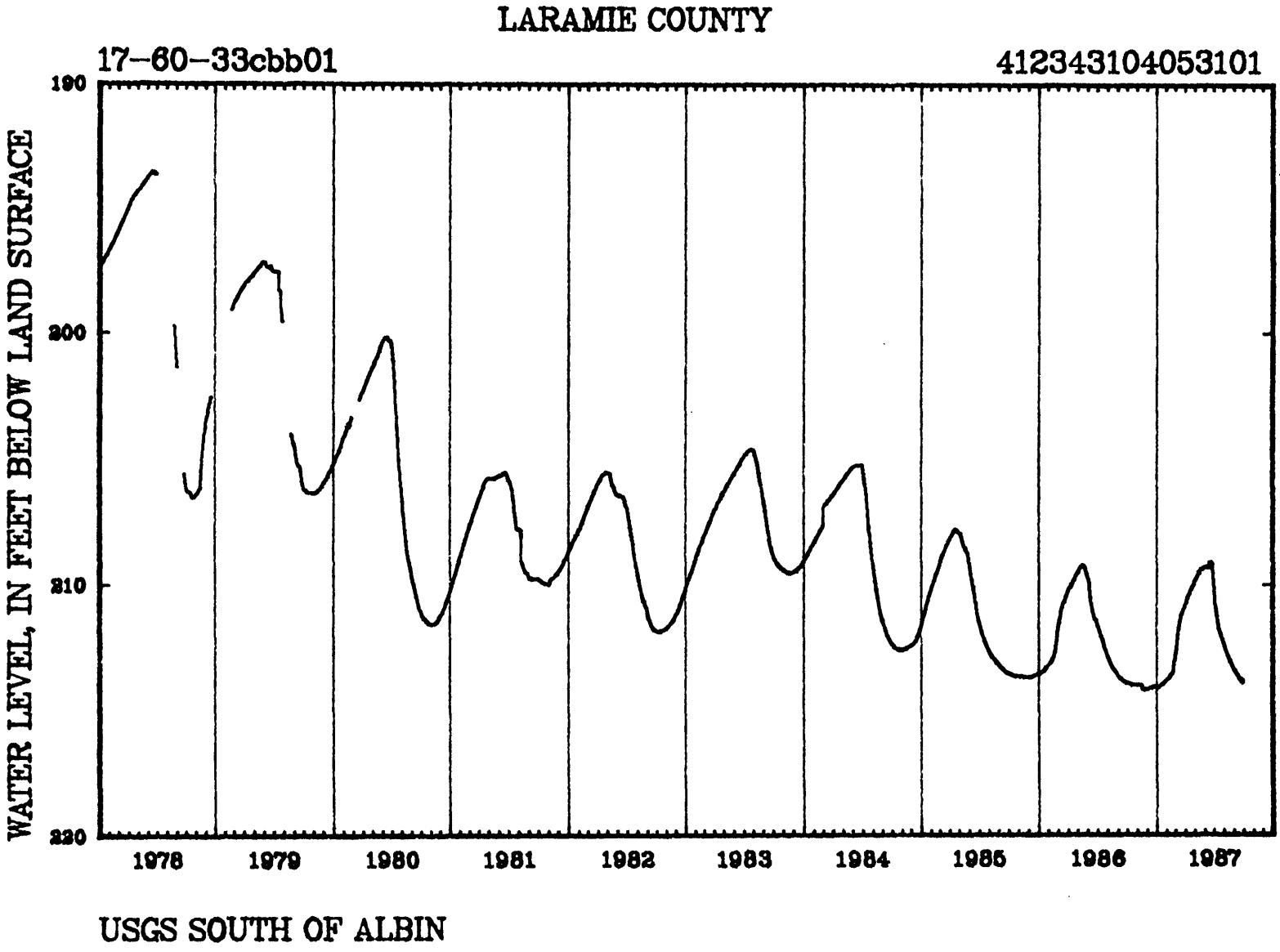
LARAMIE #5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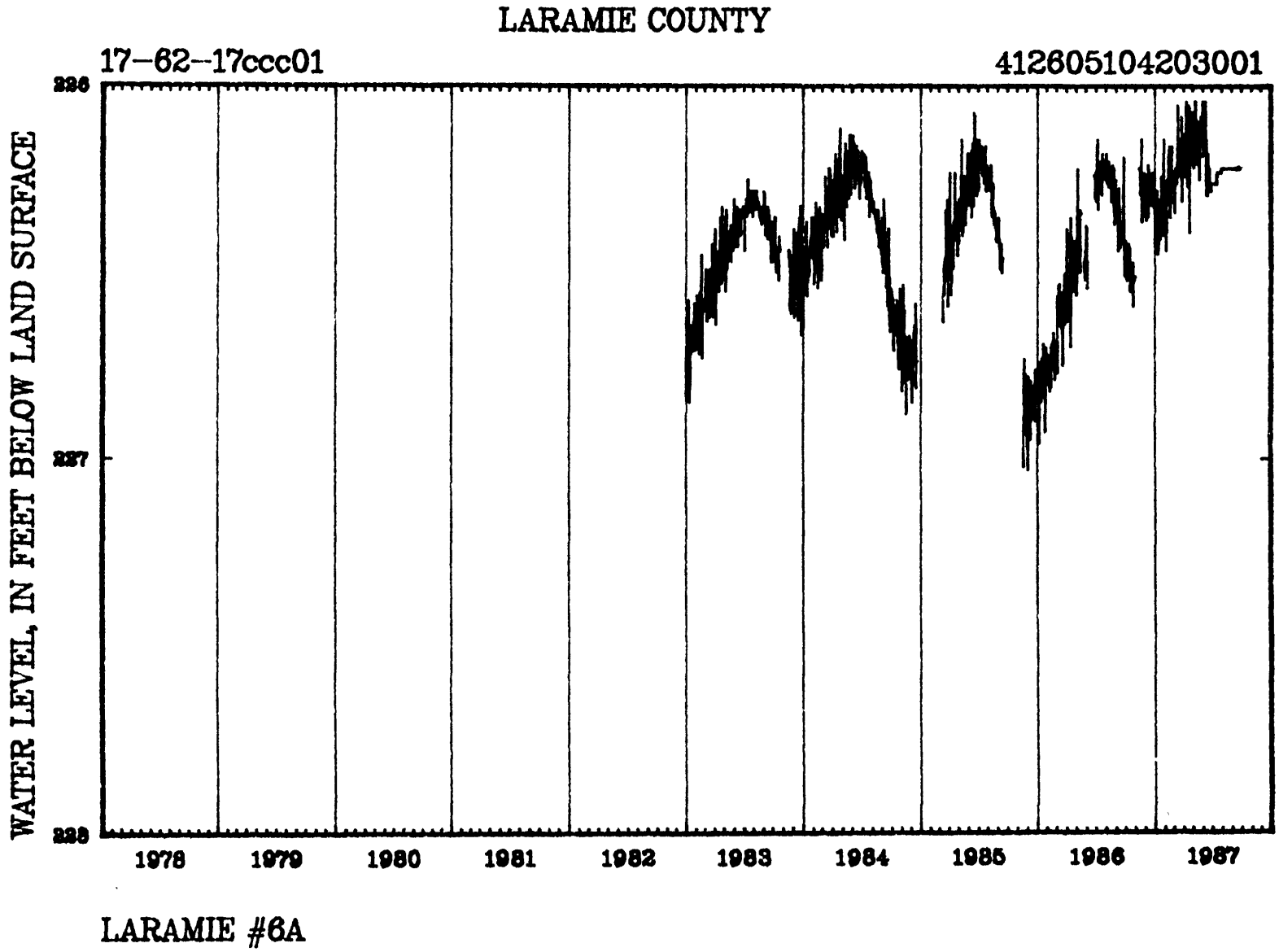
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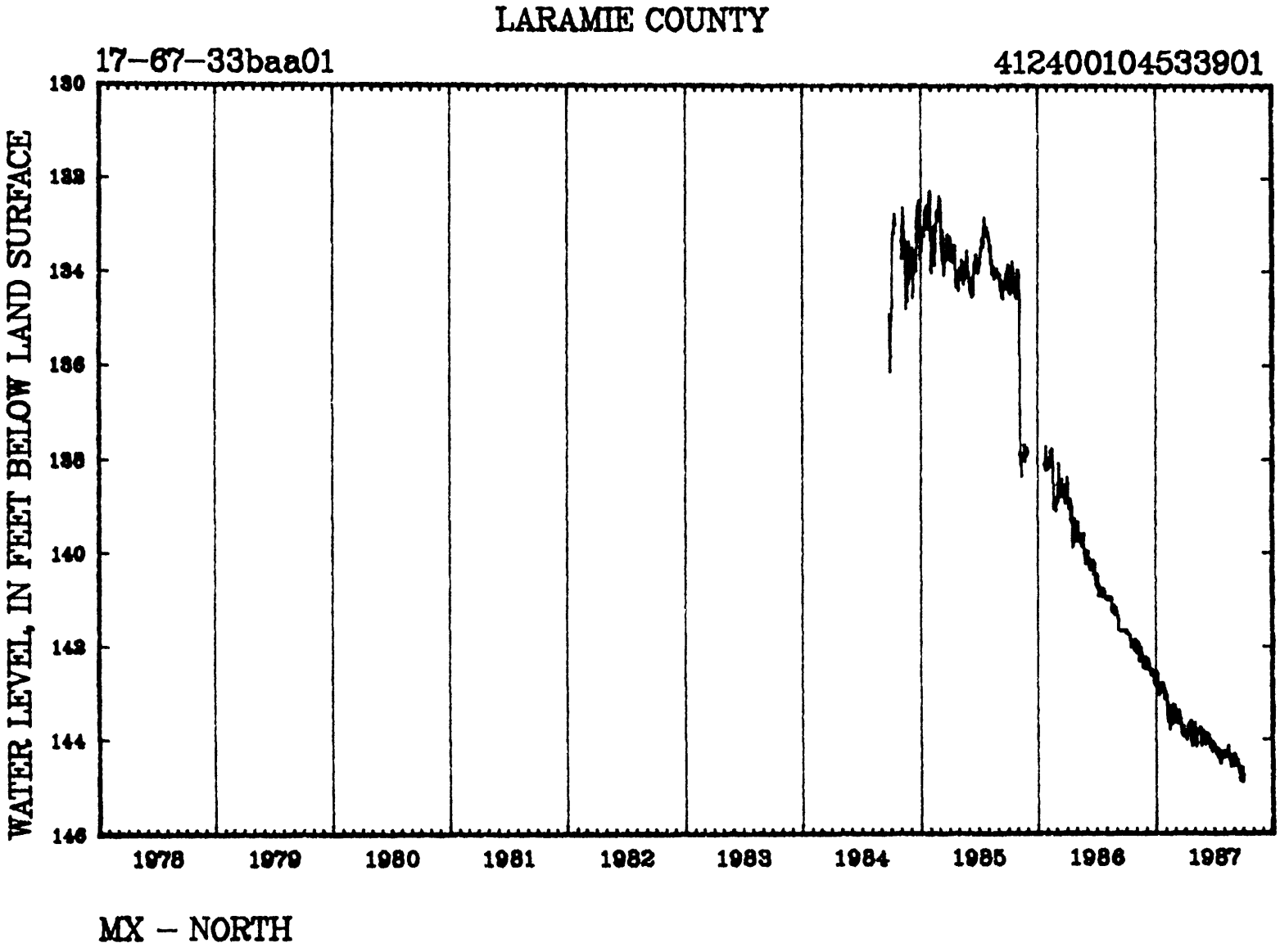
LARAMIE COUNTY
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WATER LEVEL, IN FEET BELOW LAND SURFACE
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1986
1987
MX – NORTH

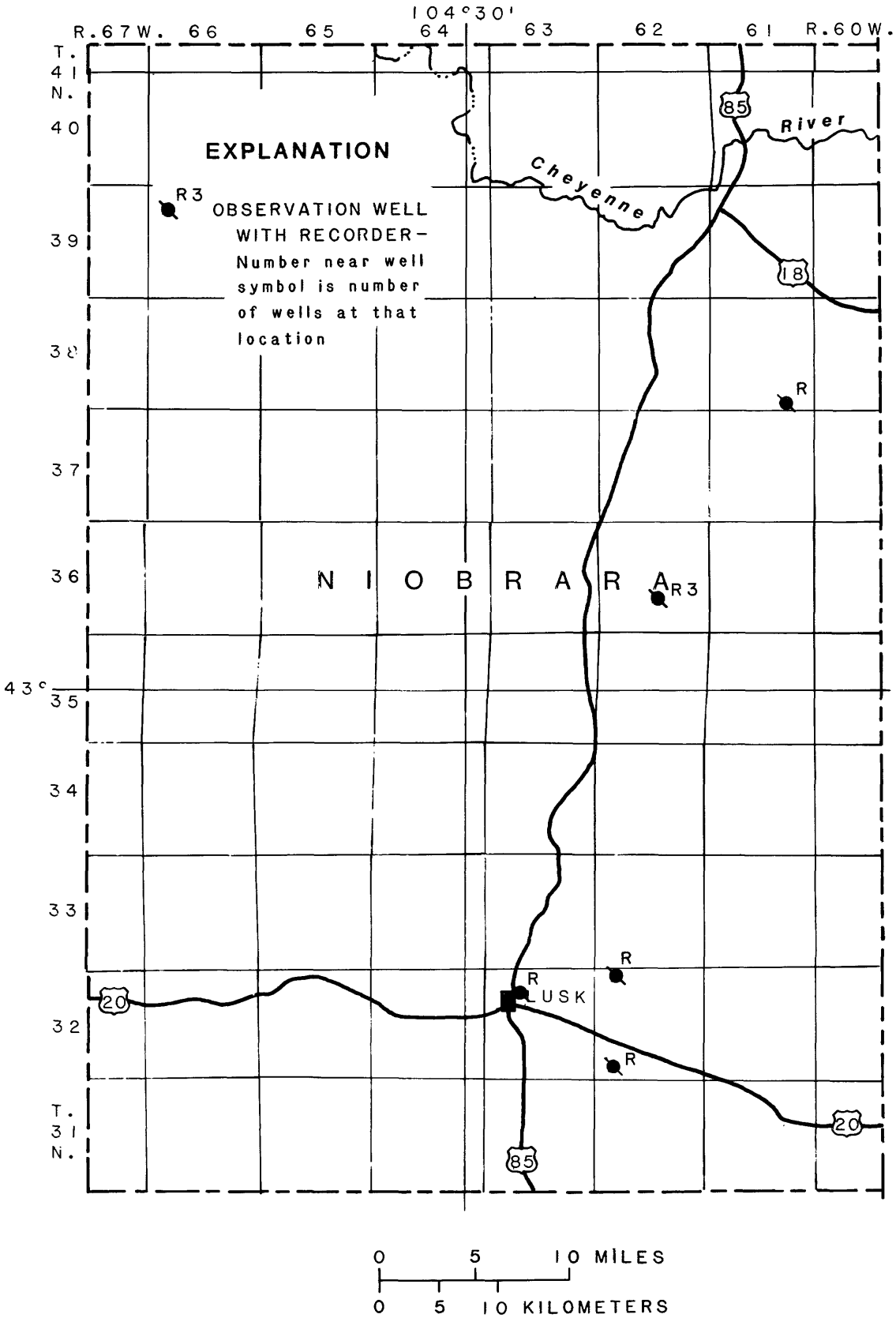
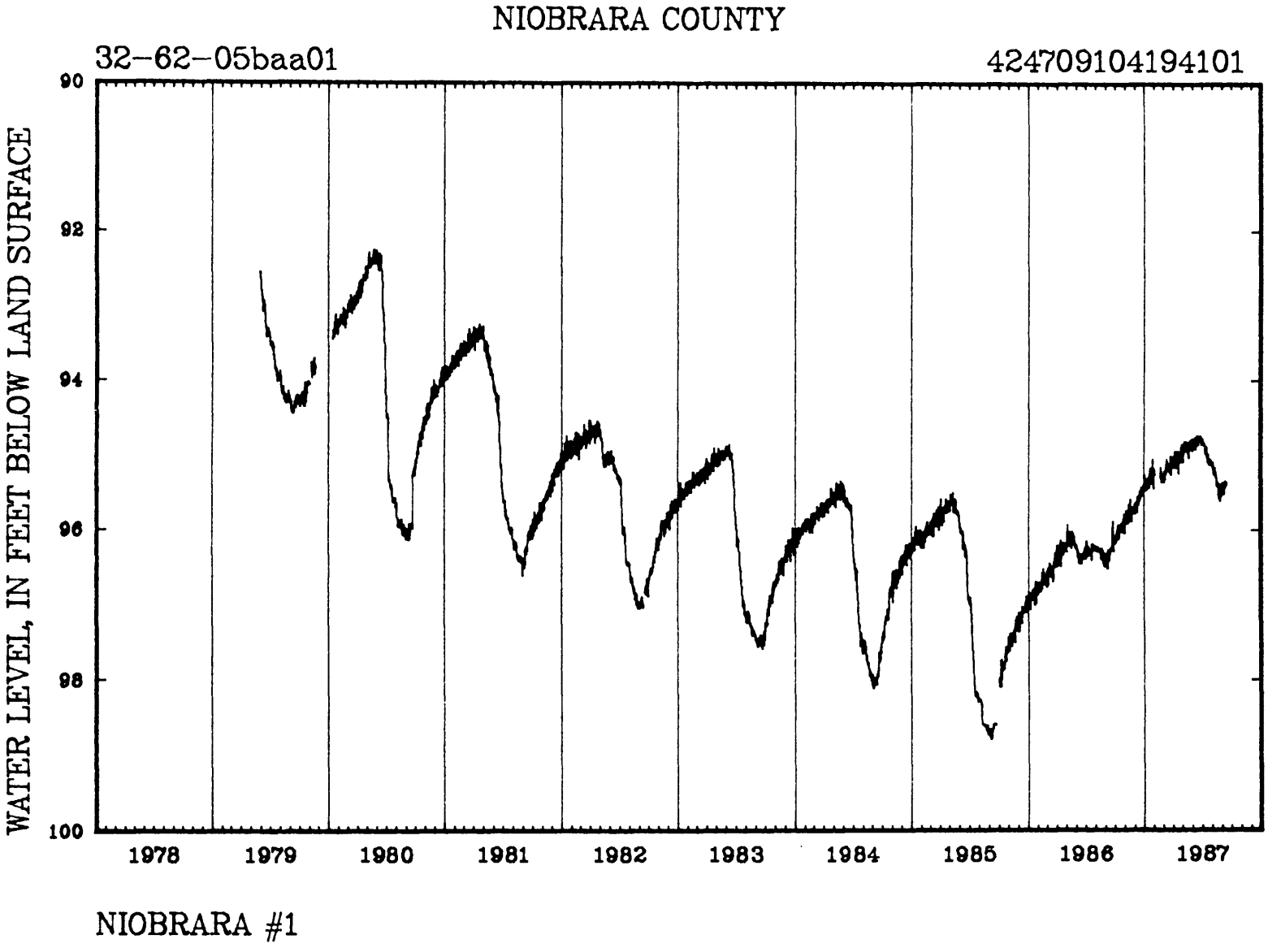


Figure 12.--Location of observation wells in Niobrara County, Wyoming.

Records of observation wells in Niobrara County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
32-62-05baa01	177	U	122ARKR	1979-87	92.26	06-80	98.78	09-85
32-62-32bbb01	485	U	122ARKR	1970-87	20.93	06-70	37.56	08-85
32-63-08daa01	178	U	122ARKR	1979-87	10.68	06-87	48.96	09-82
36-62-28ab 01	3,269	U	331MDSN	1974-87	[1] 549.00	05-74	558.54	09-85
36-62-28ab 02	505	U	217LKOT	1974-87	[1] 233.87	08-74	252.35	08-87
36-62-28bbd01	1,513	U	317MNLS	1983-87	552.10	04-86	554.21	06-84
38-61-35dca01	5,155	U	317MNLS	1983-87	707.00	09-87	720.20	10-83

[1] From hand-measured data


NIOBRARA COUNTY
32-62-05baa01
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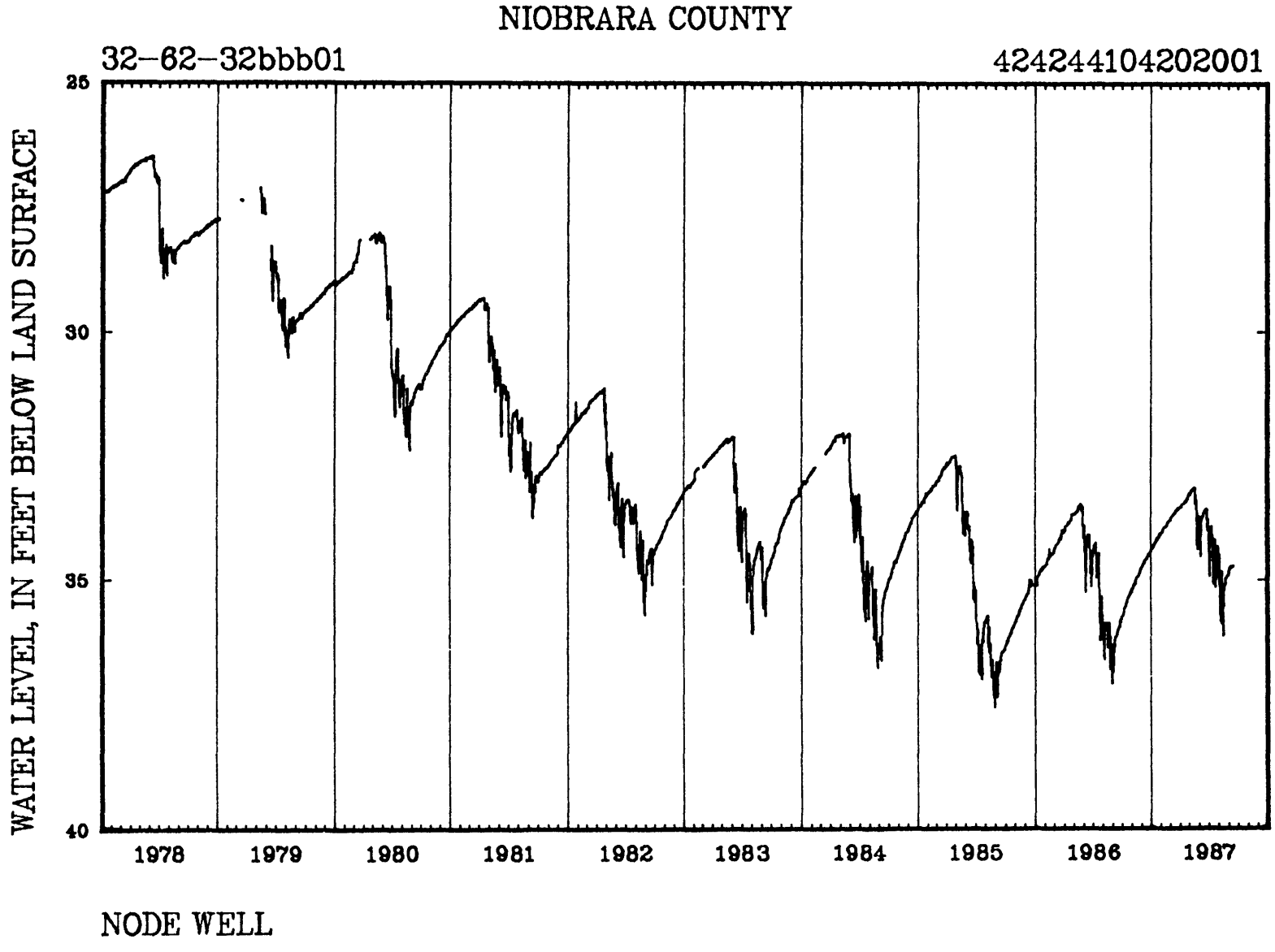
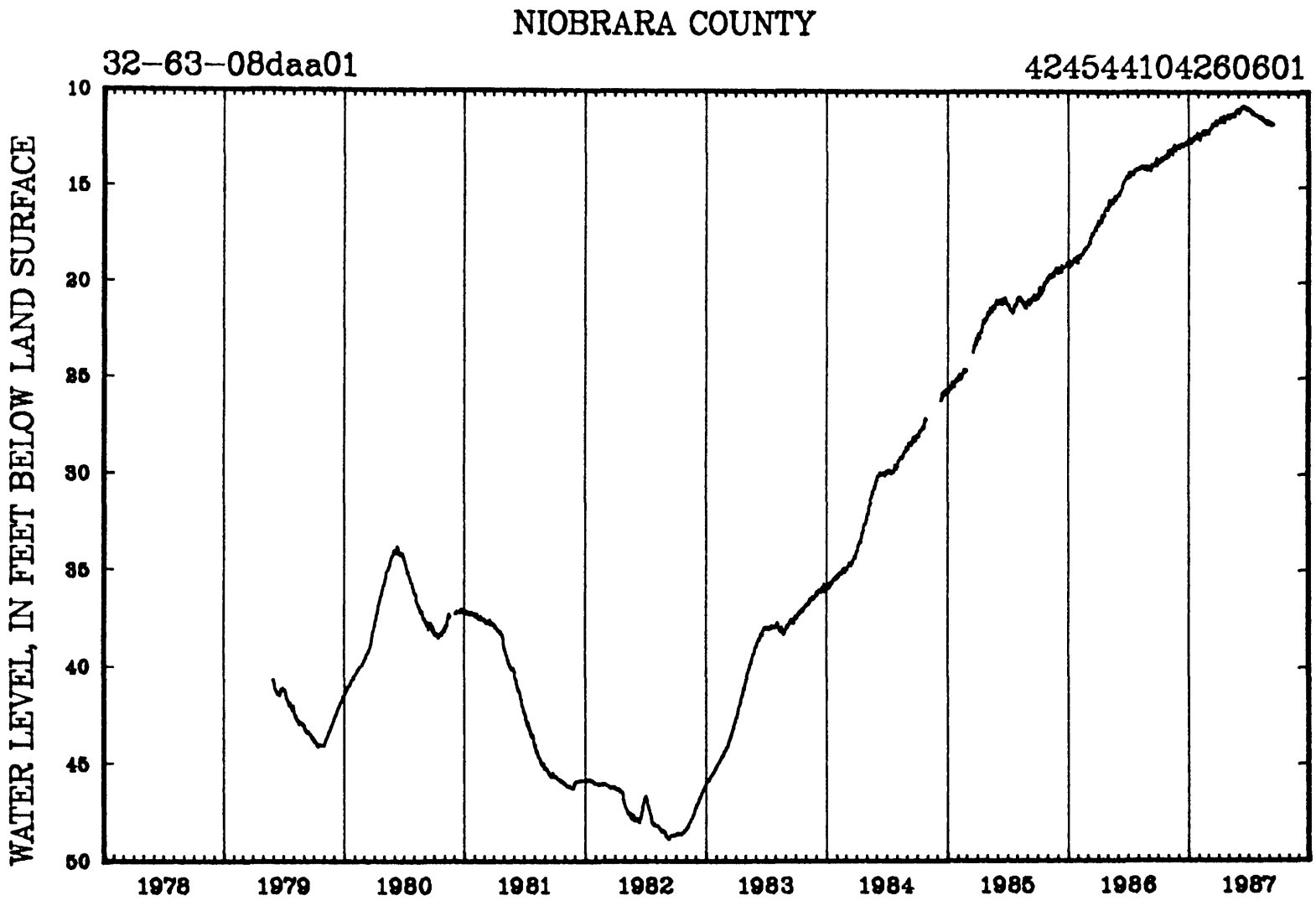
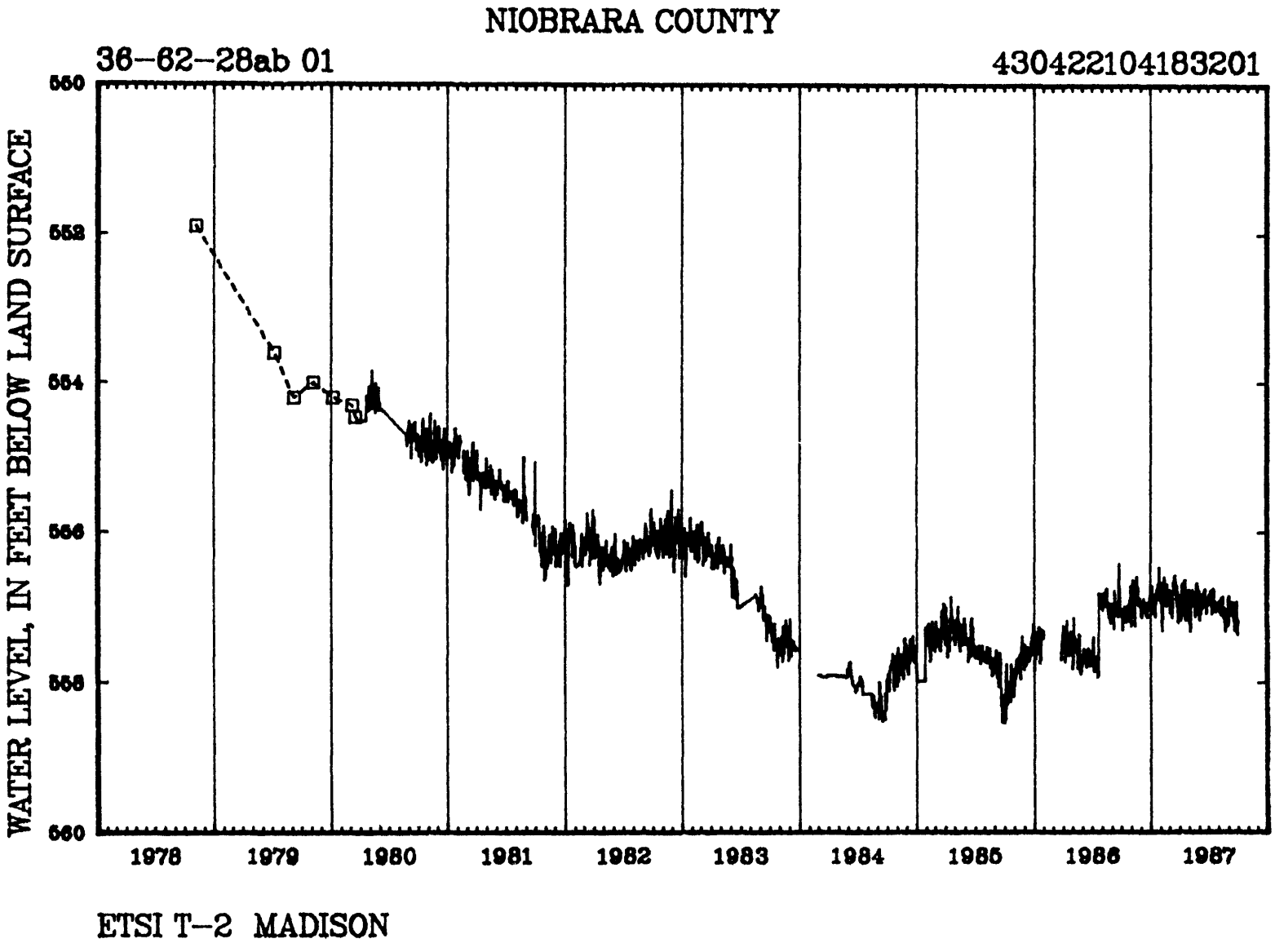
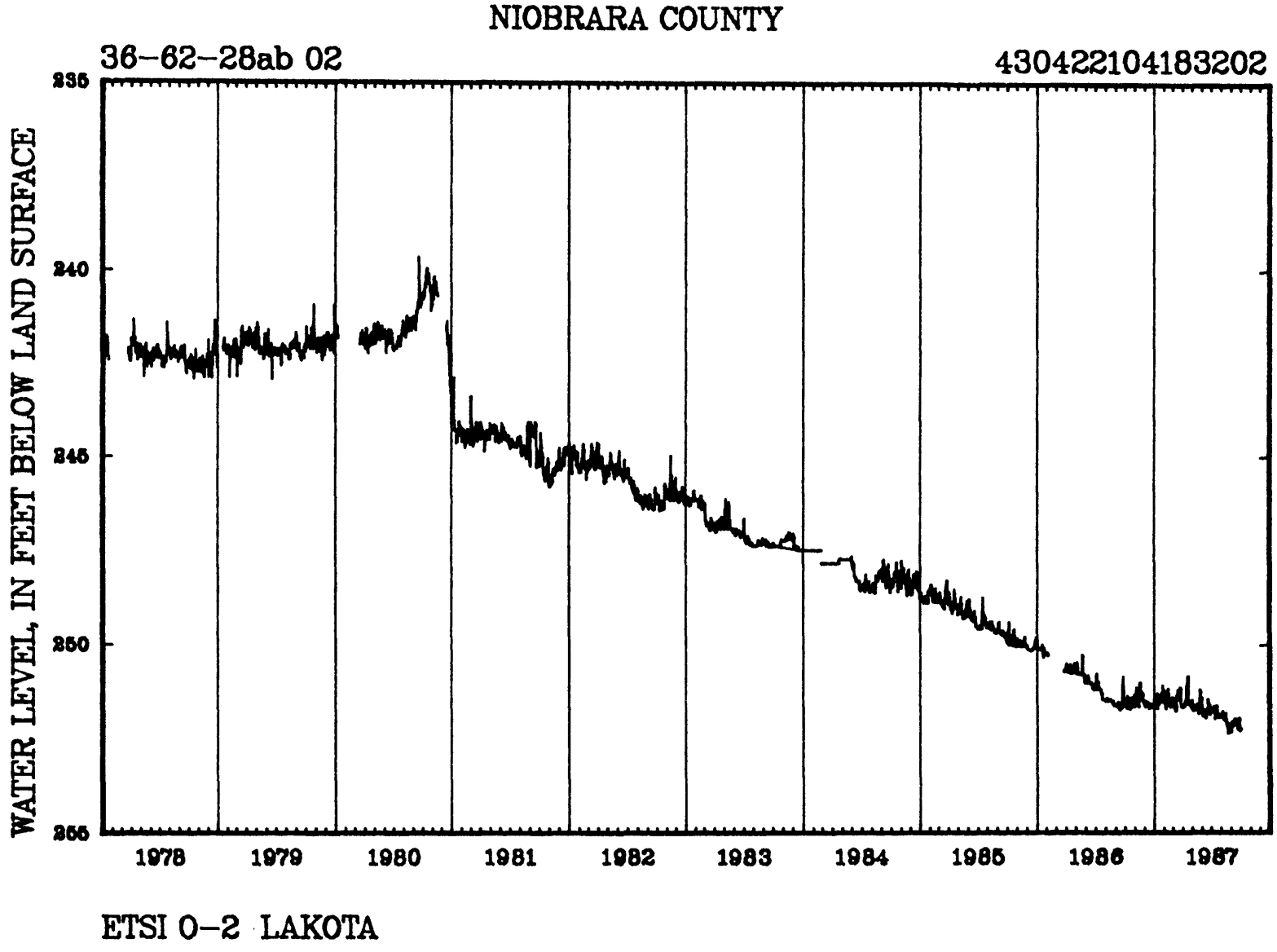
WATER LEVEL, IN FEET BELOW LAND SURFACE
90
92
94
96
98
100
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
NIOBRARA #1

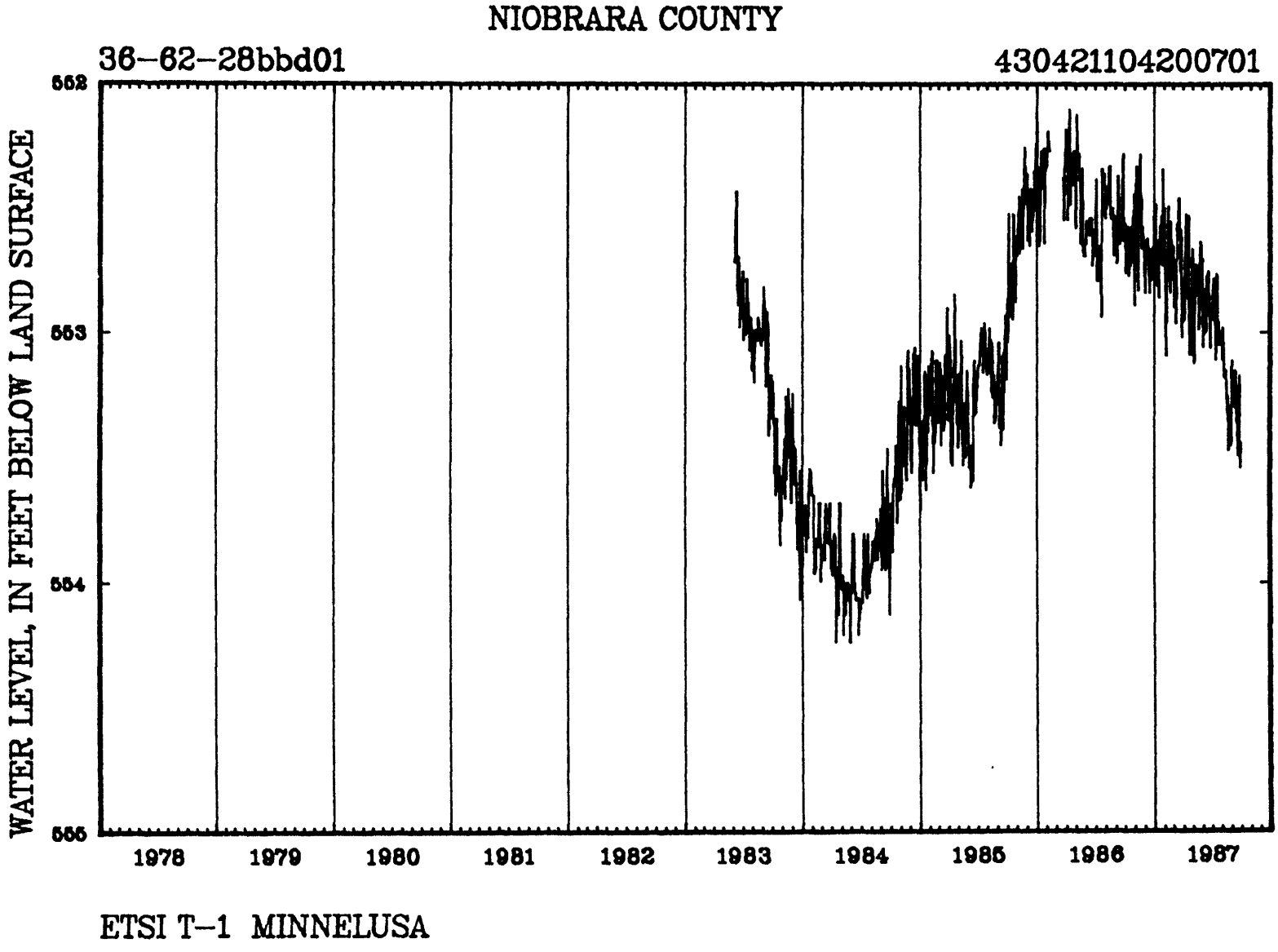

NIOBRARA COUNTY
32-62-32bbb01
424244104202001
WATER LEVEL, IN FEET BELOW LAND SURFACE
25
30
35
40
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
NODE WELL


NIOBRARA COUNTY
32-63-08daa01
424544104260601
WATER LEVEL, IN FEET BELOW LAND SURFACE
10
15
20
25
30
35
40
45
50
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987

NIOBRARA #2


NIOBRARA COUNTY
36-62-28ab 01
430422104183201
WATER LEVEL, IN FEET BELOW LAND SURFACE
550
552
554
556
558
560
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
ETSI T-2 MADISON


NIOBRARA COUNTY
36-62-28ab 02
430422104183202
WATER LEVEL, IN FEET BELOW LAND SURFACE
235
240
245
250
255
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
ETSI O-2 LAKOTA


NIOBRARA COUNTY
36-62-28bbd01
430421104200701
WATER LEVEL, IN FEET BELOW LAND SURFACE
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553
554
555
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1979
1980
1981
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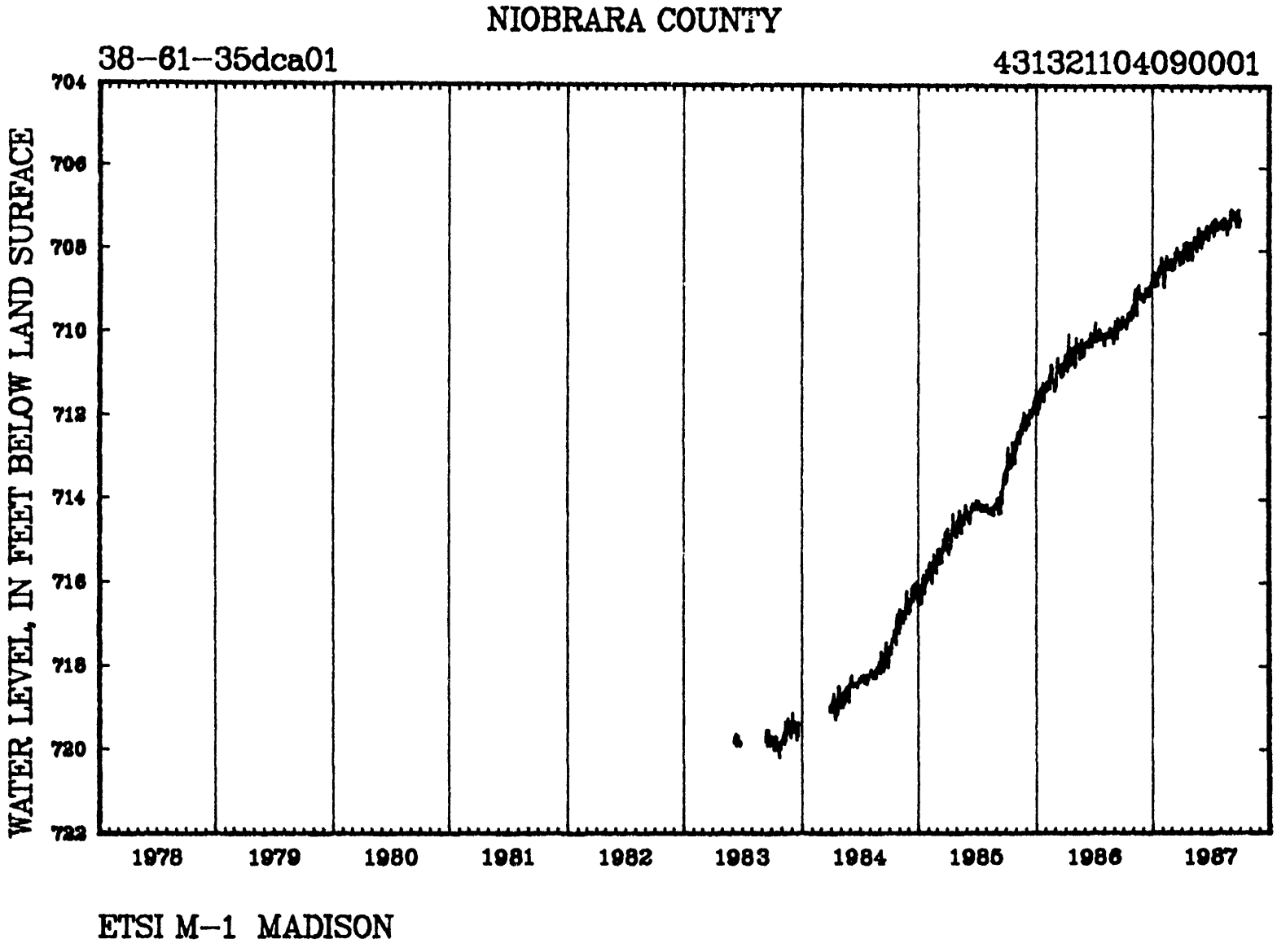
1983
1984
1985
1986
1987
ETSI T-1 MINNELUSA


NIOBRARA COUNTY
38-61-35dca01
431321104090001
WATER LEVEL, IN FEET BELOW LAND SURFACE
704
706
708
710
712
714
716
718
720
722
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
ETSI M-1 MADISON

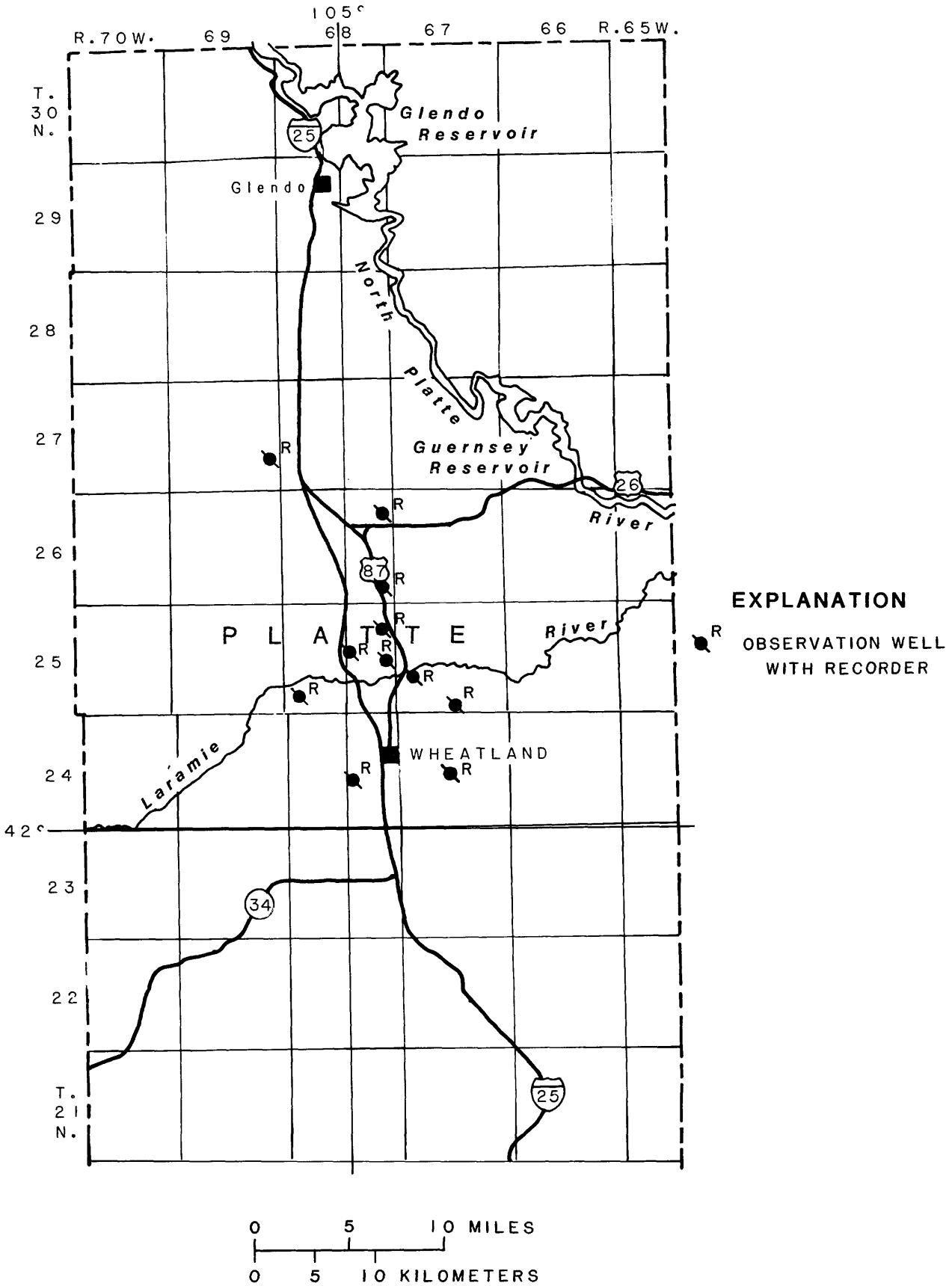
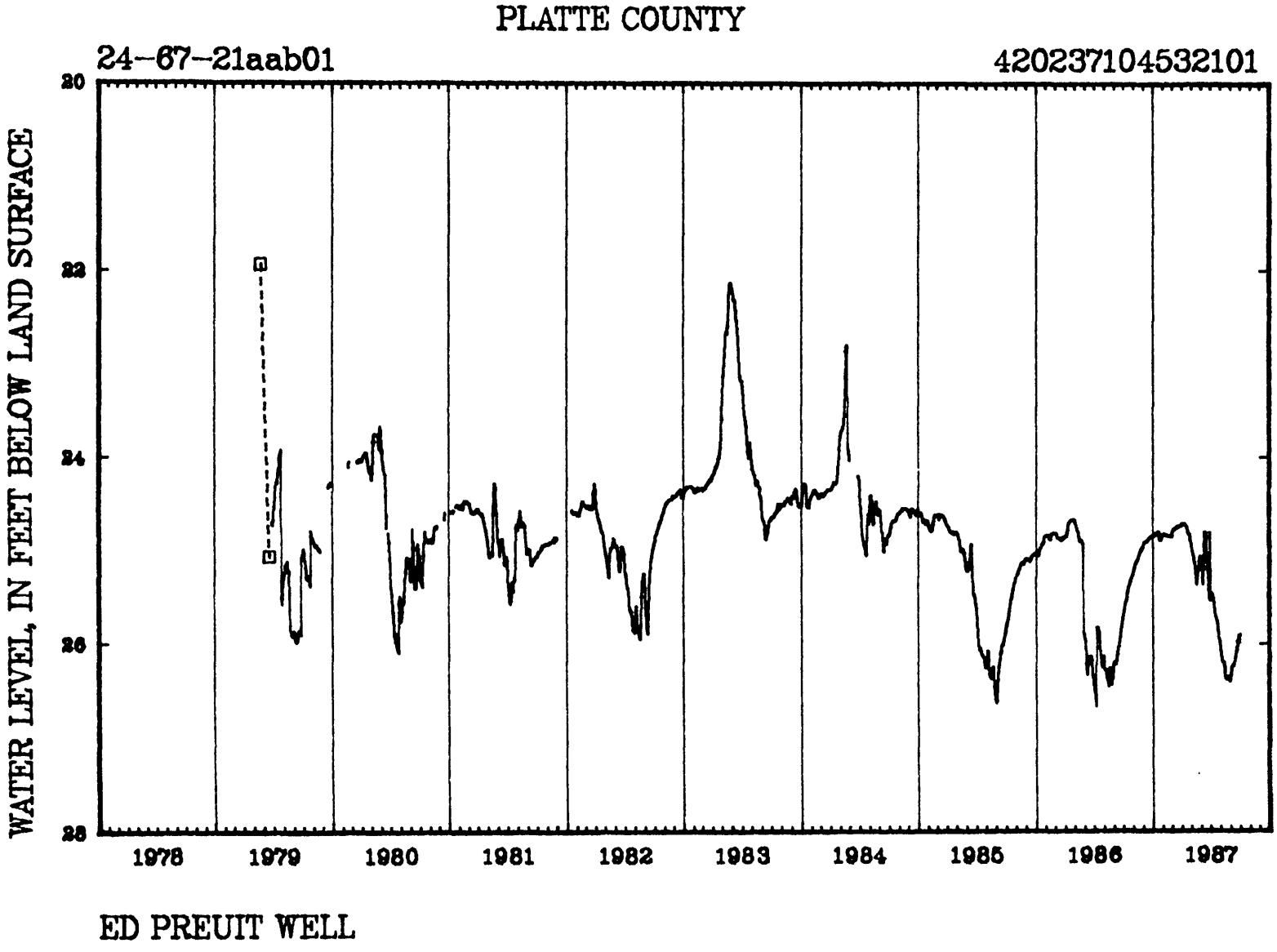


Figure 13.--Location of observation wells in Platte County, Wyoming.

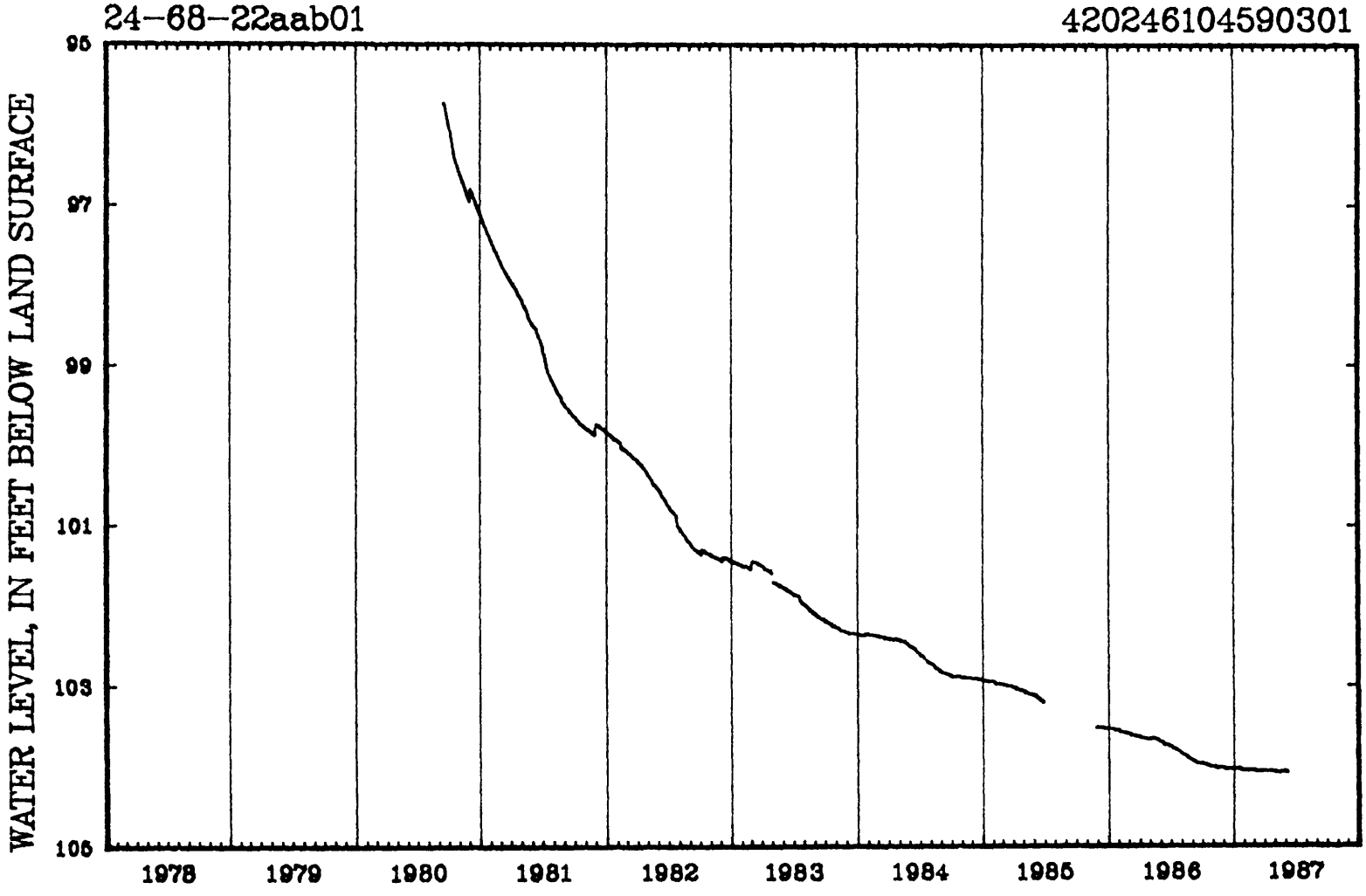
Records of observation wells in Platte County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
24-67-21aab01	41	U	111ALVM	1979-87	[1] 21.93	05-79	26.67	07-86
24-68-22aab01	380	U	122ARKR	1980-87	95.74	09-80	104.08	05-87, 06-87
25-67-19dda01	760	U	122ARKR	1979-87	47.88	11-85	81.04	07-85
25-67-34ccd01	380	U	122ARKR	1980-87	79.66	01-87	87.35	09-80
25-68-12dda01	100	M	122ARKR	1980-87	13.30	06-84	20.55	10-81
25-68-15bbd01	220	U	122ARKR	1980-87	42.50	02-81	63.32	06-85
25-68-24aad01	240	U	122ARKR	1980-87	69.71	06-87	72.11	04-81
25-68-31aaa01	400	U	122ARKR	1979-87	20.13	11-86	28.93	08-82
26-68-12cbd01	320	U	122ARKR	1980-87	135.65	09-87	153.20	10-80
26-68-36bbb01	200	U	122ARKR	1981-87	145.78	06-87	153.41	08-82
27-69-25abc01	200	U	123WRVR	1981-87	3.44	04-86	27.03	05-82

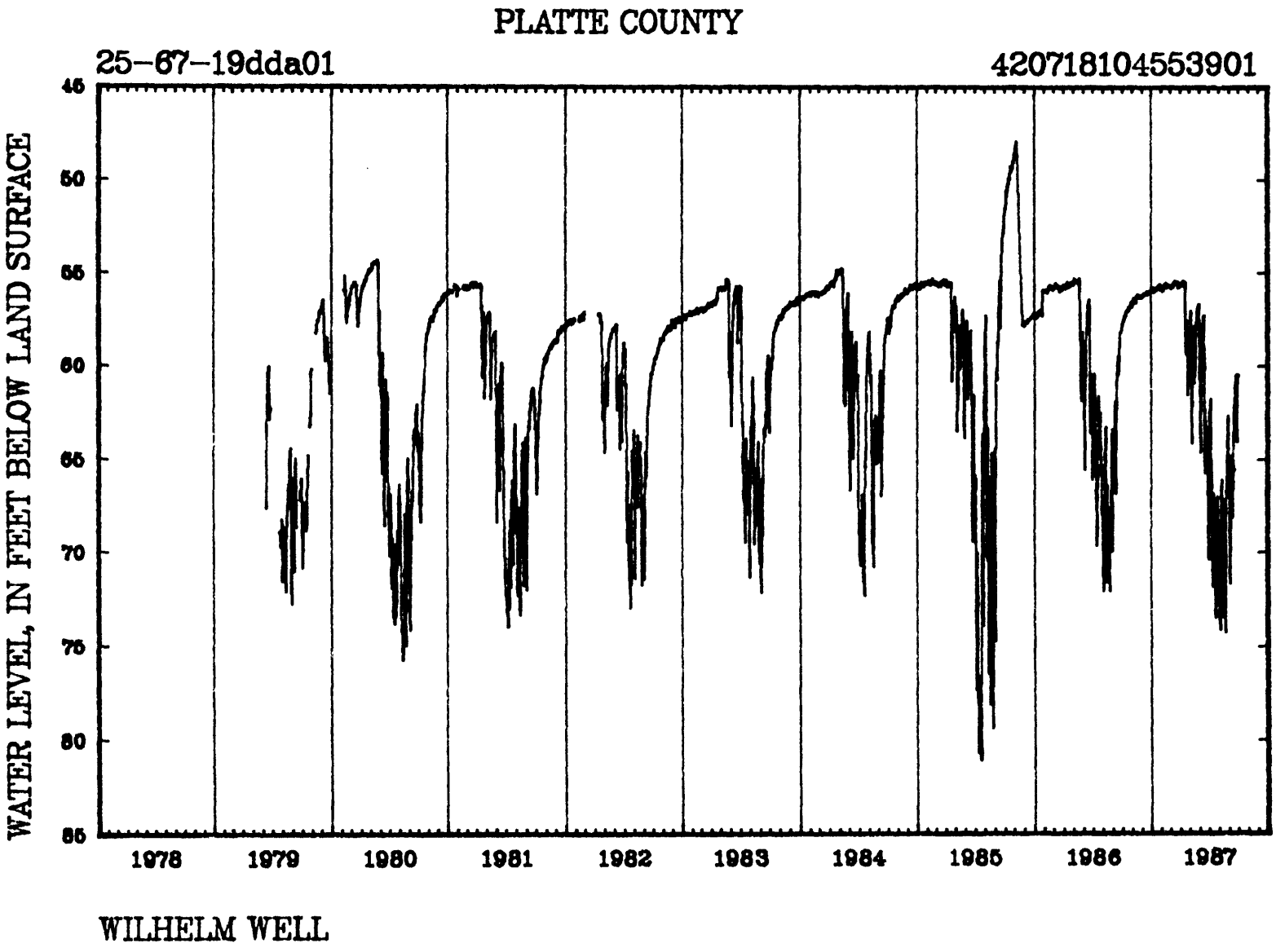
[1] From hand-measured data

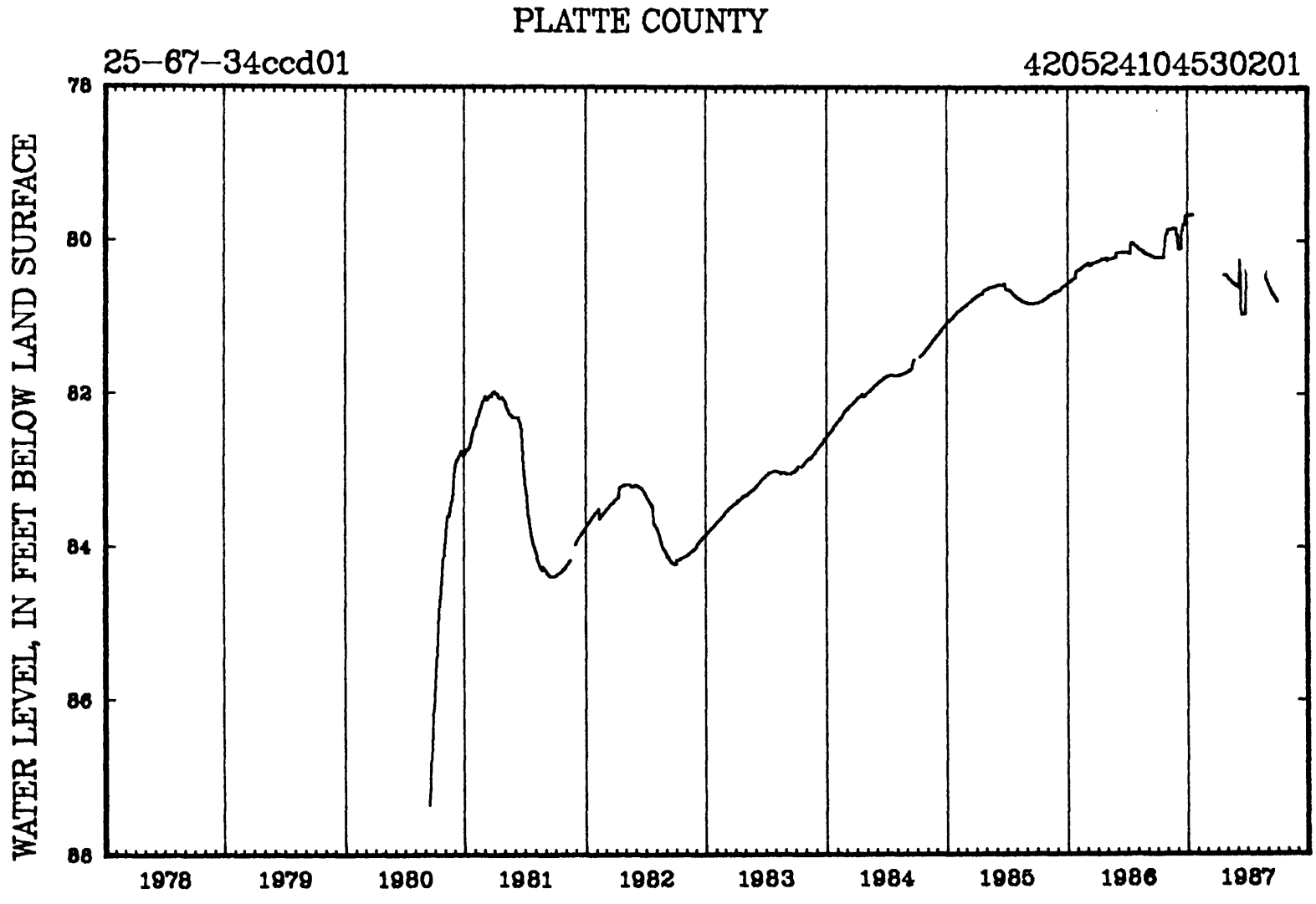

PLATTE COUNTY
24-67-21aab01
420237104532101
WATER LEVEL, IN FEET BELOW LAND SURFACE
20
22
24
26
28
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
ED PREUIT WELL

PLATTE COUNTY

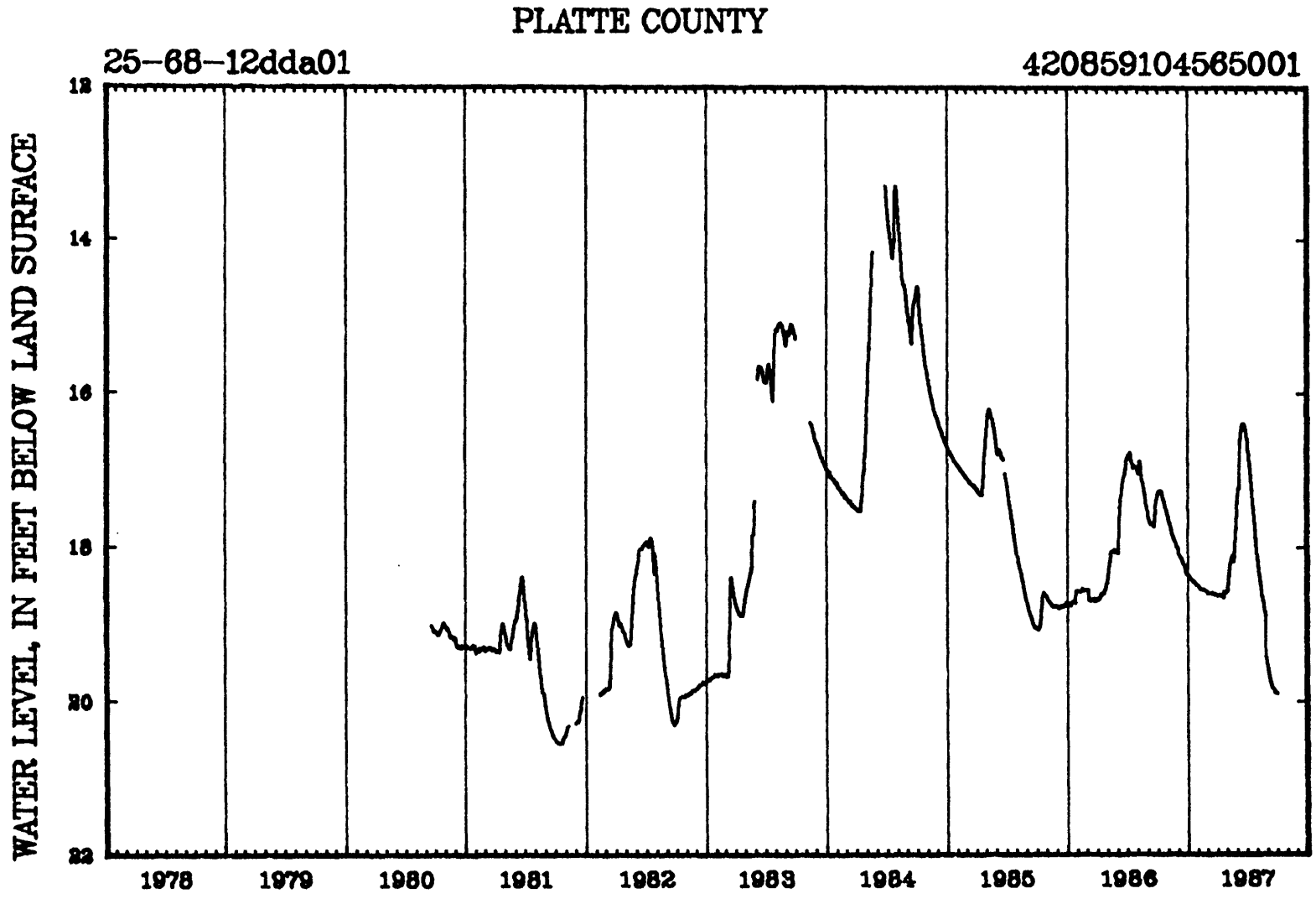


PLATTE #1

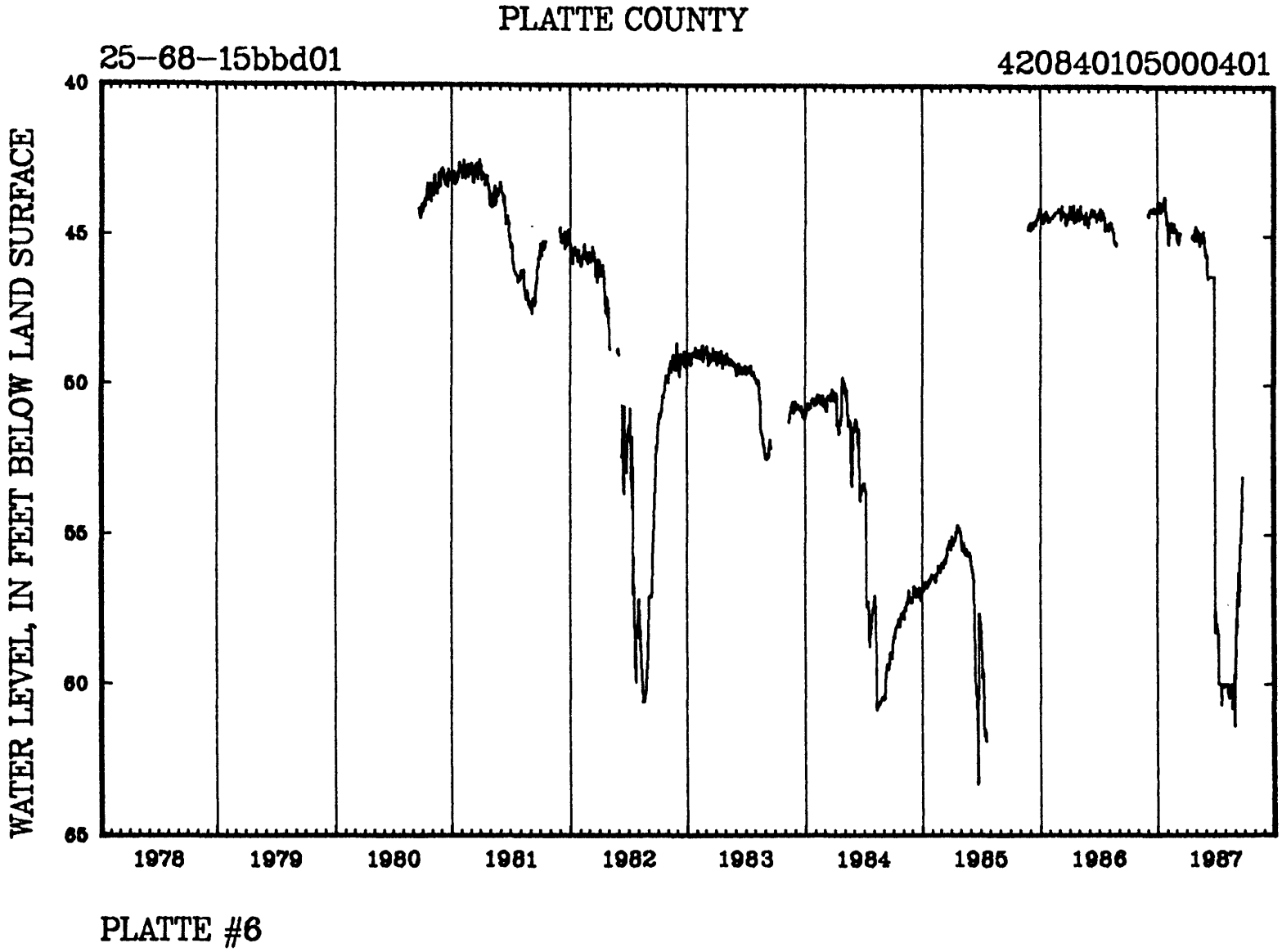

PLATTE COUNTY
25-67-19dda01
420718104553901
WATER LEVEL, IN FEET BELOW LAND SURFACE
45
50
55
60
65
70
75
80
85
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
WILHELM WELL


PLATTE COUNTY
25-67-34ccd01
420524104530201
WATER LEVEL, IN FEET BELOW LAND SURFACE
78
80
82
84
86
88
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987

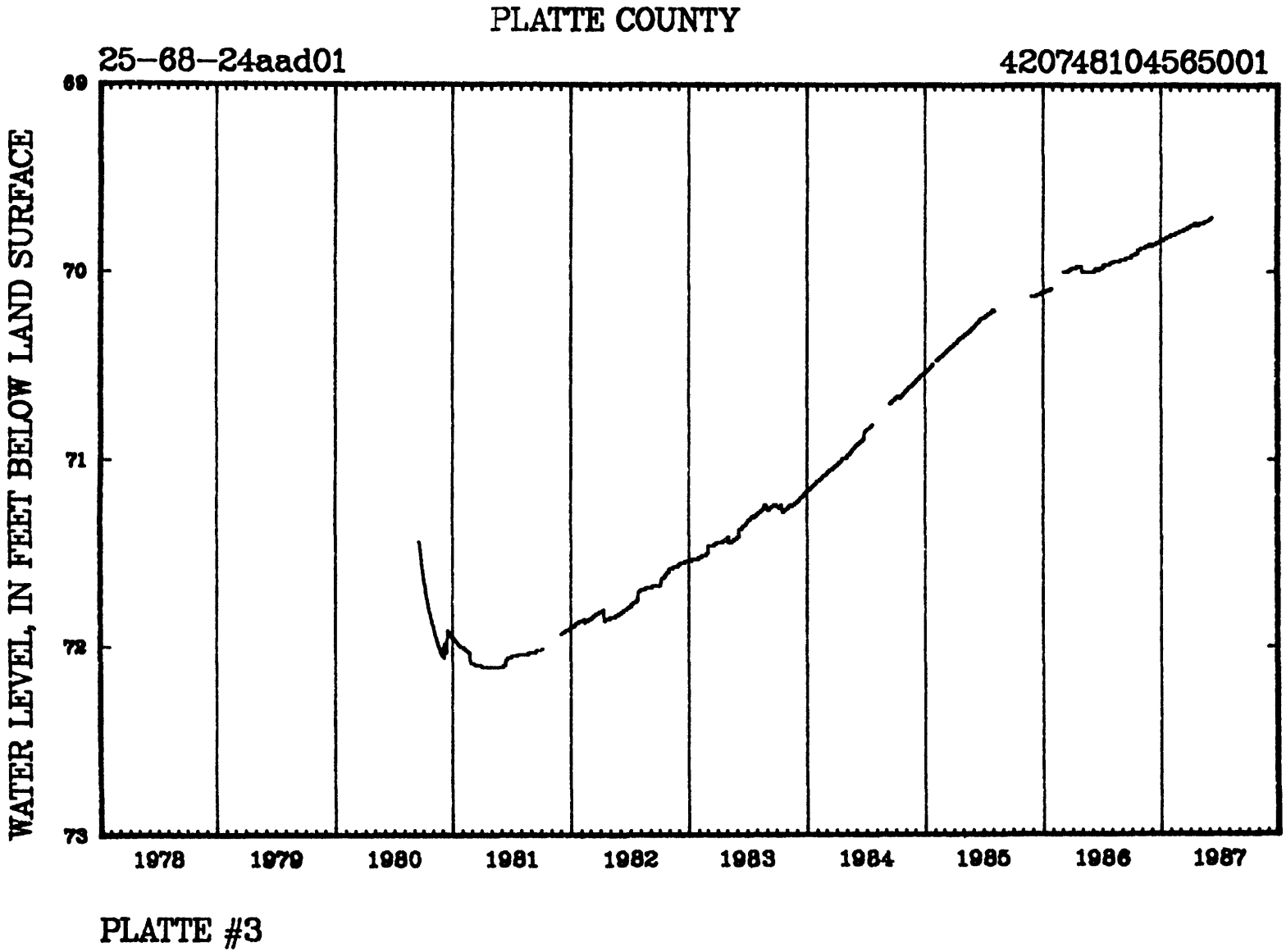
PLATTE #2


PLATTE COUNTY
25-68-12dda01
420859104565001
WATER LEVEL, IN FEET BELOW LAND SURFACE
12
14
16
18
20
22
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987

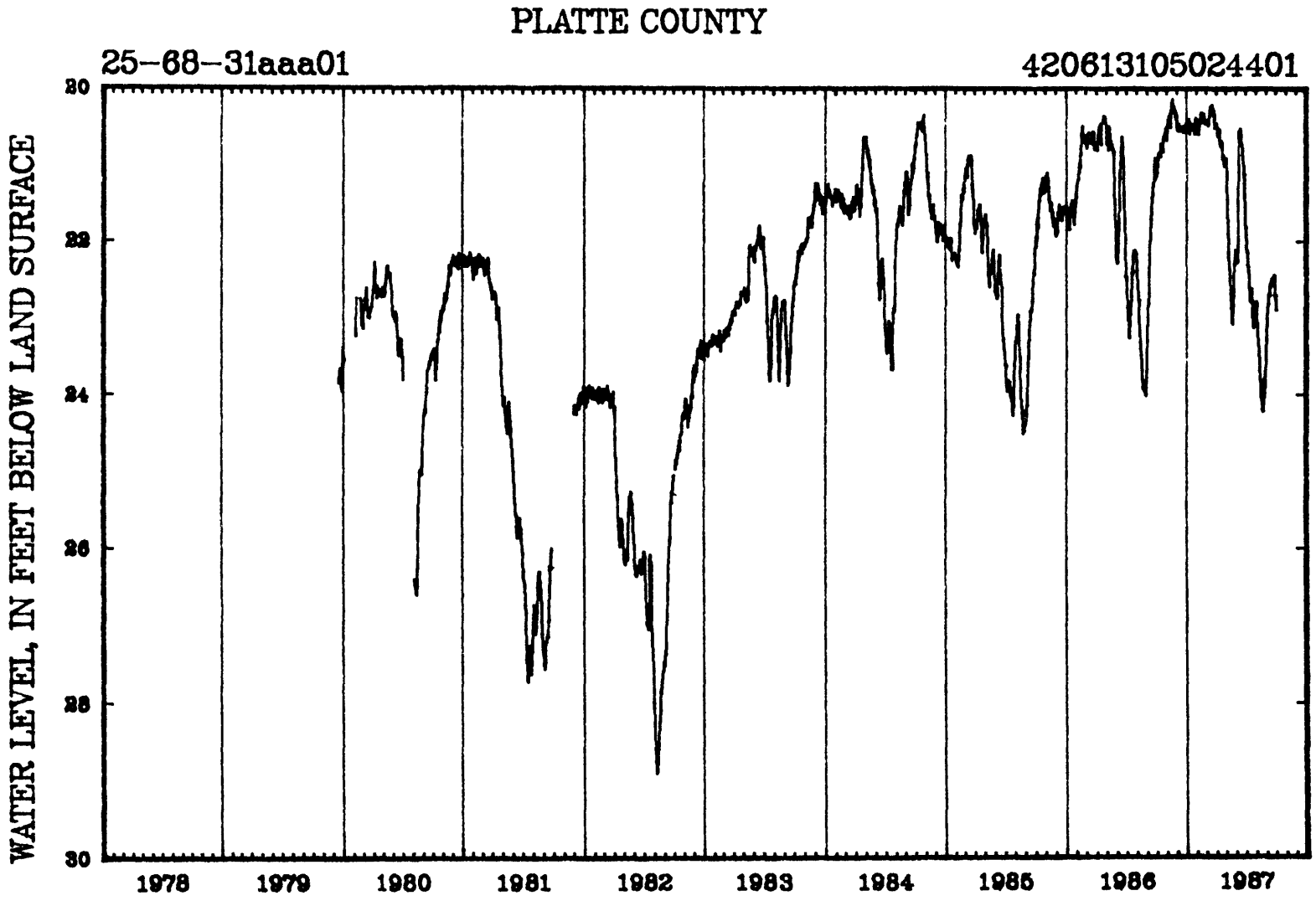
PLATTE #4


PLATTE COUNTY
25-68-15bbd01
420840105000401
WATER LEVEL, IN FEET BELOW LAND SURFACE
40
45
50
55
60
65
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987

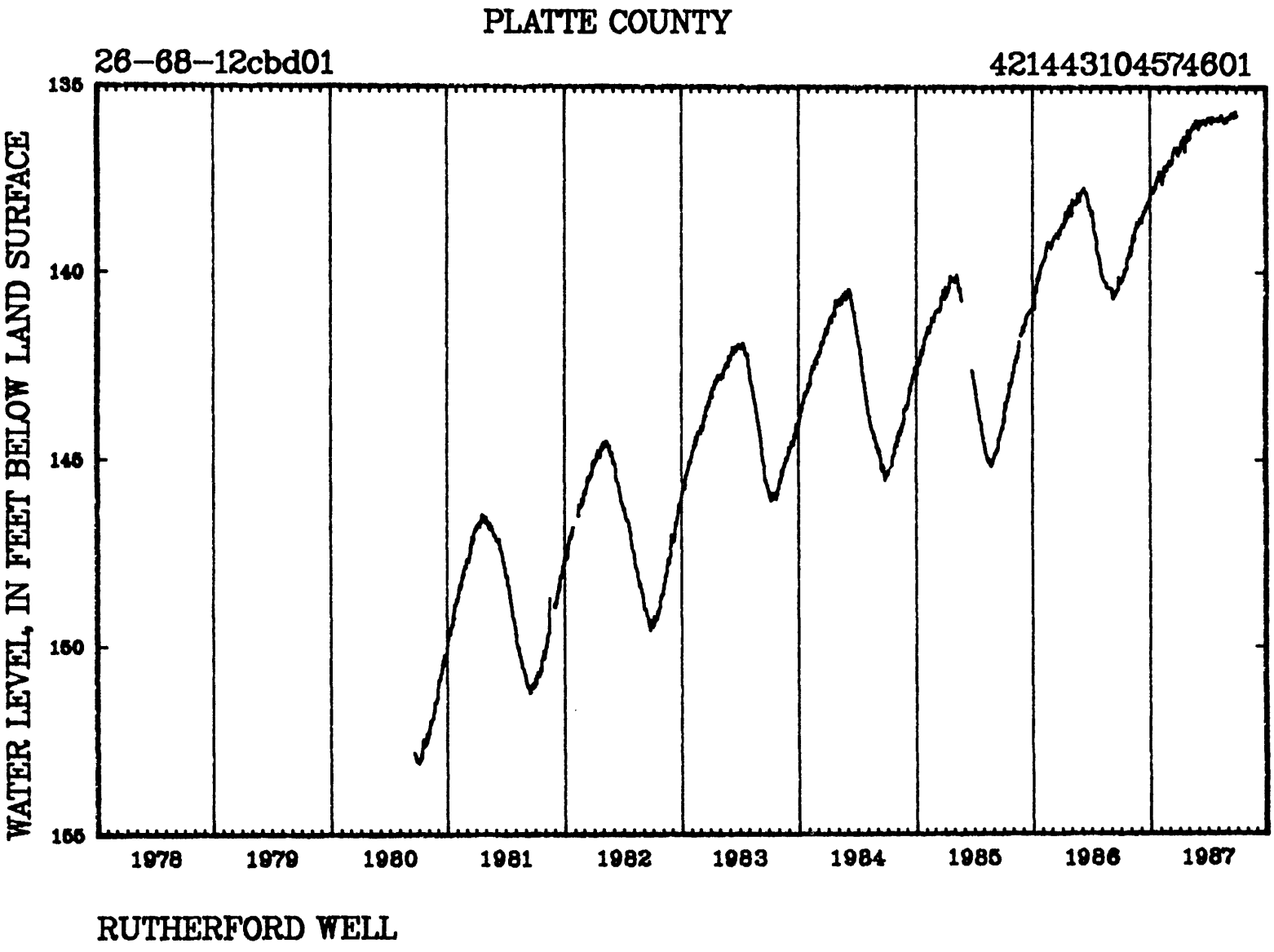
PLATTE #6

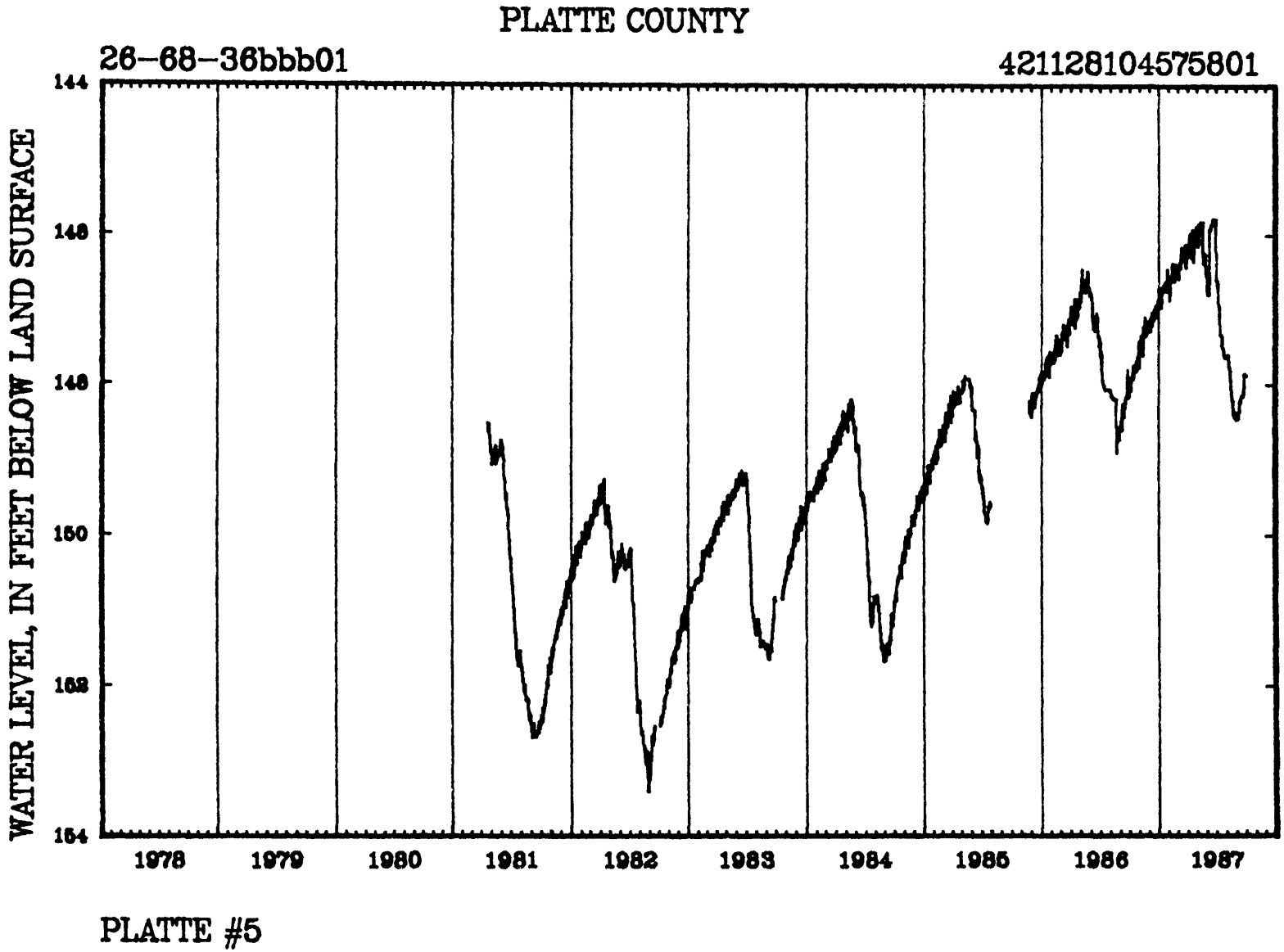

PLATTE COUNTY
25-68-24aad01
420748104565001
WATER LEVEL, IN FEET BELOW LAND SURFACE
69
70
71
72
73
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987

PLATTE #3

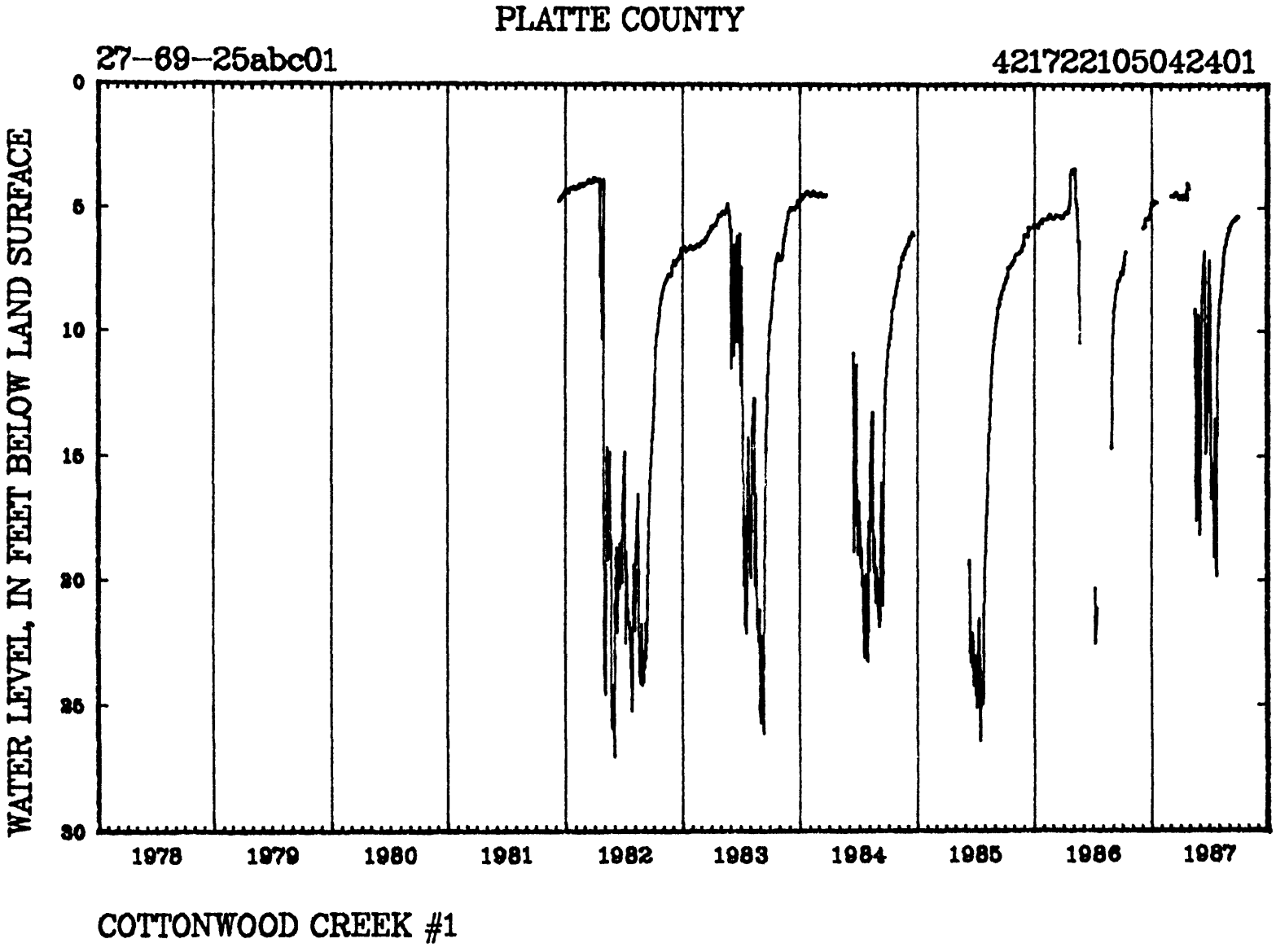

PLATTE COUNTY
25-68-31aaa01
420613105024401
WATER LEVEL, IN FEET BELOW LAND SURFACE
20
22
24
26
28
30
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987

PLATTE #7


PLATTE COUNTY
26-68-12cbd01
421443104574601
WATER LEVEL, IN FEET BELOW LAND SURFACE
135
140
145
150
155
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
RUTHERFORD WELL


PLATTE COUNTY
26-68-36bbb01
421128104575801
WATER LEVEL, IN FEET BELOW LAND SURFACE
144
146
148
150
152
154
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987

PLATTE #5


PLATTE COUNTY
27-69-25abc01
421722105042401
WATER LEVEL, IN FEET BELOW LAND SURFACE
0
5
10
15
20
25
30
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
COTTONWOOD CREEK #1

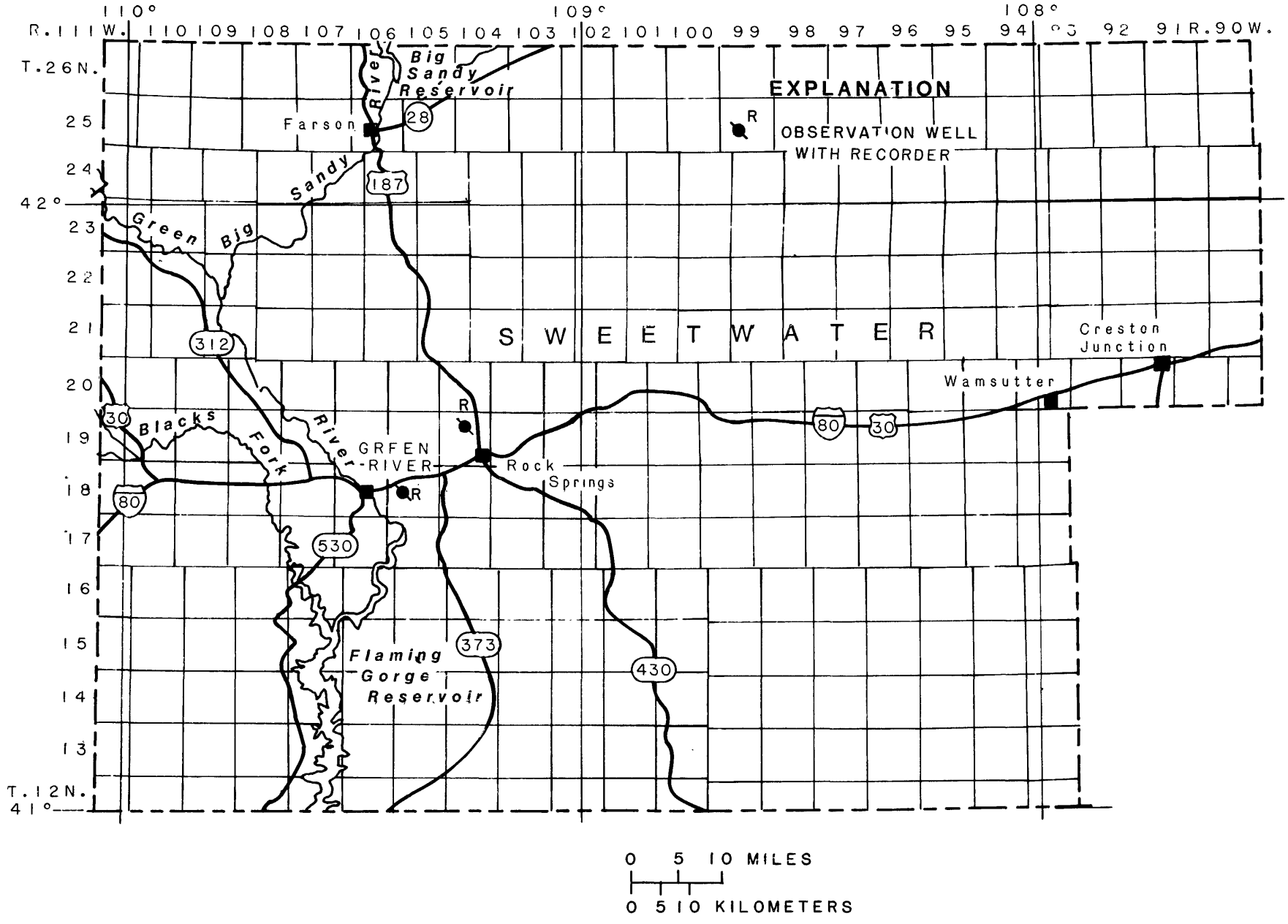
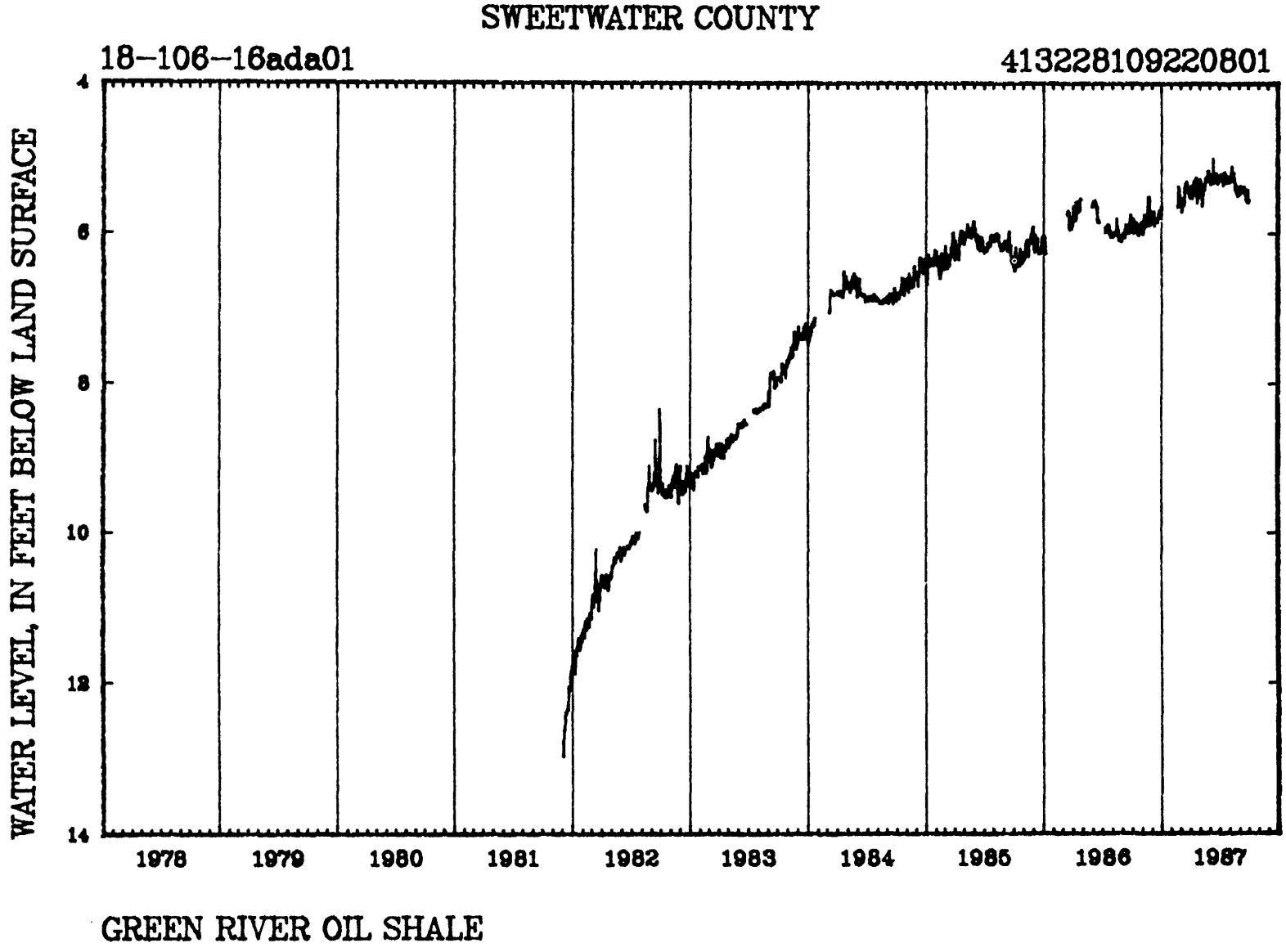
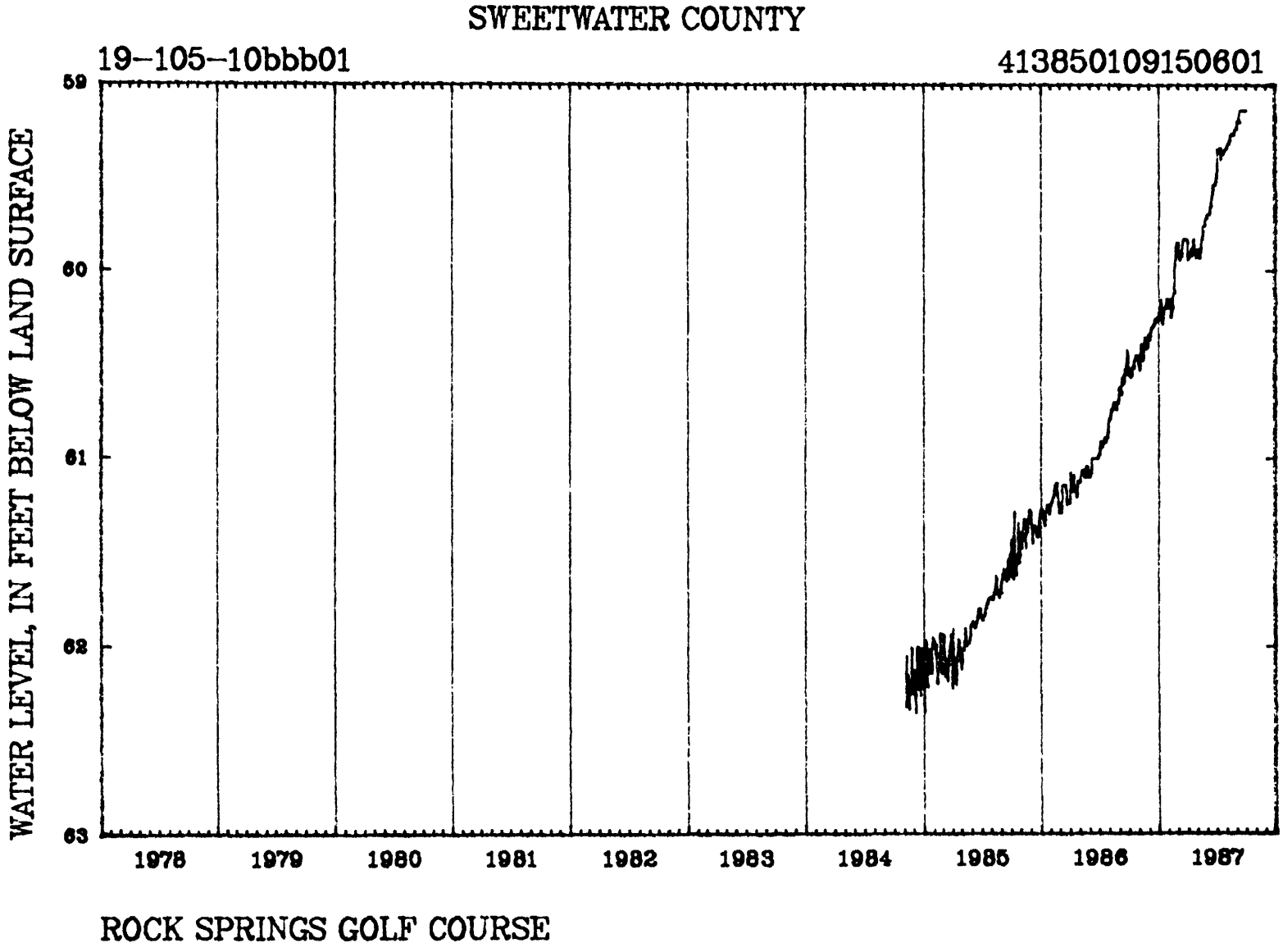


Figure 14.--Location of observation wells in Sweetwater County, Wyoming.

Records of observation wells in Sweetwater County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
18-106-16ada01	1,030	U	124WSTC	1981-87	5.00	06-87	12.97	12-81
19-105-10bbb01	240	U	-------	1984-87	59.14	09-87	62.36	12-84


SWEETWATER COUNTY
18–106–16ada01
413228109220801
WATER LEVEL, IN FEET BELOW LAND SURFACE
4
6
8
10
12
14
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
GREEN RIVER OIL SHALE


SWEETWATER COUNTY
19–105–10bbb01
413850109150601
WATER LEVEL, IN FEET BELOW LAND SURFACE
59
60
61
62
63
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
ROCK SPRINGS GOLF COURSE

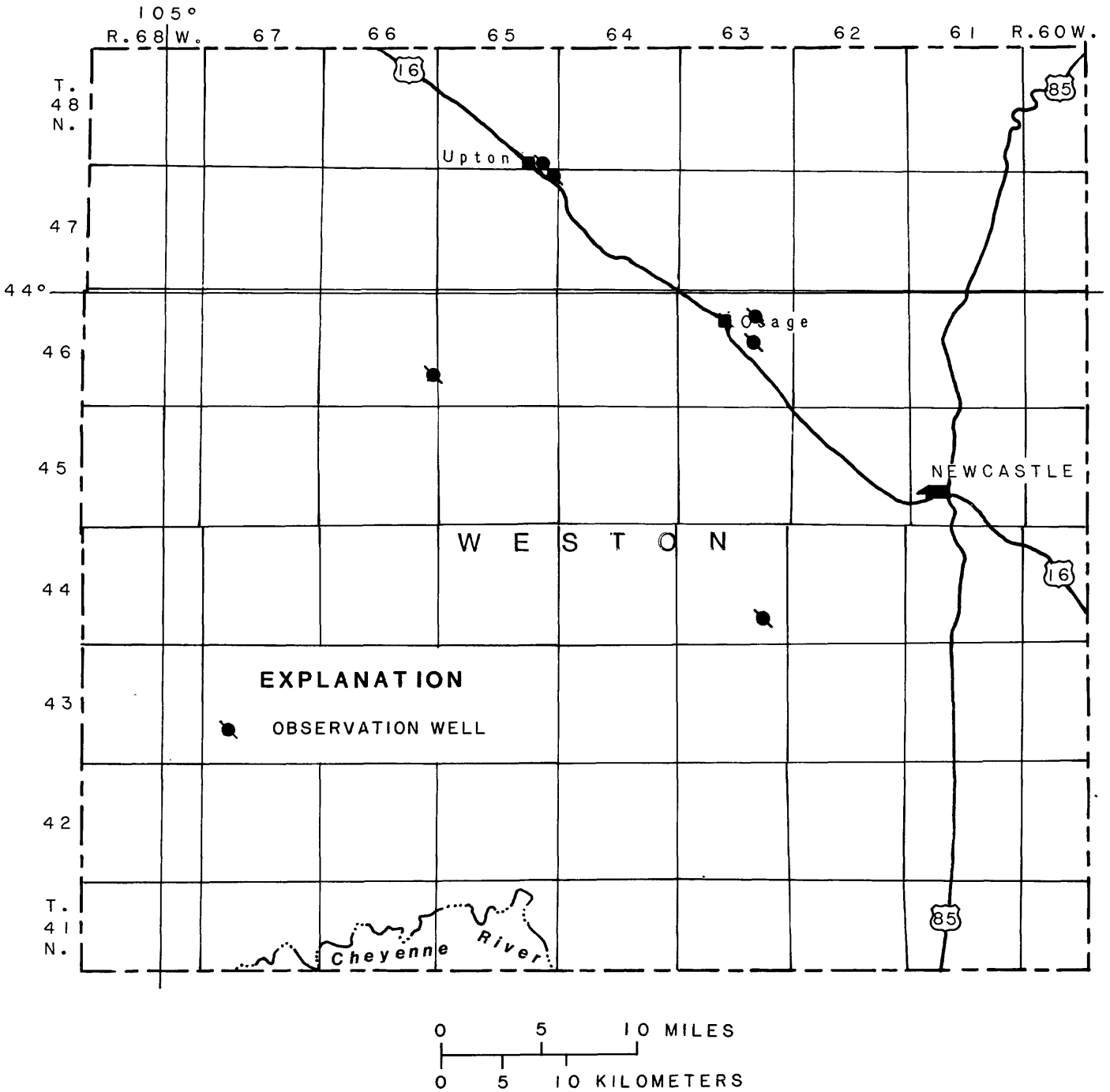
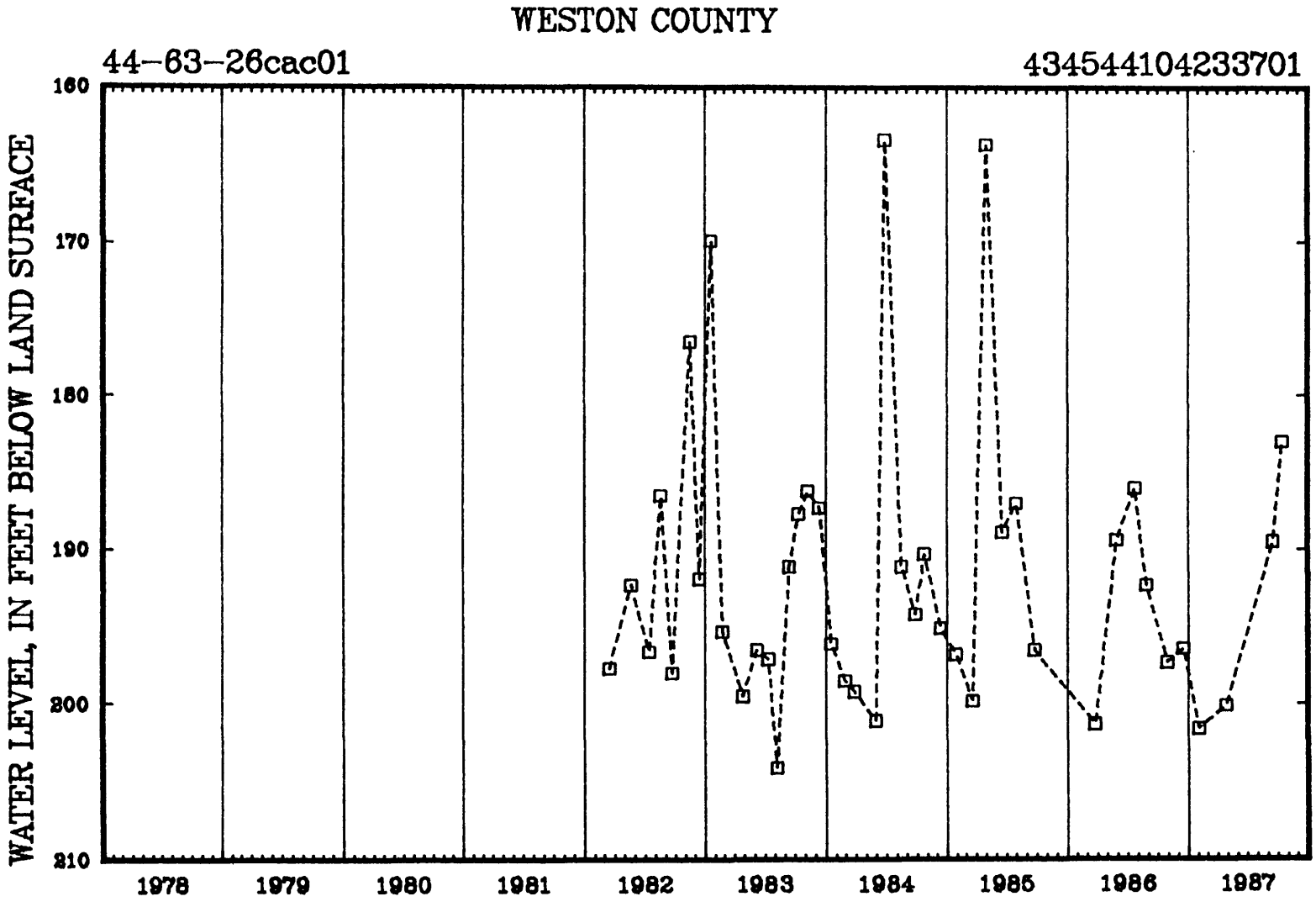


Figure 15.--Location of observation wells in Weston County, Wyoming.

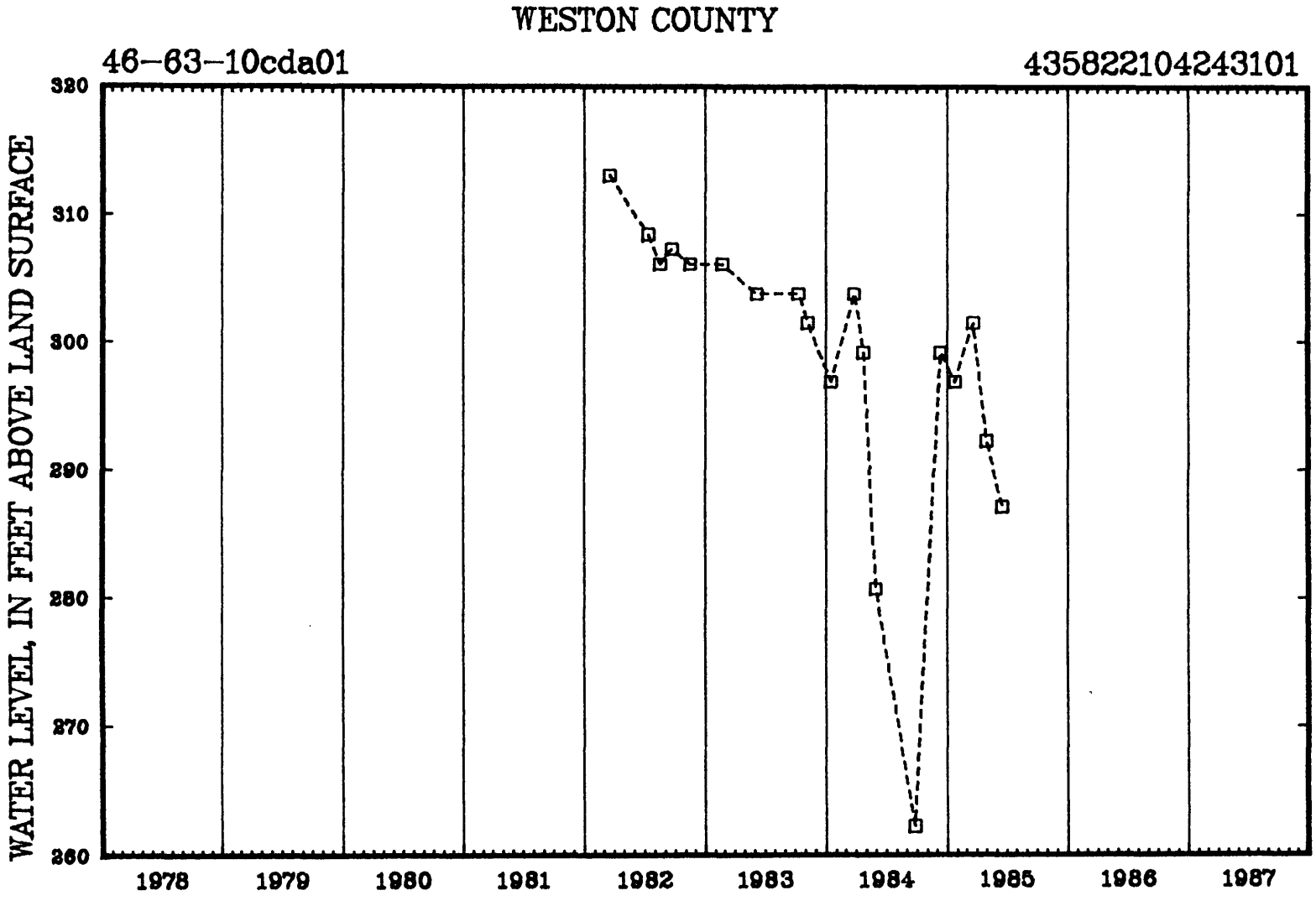
Records of observation wells in Weston County, Wyoming, and highest and lowest recorded water levels, in feet below land surface.

Well number	Well depth (ft)	Use of water	Geologic source	Record available (yr)	Water levels			
					Highest		Lowest	
					Level (ft)	Month-year	Level (ft)	Month-year
44-63-26cac01	6,881	H,S,I	331MDSN	1982-87	[1]163.48	06-84	[1,4]204.10	08-83
46-63-10cda01	3,135	N	331MDSN	1982-85	[1,5]313.07	03-82	[1,4]262.25	09-84
46-63-15add01	3,135	N	331MDSN	1982-86	[1,5]354.25	03-82	[1,4]323.06	05-86
46-66-25dbb01	8,780	U	331MDSN	1982-87	[1]1,008.76	03-87, 06-87, 09-87	[1]1,081.75	09-85
47-65-01bab01	3,310	P	331MDSN	1983-84	[1]53.54	04-83	[1,4]70.90	08-83
48-65-35ccb01	3,193	P	331MDSN	1982-87	[1]10.20	03-86	[1,4]218.50	07-83

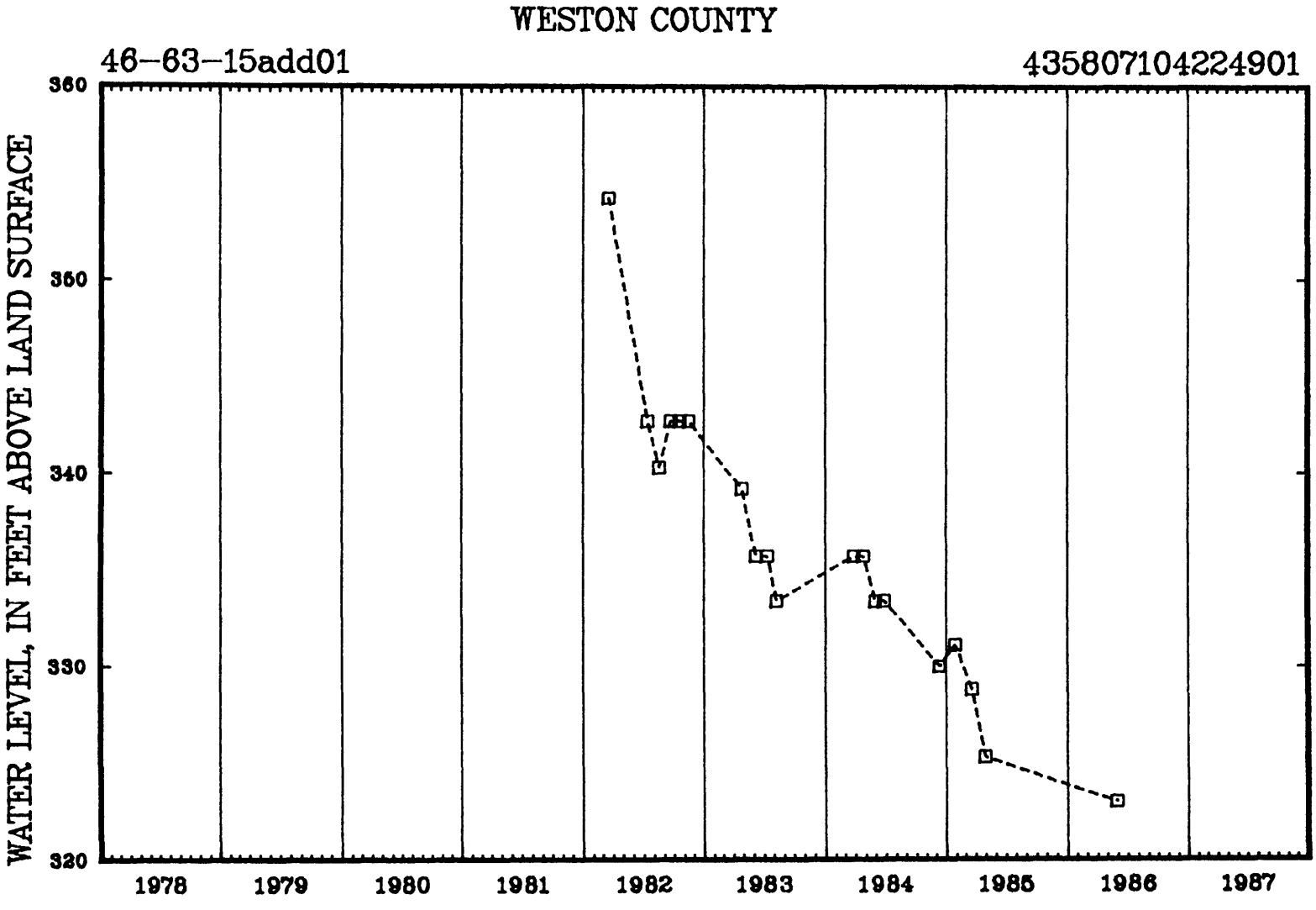
[1] From hand-measured data
[4] Well being pumped
[5] Artesian well; highest level is shut-in pressure converted to feet above land surface



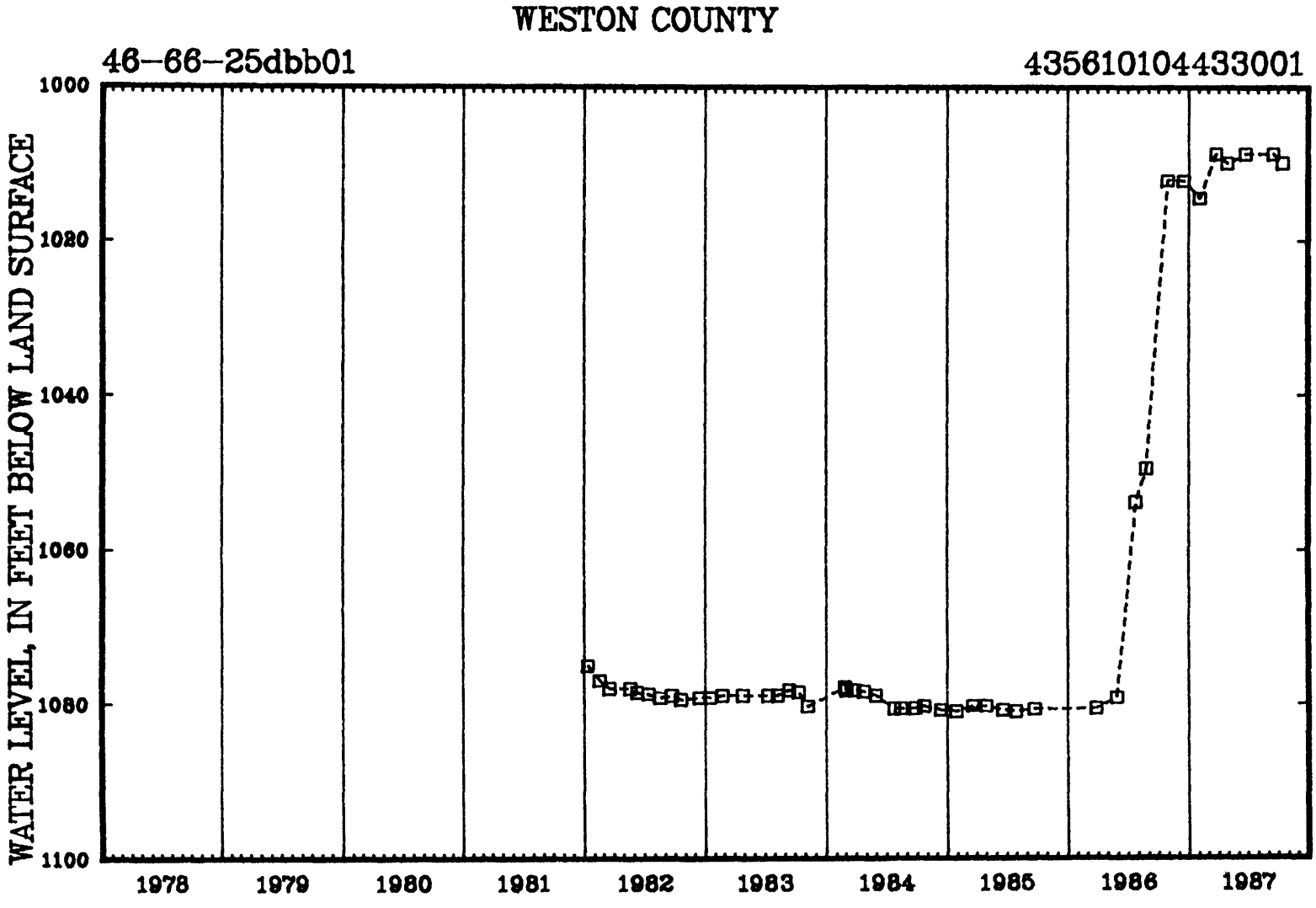
TOWNSEND WELL
DATA REFLECTS STATIC AND PUMPING WATER LEVELS



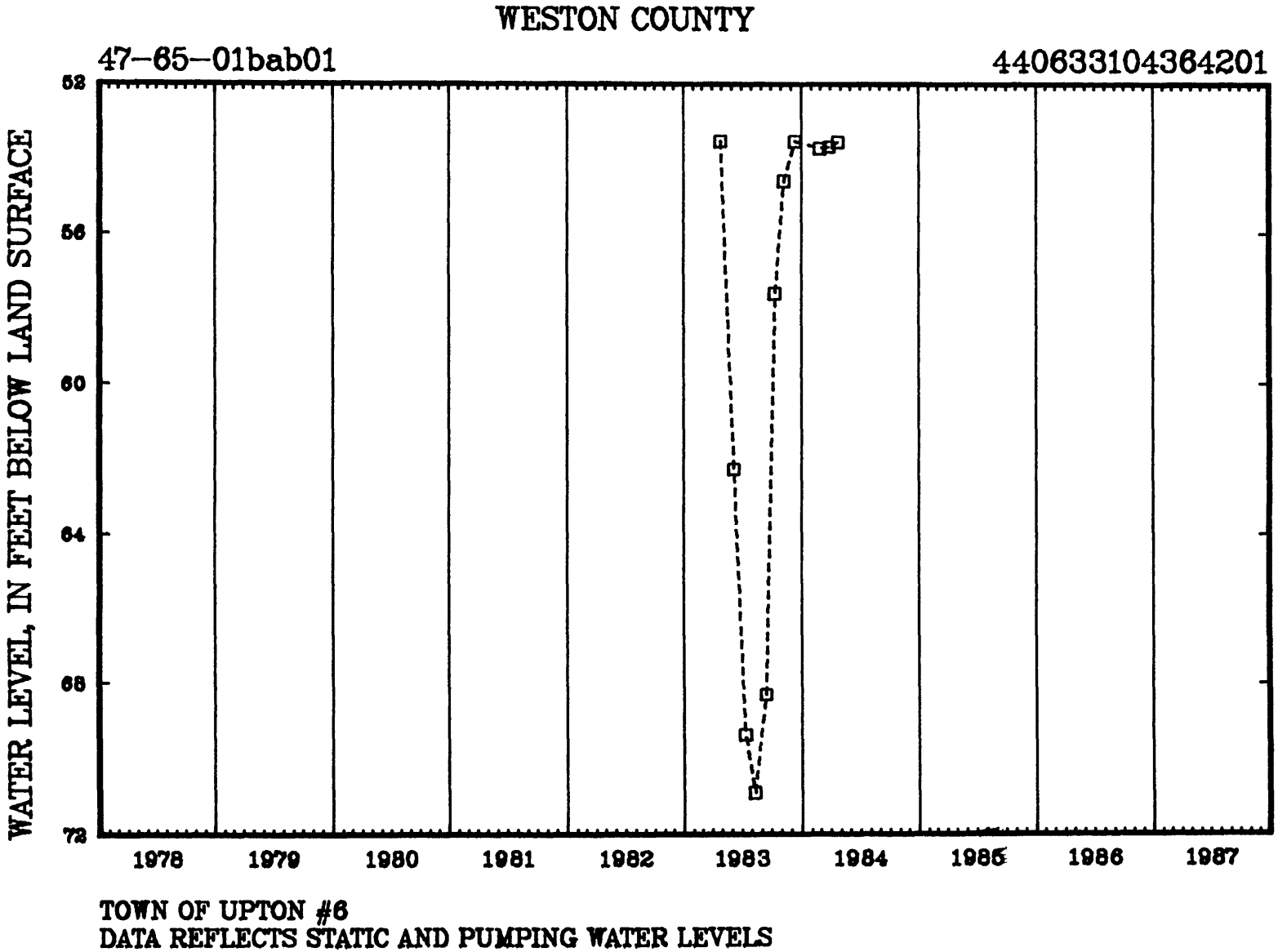
BLACK HILLS POWER #3
ARTESIAN WELL, VERTICAL AXIS IS FEET ABOVE LAND SURFACE

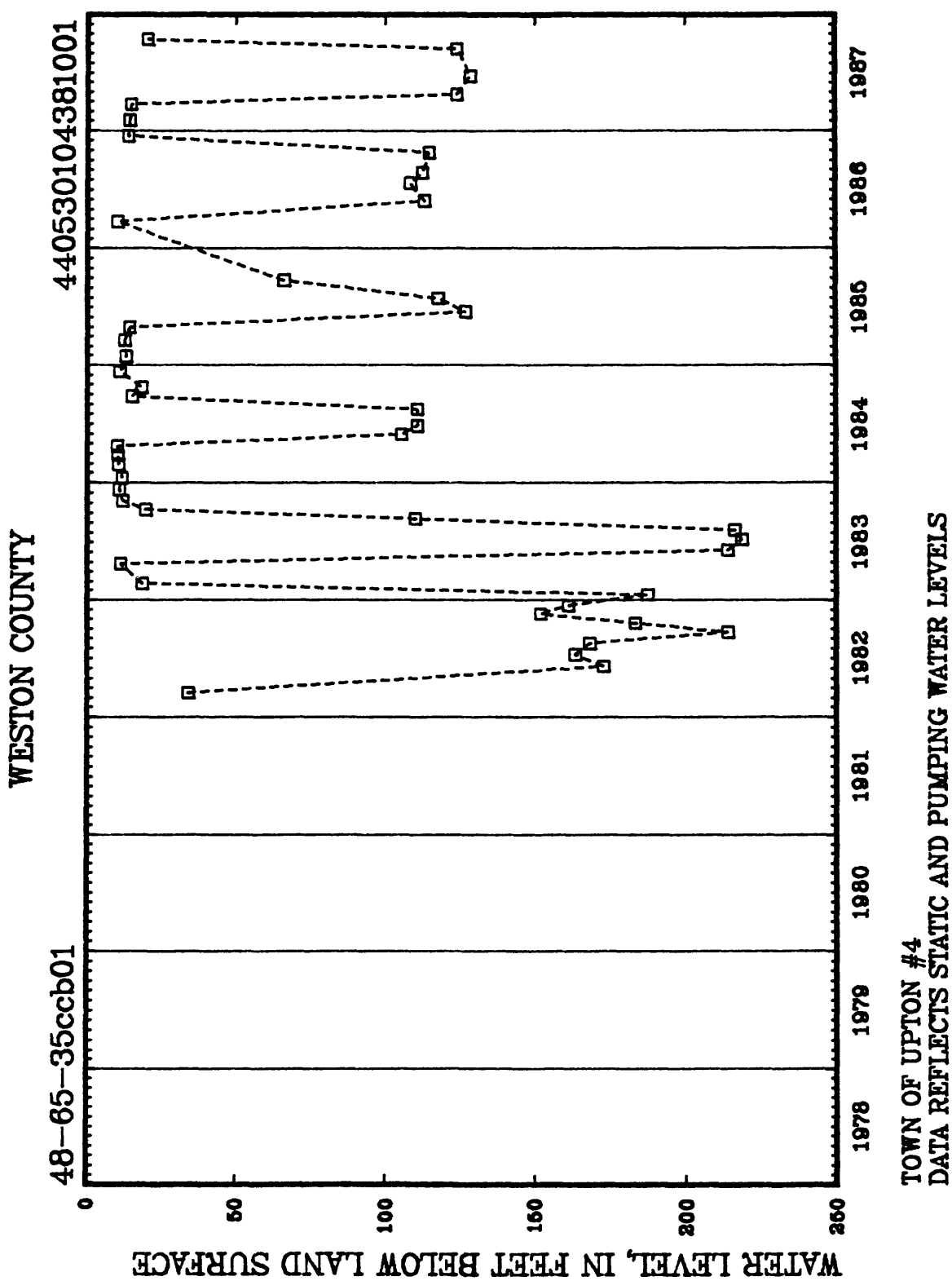


BLACK HILLS POWER #4
ARTESIAN WELL, VERTICAL AXIS IS FEET ABOVE LAND SURFACE



TERRA RESOURCES MADISON
DATA REFLECTS STATIC CONDITION AND PUMPING OF WATER FLOOD SYSTEM NEARBY


WESTON COUNTY
47-65-01bab01
440633104364201
WATER LEVEL, IN FEET BELOW LAND SURFACE
52
56
60
64
68
72
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
TOWN OF UPTON #6
DATA REFLECTS STATIC AND PUMPING WATER LEVELS



TOWN OF UPTON #4
DATA REFLECTS STATIC AND PUMPING WATER LEVELS

*U.S. GOVERNMENT PRINTING OFFICE: 1988-0-574-966/85117