BULLETIN 5705

WATER LEVEL DECLINE MAPS, 1956 TO 1957, AND WATER LEVELS IN OBSERVATION WELLS IN 20 COUNTIES IN THE SOUTHERN HIGH PLAINS, TEXAS

Compiled by
C. R. Follett, Engineer
Texas Board of Water Engineers

From records of the Texas Board of Water Engineers
and the
Geqlogical Survey, United States Department of the Interior

April 1957

C O N T E N T S

ILLUSTRATIONS

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WATER-LEVEL MAPS AND WATER LEVELS IN OBSERVATION WELLS IN THE SOUTHERN HIGH PLAINS, TEXAS

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INTRODUCTION

One of the functions of the Texas Board of Water Engineers is to make independently, or in cooperation with other state and federal agencies, scientific investigations of the source, amount and quality of ground-water supplies. This compilation is based on water-level data obtained as part of a state-wide observation well program which is financed cooperatively by the Texas Board of Water Engineers and the United States Geological Survey.

Compiled herein are water-level decline maps showing fluctuations of the water table in the Southern High Plains of Texas. Changes in water levels between January 1956 and January 1957 are indicated by red (declines) or blue (rise) figures on the county maps. Unpublished water-level measurements for each county are tabulated on the page preceding the map of the county. The figures are in feet below land-surface datum.

All water-level measurements are on record in the office of the Texas Board of Water Engineers and the U. S. Geological Survey. They are published periodically in water-level reports, but pending publication, they may be consulted in the open files of the above office.

WATER-LEVEL MEASUREMENTS IN ARMSTRONG COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1956	1957
463	153.90	159.47
464	170.05	175.11
465	114.48	117.90
467	155.07	155.92
468	132.37	133.41

ARMSTRONG COUNTY
DECLINE OF WATER LEVELS
January 1956 to January 1957

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TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
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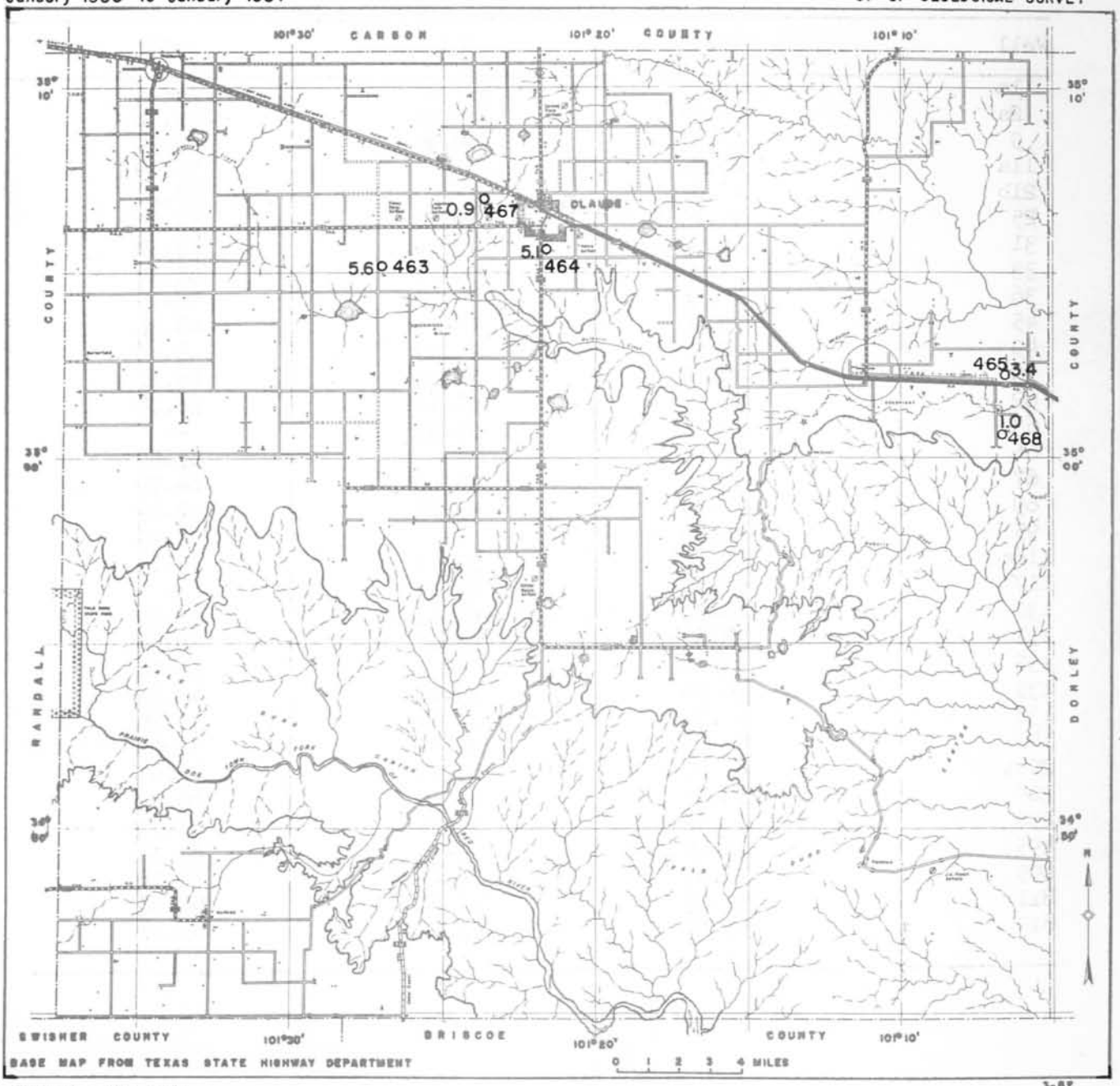

O Observation well
Decline of water levels, in feet, shown in red.

WATER-LEVEL MEASUREMENTS IN BAILEY COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1955	1956	1957
1a	102.70	105.87	--
2a	99.95	102.31	105.76
9	63.61	69.20	70.39
11a	44.85	--	51.79
21b	48.87	--	57.24
25	45.79	50.80	53.86
31	36.90	40.14	45.58
33	54.85	59.53	65.16
36	40.16	44.52	48.15
45	39.50	--	48.46
49	42.25	45.09	48.48
53	48.55	54.03	56.12
62	58.60	66.17	66.08
63	55.31	59.65	--
66	58.60	--	65.59
67	58.40	60.08	64.79
69	47.05	49.68	52.49
95	46.52	--	55.29
116a	48.65	53.17	57.14
117	57.40	61.23	--
130	44.80	65.03	52.79
131	38.61	45.45	48.88
132	45.60	--	54.00
135	36.90	39.01	43.24
137	31.80	35.54	39.35
141	28.48	31.57	37.09
205a	61.80	69.71	72.07
207	83.95	88.12	88.59
450	33.52	34.34	35.53
495	73.40	--	87.38
809	72.65	78.47	80.58
811	91.23	93.09	98.06
815	51.85	52.76	52.01

BAILEY COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

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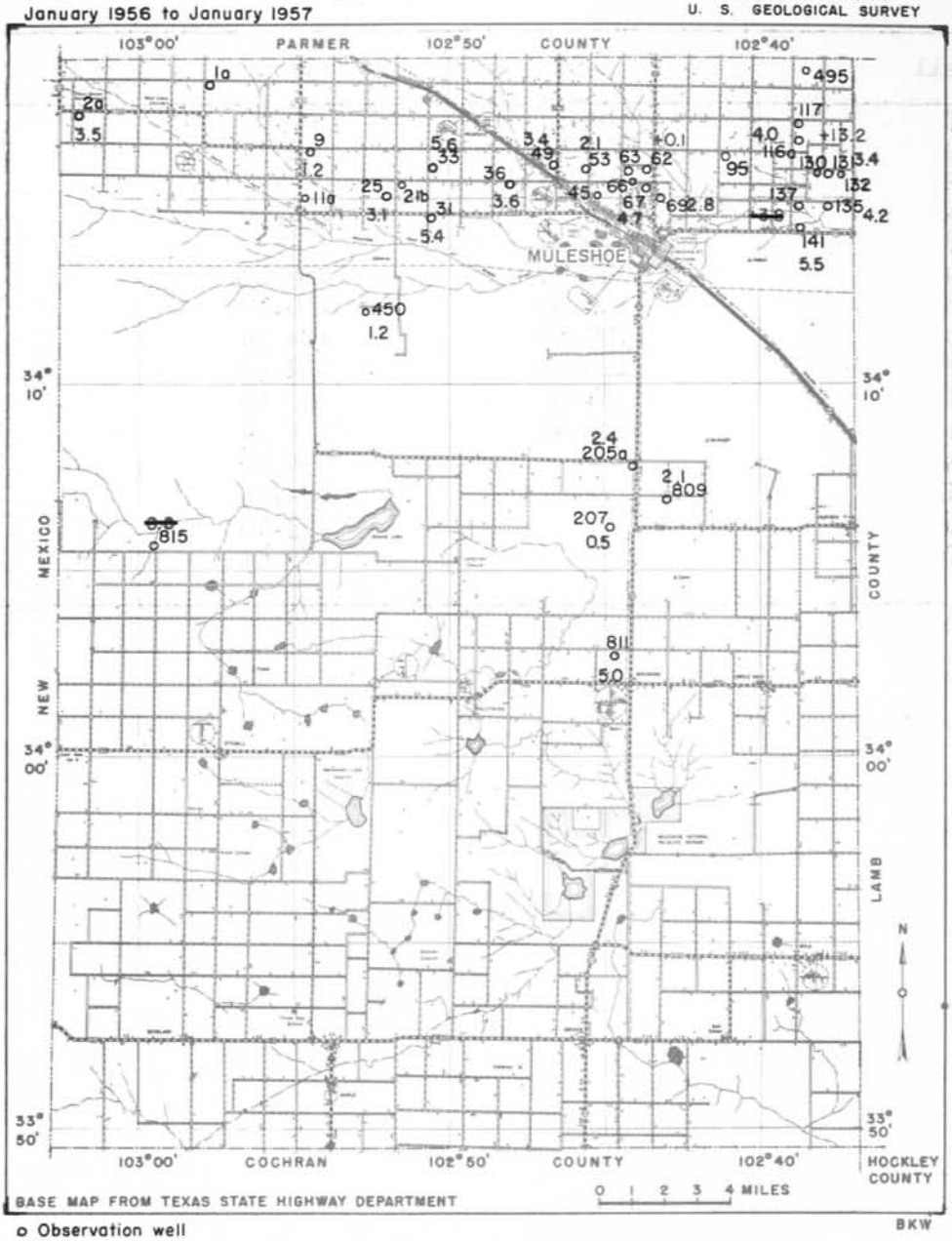

o Observation well
Decline of water levels, in feet, shown in red.
Rise of water levels, in feet, shown in blue.

WATER-LEVEL MEASUREMENTS IN BRISCOE COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1955	1956	1957
107	88.57	88.67	89.03
119	110.40	112.34	121.29
122	94.25	--	107.47
134	--	102.00	105.67
148	92.64	--	103.93
159	109.25	114.67	119.40
168	106.69	110.10	116.17
170	109.80	114.55	116.71
217	129.05	132.38	--
227	84.61	89.60	91.18
234	114.40	119.14	124.49
253	--	90.19	102.70
255	--	104.03	111.98
256	--	93.40	97.24
257	--	175.41	180.49

BRISCOE COUNTY, TEXAS

DECLINE OF WATER LEVELS

January 1956 to January 1957

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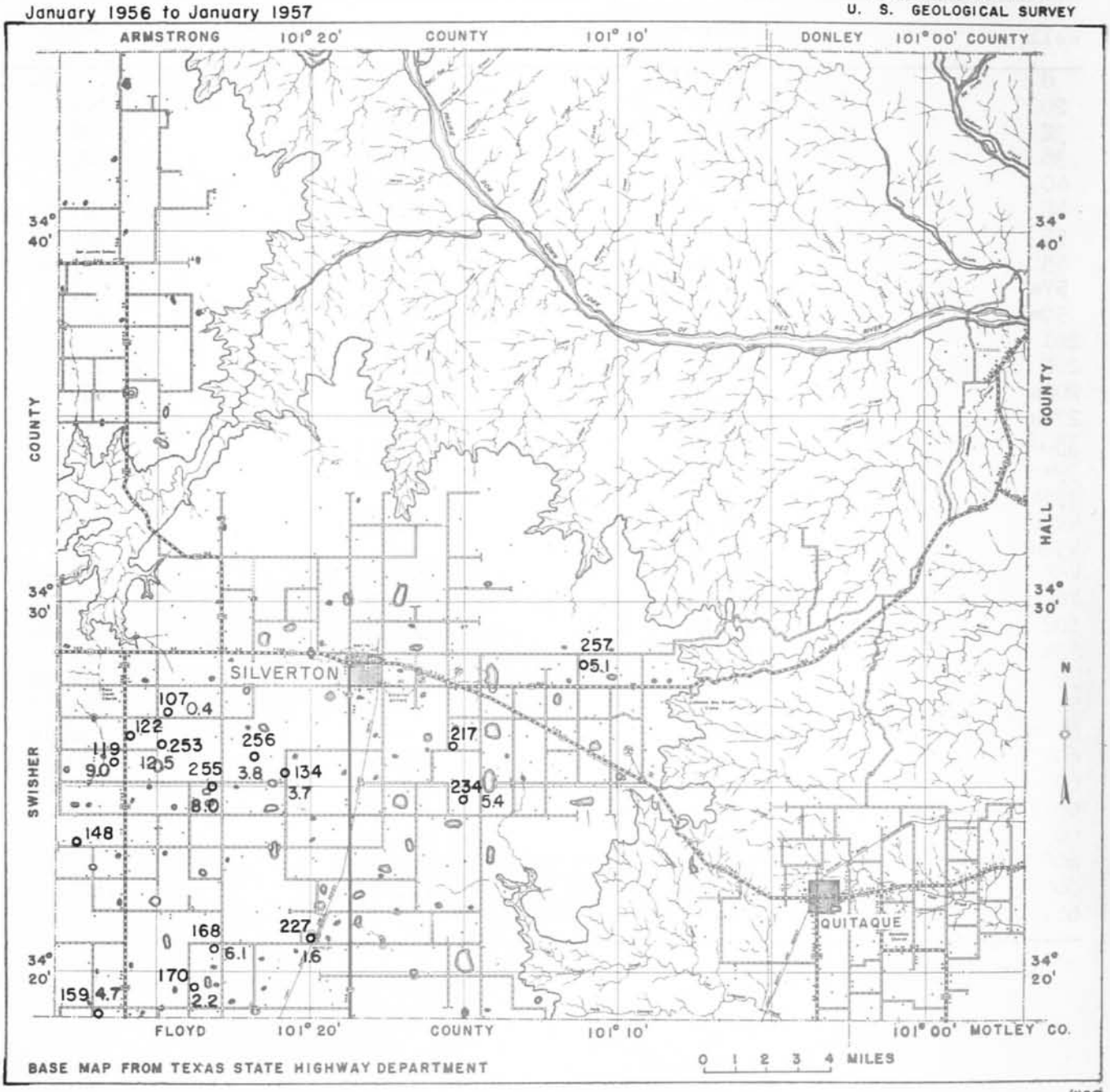

WSS

o Observation well
Decline of water levels, in feet, shown in red

WATER-LEVEL MEASUREMENTS IN CASTRO COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1955	1956	1957
8	93.50	95.65	103.26
20	89.67	94.77	101.03
32	82.80	86.36	92.34
36	111.45	117.46	123.55
40	90.20	98.51	--
48	b79.95	78.87	91.29
52	103.40	106.91	103.06
53	90.86	95.66	99.18
57a	109.47	110.79	117.59
58a	--	165.64	169.03
201	163.50	167.40	173.19
202	109.90	111.43	112.77
202a	156.30	162.15	167.48
278a	170.35	176.22	181.07
330a	132.44	137.90	--
394	110.83	114.22	--
395a	107.70	--	--
410b	89.90	96.62	98.75
452a	108.70	--	--
465	106.17	112.05	108.66
465a	106.14	111.99	116.71
508	94.22	97.55	103.59
524a	93.30	96.23	--
528a	108.10	111.26	116.30
529	104.63	--	111.58
544a	110.60	--	122.16
601	--	125.60	130.54
602	--	130.28	124.35
604	--	169.85	183.03
605	--	154.34	167.38
606	--	175.92	179.96
608	--	118.83	120.95
611	--	96.74	101.98

b pumped recently.

CASTRO COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

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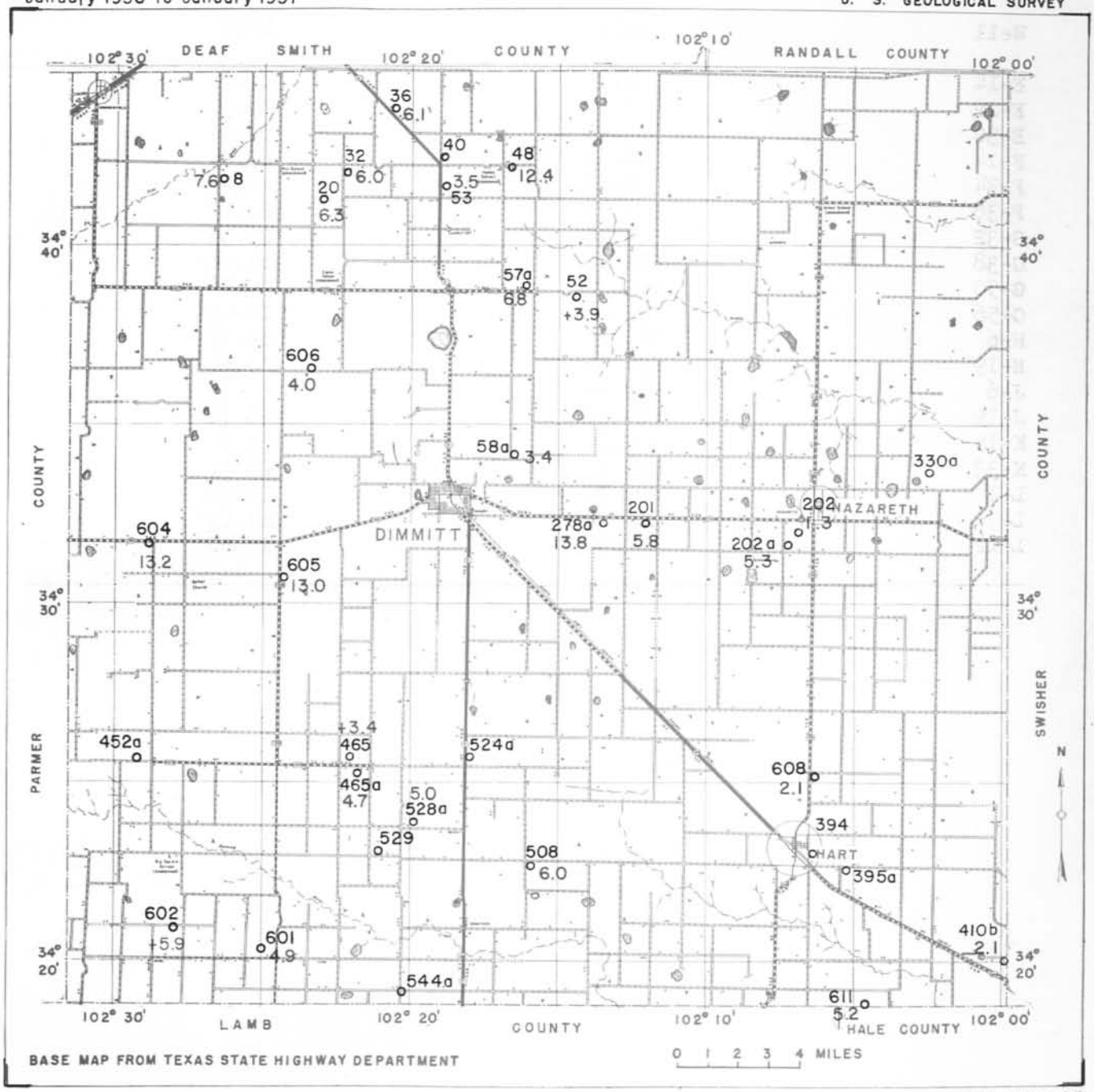

FEB. 1957 DF

o Observation well
Decline of water levels, in feet, shown in red
Rise of water levels, in feet, shown in blue

WATER-LEVEL MEASUREMENTS IN CARSON COUNTY, TEXAS

Depth to water in feet in January

(A few measurements were made in December or February)

Well	1956	1957
E-14	388.74	392.90
E-22	405.60	408.00
E-30	357.20	366.97
F-14	328.34	329.04
F-34	336.60	340.45
F-38	317.35	321.40
G-32	324.14	325.35
G-38	314.40	313.90
G-50	289.76	299.76
G-56	297.00	300.42
H-6	277.25	289.77
H-19	291.98	300.60
J-6	358.44	363.32
J-12	224.22	228.78
K-15	331.95	334.20
K-33	325.90	328.30
L-1	298.30	301.20
L-7	281.04	281.85
L-12	320.98	327.62

CARSON COUNTY, TEXAS
DECLINE OF WATER LEVELS
January 1956 to January 1957

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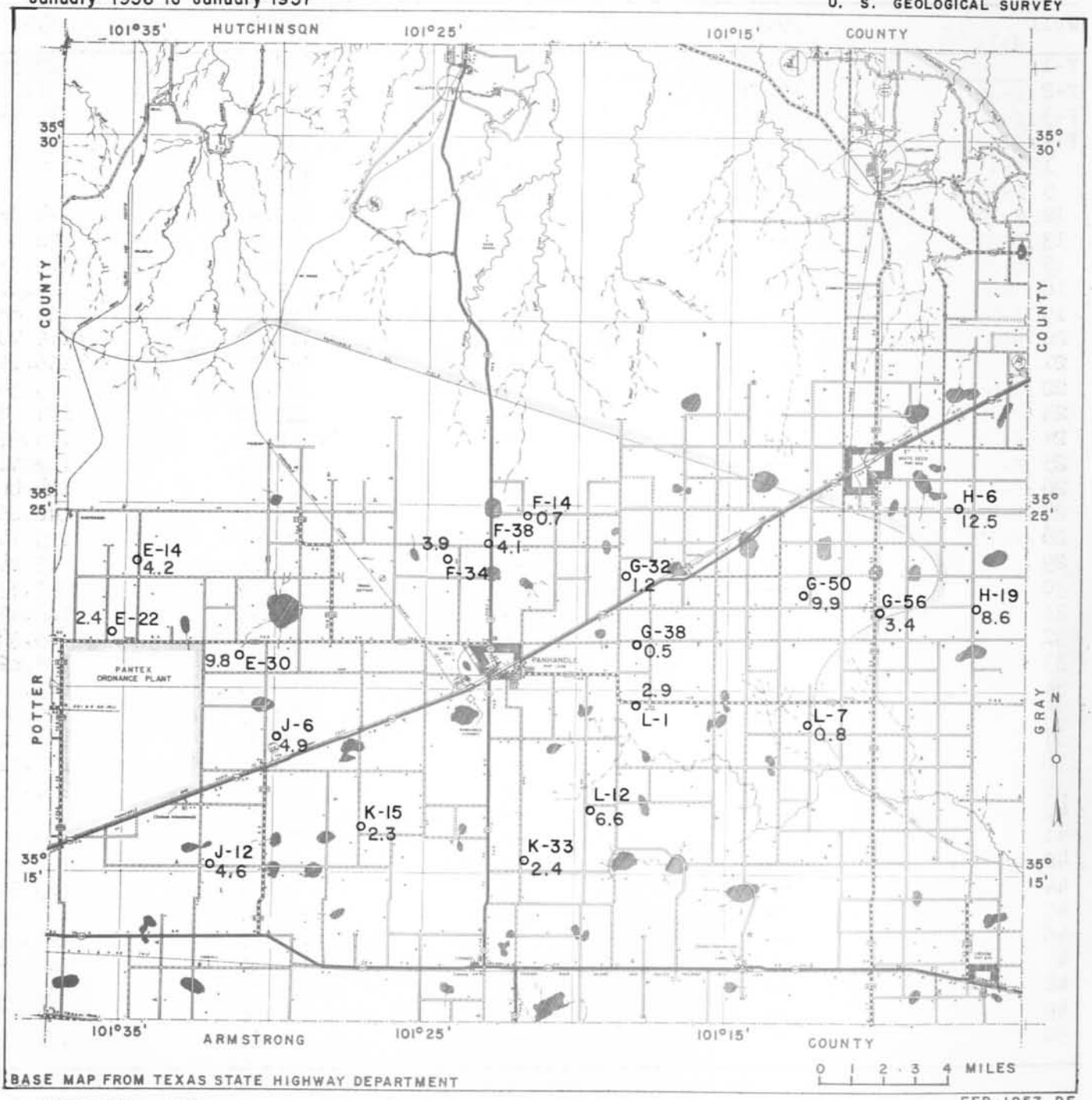

o Observation well

Decline of water levels, in feet, shown in red

WATER-LEVEL MEASUREMENTS IN COCHRAN COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1954	1955	1956	1957
F-1	110.90	114.70	118.56	122.36
F-2	116.37	121.90	125.23	131.08
F-3	131.45	135.87	139.97	144.94
F-4	124.55	127.74	132.41	--
1	--	--	148.8	149.8
5	127.38	128.28	132.00	137.80
12	--	--	140.9	144.72
13	--	--	121.7	122.80
15	--	--	106.05	110.73
16	--	--	102.45	103.91
19	--	--	126.20	128.66
20	--	--	118.32	119.70
21	--	--	146.28	156.15
22	--	--	147.37	149.38
23	--	--	123.50	124.77
24	--	--	149.17	150.97
25	--	--	129.15	132.48
26	--	--	121.05	124.80
27	--	--	142.00	142.66
28	--	--	138.55	139.74
29	--	--	84.16	85.24
30	--	--	140.02	141.77
31	--	--	125.54	126.45
32	--	--	93.72	96.38
33	--	--	103.50	106.62
34	--	--	169.17	169.70
36	--	--	88.85	90.54
37	--	--	128.50	131.12
38	--	--	174.65	177.12
39	--	--	156.78	160.35
40	--	--	120.88	119.10
41	--	--	106.75	109.91
42	--	--	125.30	127.75
44	--	--	97.97	103.97
45	--	--	139.50	137.90
46	--	--	142.65	145.13
47	--	--	120.58	120.63
48	--	--	119.65	123.53
49	--	--	164.50	168.40
50	--	--	178.38	175.73

COCHRAN COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

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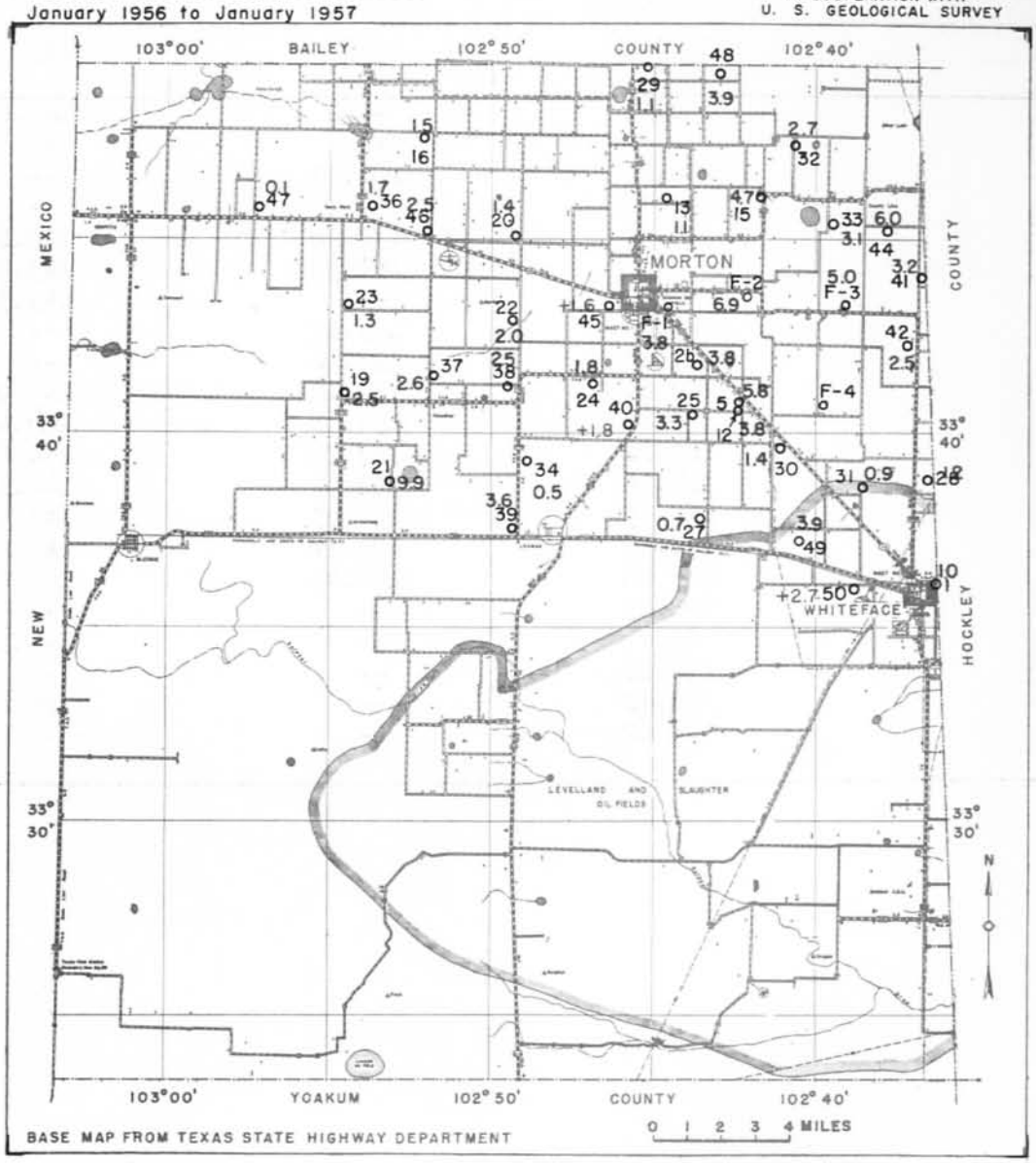

WSS

o Observation well
Decline of water levels, in feet, shown in red.
Rise of water levels, in feet, shown in blue

WATER-LEVEL MEASUREMENTS IN CROSBY COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1955	1956	1957
1	138.57	--	144.07
3b	--	--	--
4	198.29	201.23	--
7	141.38	--	--
7b	173.94	178.48	190.61
8	--	122.33	125.97
10a	--	--	145.56
10b	129.84	135.27	--
11b	121.13	127.06	--
11c	132.61	139.13	149.04
12b	138.48	154.88	168.40
13a	120.22	127.24	134.88
14	124.36	132.92	140.10
17a	130.79	136.25	141.91
21a	132.58	139.22	145.01
23b	144.08	148.45	153.85
340	120.65	--	--
340a	--	--	149.00
343c	130.21	--	--
401b	98.42	--	104.47
415a	94.62	--	--

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CROSBY COUNTY, TEXAS
DECLINE OF WATER LEVELS
January 1956 to January 1957

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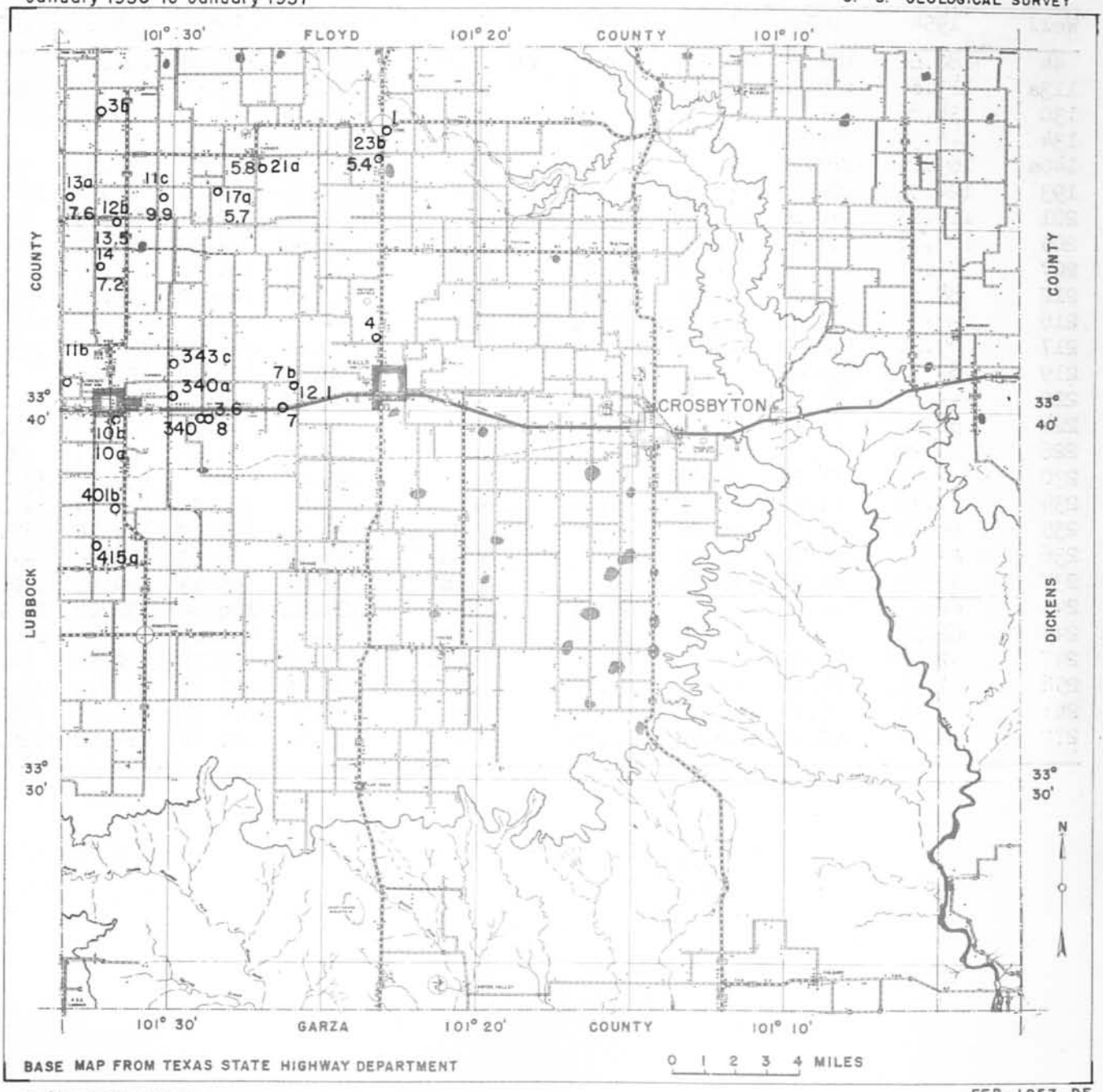

BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

FEB. 1957 DF

o Observation well

Decline of water levels, in feet, shown in red

WATER-LEVEL MEASUREMENTS IN DEAF SMITH COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1954	1955	1956	1957	Well	1954	1955	1956	1957
44	180.62	181.37	181.75	--	281b	108.06	123.05	120.89	127.80
113a	113.60	118.58	122.20	125.03	283	75.36	79.66	--	b95.60
130	134.86	--	--	--	288	94.76	95.30	104.35	112.32
134	146.31	155.88	--	166.67	291	83.57	--	--	--
140a	169.09	172.30	--	181.56	302	59.76	63.53	68.29	73.20
193	124.93	128.80	131.60	136.83	305	107.35	112.48	117.57	124.72
201	119.23	121.60	124.37	127.20	311	62.91	67.65	71.60	78.65
205	108.48	113.30	122.27	--	315	73.60	79.90	83.11	89.44
207	71.65	76.38	81.68	84.82	322	98.97	104.00	105.17	100.18
212	88.80	96.01	99.50	105.25	326	117.64	123.90	128.88	135.05
216	--	79.60	81.72	85.02	331	--	--	107.54	110.60
217	99.62	108.40	106.92	123.34	336	110.50	115.03	118.79	123.85
219	89.78	95.63	--	108.64	340	98.05	103.92	107.10	--
220	--	99.17	104.88	109.80	342	98.92	--	--	121.20
224	66.40	73.90	78.40	86.96	394	90.44	91.10	92.95	95.01
226	75.22	80.78	89.70	90.80	431	82.59	85.50	89.01	93.34
230	--	71.73	64.23	66.40	459	126.08	--	139.77	138.80
234	55.46	55.50	58.19	59.00	486	103.84	114.01	111.54	121.90
235	60.35	63.09	66.22	--	502	130.31	136.09	139.40	147.10
236	--	68.18	70.00	--	506a	91.53	94.32	96.4	--
237	58.45	64.78	66.50	--	513a	92.25	96.43	99.40	102.74
241	62.13	--	--	68.45	514	123.81	128.60	132.22	143.10
245	62.29	--	--	74.10	546	--	134.67	--	140.56
247	52.08	43.67	--	48.80	558	72.40	69.72	72.90	84.00
258	77.51	82.34	--	93.78	566	190.62	193.35	197.13	201.00
261	75.14	78.18	82.90	87.30	919	98.5	101.93	106.40	108.29
272	98.50	102.62	108.96	117.79	934	115.54	121.12	124.90	128.76

DEAF SMITH COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

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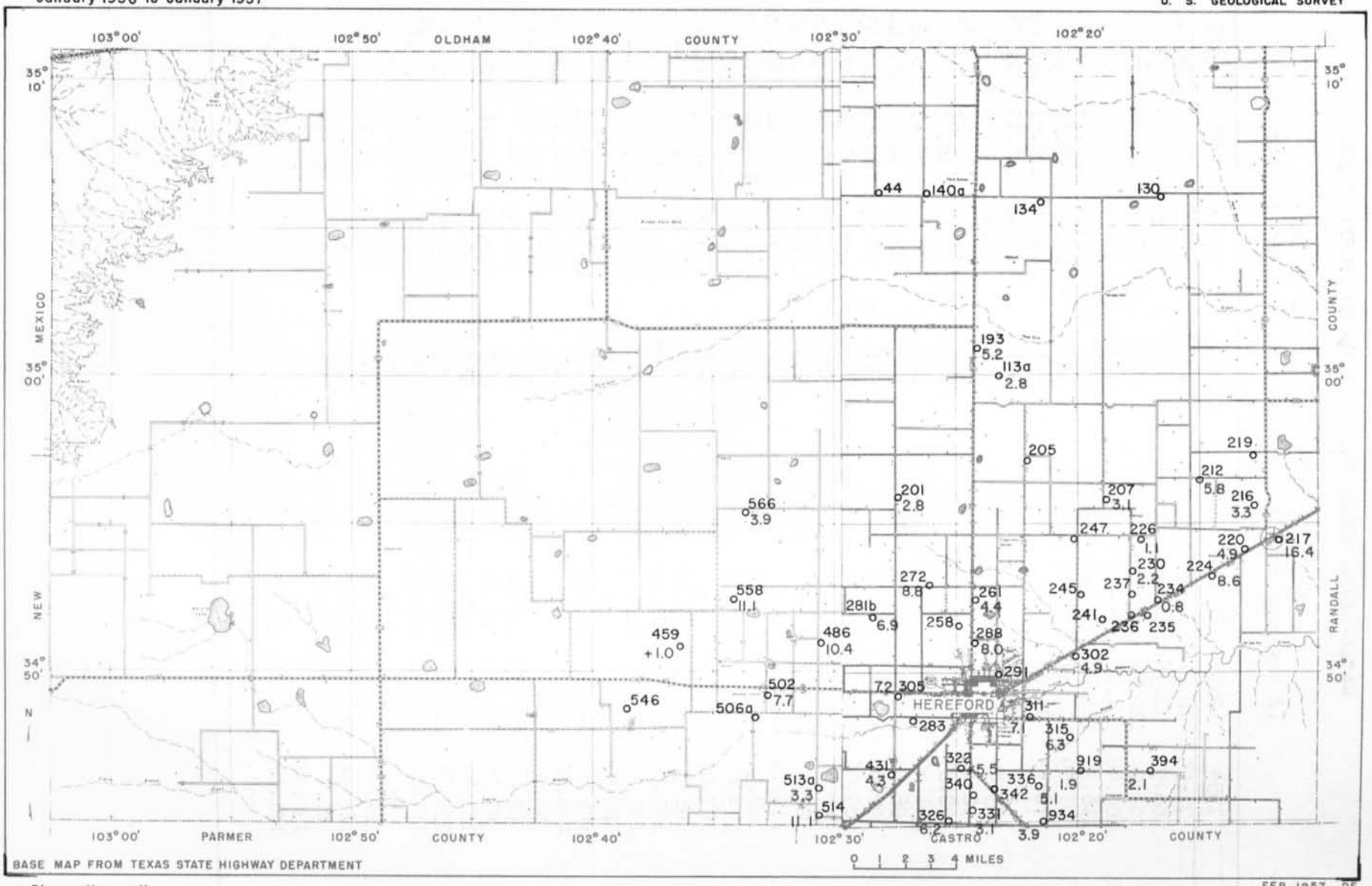

BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

FEB. 1957 DF

o Observation well

Decline of water levels, in feet, shown in red

Rise in water levels, in feet, shown in blue

WATER-LEVEL MEASUREMENTS IN FLOYD COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1954	1955	1956	1957	Well	1954	1955	1956	1957
5	71.50	78.47	81.17	85.57	428	110.77	--	120.24	--
5a	66.95	71.36	74.79	80.50	435	124.27	132.55	136.75	145.24
20	109.24	110.15	112.59	118.70	448	106.75	125.39	130.03	139.08
21	106.48	114.16	--	--	459	97.45	109.48	--	--
32	116.32	121.90	123.36	129.60	463	105.34	116.44	119.43	125.40
42	95.09	101.64	105.93	114.44	467	83.41	92.63	97.06	104.88
53	78.13	83.86	--	--	472	95.44	108.51	116.82	125.57
55	--	94.16	100.48	--	478	107.95	116.19	122.74	133.12
56	83.49	88.10	92.40	94.63	486	38.90	37.66	--	39.28
57	92.86	98.15	102.43	108.84	493	126.50	137.90	134.66	142.05
106	102.23	--	--	--	496	127.1	132.81	--	--
108	101.60	110.09	--	129.05	502	90.60	99.47	110.65	--
110	96.54	118.63	122.72	126.94	510	81.36	94.54	102.44	102.77
111	92.83	104.42	104.81	--	511	98.93	109.52	115.43	--
112	89.06	104.07	107.79	106.6	519a	--	110.32	120.18	129.80
120	110.2	119.81	--	--	523	111.08	123.82	130.05	139.31
138	122.50	127.32	--	138.39	529	110.49	110.76	111.25	113.55
139	119.11	124.32	--	133.07	542	98.83	109.62	115.06	--
140	108.32	--	116.14	123.67	546	91.83	103.84	111.09	127.16
143	113.03	120.45	121.05	133.74	554	103.73	108.01	108.66	121.80
153	101.01	108.07	--	--	562	156.98	178.13	160.13	--
157	106.30	110.35	113.56	120.05	603	177.80	--	--	--
161	113.59	120.57	123.42	131.84	610a	215.00	221.39	--	237.82
185	103.11	112.71	115.53	127.90	610b	208.34	217.94	--	236.08
186	108.52	--	--	--	612	156.79	--	166.93	--
216	205.50	215.03	203.59	--	618a	238.26	242.06	--	--
216a	200.52	--	--	--	627	96.70	104.93	109.22	112.80
262	95.27	--	--	--	630	127.38	135.78	140.18	144.28
263	102.07	107.63	112.00	118.93	651	87.39	--	--	--
264	83.76	89.99	91.65	94.65	652	112.12	120.56	129.81	131.55
265	101.83	--	112.51	117.86	663	106.77	119.80	--	--
315a	235.65	235.41	235.78	235.80	701	106.29	--	123.35	132.0
326	154.20	151.52	156.77	165.89	704	114.26	127.04	130.21	--
409	--	118.01	--	--	720	93.94	--	109.14	121.30
410a	102.59	110.76	114.28	121.00	726	85.13	91.27	95.98	105.01
414	121.44	129.18	129.05	--	727	102.33	104.10	--	127.10
416	121.93	129.51	132.67	137.74	728	102.17	114.05	--	130.89
420	130.98	--	--	--	729	96.93	120.45	108.16	119.83
421	121.12	128.58	131.43	137.40	730	133.80	143.37	152.69	--
423	--	127.07	127.19	134.68					

FLOYD COUNTY, TEXAS
DECLINE OF WATER LEVELS
January 1956 to January 1957

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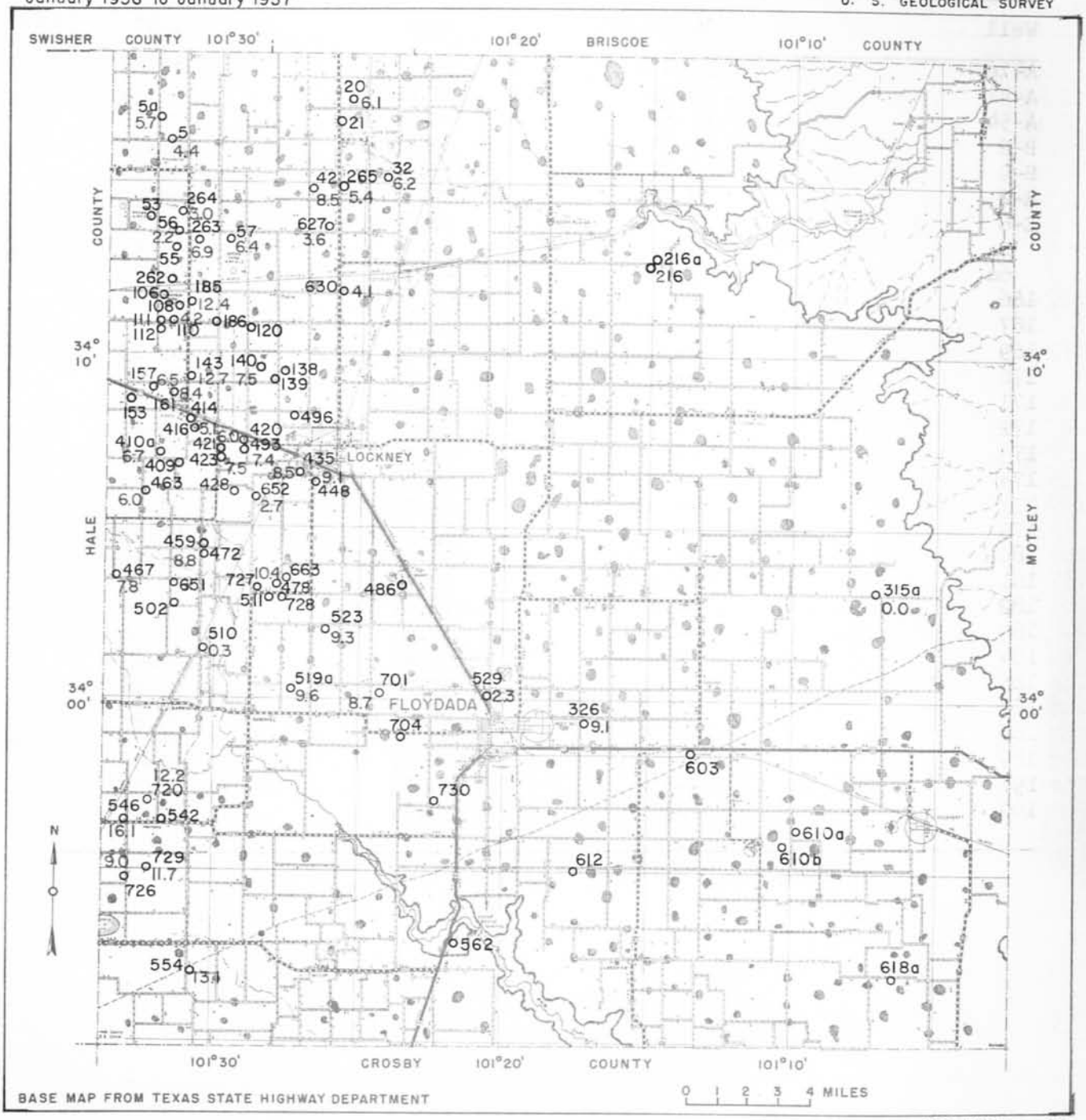

FEB. 1957 DF

o Observation well
Decline of Water levels, in feet, shown in red

WATER-LEVEL MEASUREMENTS IN GAINES COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1955	1956	1957
A-16	51.2	54.27	57.05
A-41	48.66	51.62	54.74
A-54	81.67	--	85.40
B-2	85.73	85.56	85.79
B-9	107.00	117.72	117.23
E-2	79.12	82.10	82.50
E-6	73.6	71.89	72.52
2	54.25	--	54.53
6a	40.54	42.18	45.70
166	--	51.30	56.80
167	--	61.71	62.03
169	--	63.49	65.25
170	--	76.86	80.00
171	--	83.03	85.25
172	--	76.33	80.40
173	--	59.13	62.00
174	--	55.69	58.40
177	--	73.64	77.67
179	--	51.20	46.70
180	--	55.97	55.90
181	--	68.99	75.30
182	--	78.01	78.93
183	--	51.61	52.90
184	--	95.42	102.05
186	--	91.80	88.20
187	--	32.03	31.90
188	--	95.35	96.77
189	--	118.17	120.70
191	--	79.62	80.34
192	--	79.55	81.90

GAINES COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
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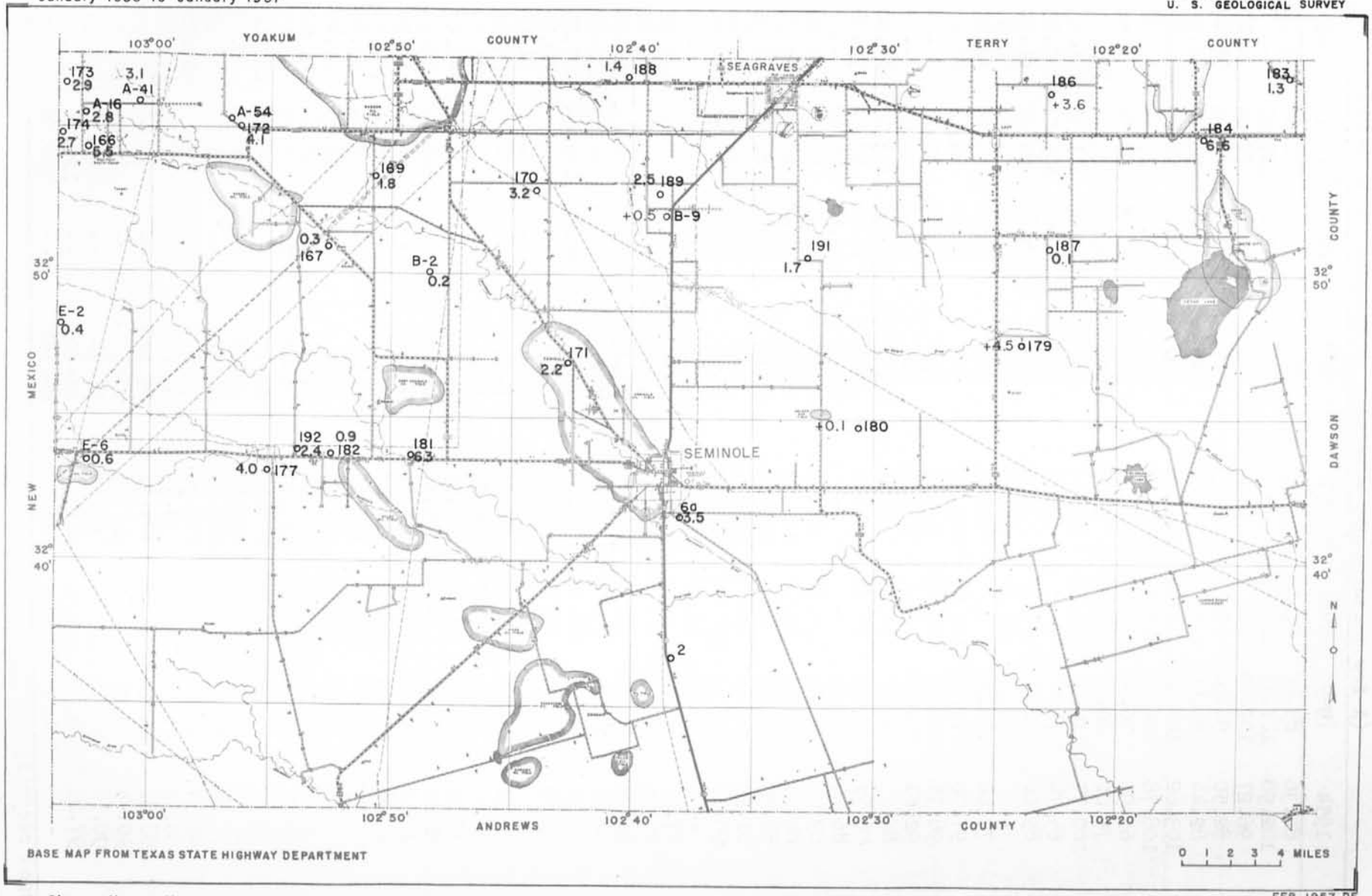


BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

FEB. 1957 DF

o Observation well
Decline of water levels, in feet, shown in red
Rise of water levels, in feet, show in blue

WATER-LEVEL MEASUREMENTS IN HALE COUNTY, TEXAS

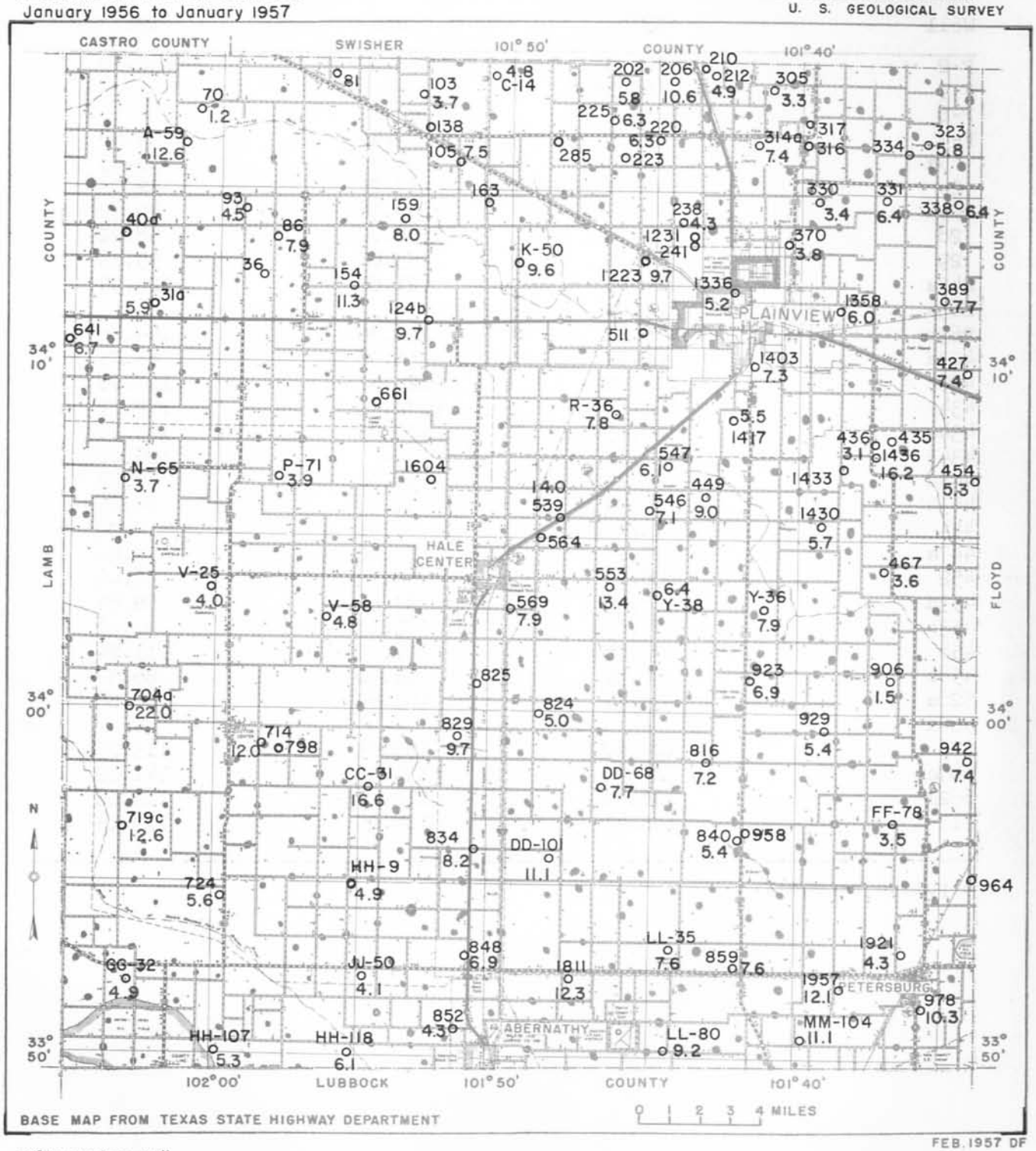
Depth to water in feet in Janaury
(A few measurements were made in December or February)

Well	1954	1955	1956	1957	Well	1954	1955	1956	1957
31a	81.36	85.80	90.10	95.98	724	--	120.63	122.12	127.73
36	102.98	107.73	115.62	--	798	102.05	109.87	--	119.78
40a	96.27	102.69	--	116.39	816	67.30	72.04	74.47	81.68
70	82.50	91.60	93.33	94.49	824	73.58	78.78	85.43	90.41
81	82.44	86.68	--	95.60	825	93.76	96.45	99.53	104.12
86	103.62	108.30	111.85	119.70	829	92.99	98.00	100.26	110.00
93	108.78	114.50	118.43	123.07	834	100.72	115.78	123.88	132.66
103	65.90	70.40	74.37	78.10	840	77.06	83.94	87.54	92.95
105	75.02	80.37	84.97	92.49	848	106.64	110.75	116.00	122.85
124b	100.77	b114.07	111.33	121.00	852	135.69	141.38	148.63	152.90
138	65.74	71.00	--	78.72	859	98.43	105.21	110.25	117.80
154	85.00	92.95	94.15	105.45	906	56.88	62.31	66.30	67.79
159	--	93.18	96.55	104.55	923	61.30	71.91	76.97	83.90
163	77.48	83.22	--	94.52	929	58.54	63.75	66.86	72.28
202	97.00	103.75	109.65	115.42	942	75.87	84.14	88.45	95.80
206	98.35	103.08	107.69	118.28	958	73.73	81.71	--	90.66
210	92.61	95.78	--	108.50	964	84.98	95.88	--	110.66
212	86.71	90.00	94.05	98.94	978	104.89	113.17	120.00	130.26
220	86.55	91.36	94.90	101.20	1223	92.16	93.78	92.02	101.68
223	86.10	92.74	--	--	1231	87.54	98.90	--	101.38
225	89.07	95.24	100.12	106.37	1336	80.34	88.05	91.85	97.09
238	84.05	89.13	92.90	107.23	1358	92.68	98.05	102.71	108.75
241	88.30	94.85	--	102.69	1403	74.28	83.18	86.31	93.60
285	81.22	90.49	--	102.37	1417	90.35	99.05	99.14	104.67
305	98.18	103.35	107.50	110.79	1430	66.67	73.63	80.99	86.73
314a	--	82.50	87.36	94.74	1433	86.59	93.43	--	115.57
316	77.91	83.14	--	89.13	1436	93.74	100.84	105.82	122.04
317	77.01	82.10	--	89.35	1604	85.18	92.50	96.84	--
323	89.28	94.55	97.94	103.78	1811	108.10	114.63	115.84	128.15
330	78.97	84.49	90.70	94.12	1921	85.74	94.53	101.42	105.75
331	75.26	80.21	88.87	95.27	1957	94.61	105.09	107.95	c120.00
334	83.45	92.88	99.72	97.54	A-59	--	--	108.73	121.32
338	--	79.73	81.53	87.95	C-14	--	--	84.68	89.43
370	76.91	86.48	91.13	94.89	K-50	--	--	85.64	95.20
389	84.83	92.04	97.55	105.24	N-65	--	71.76	76.73	80.47
427	87.96	96.08	99.18	106.58	P-71	--	92.10	96.52	100.37
435	92.31	100.90	--	105.50	R-36	--	108.45	115.33	123.10
436	96.14	106.34	112.36	115.47	V-25	--	84.80	86.90	90.90
449	89.04	97.79	105.83	114.87	V-58	--	96.86	101.54	106.35
454	101.44	113.20	116.39	121.65	Y-36	--	58.09	62.88	70.74
467	54.74	58.23	62.30	65.94	Y-38	--	60.55	60.47	66.85
511	59.02	66.33	--	78.34	CC-31	--	114.64	121.40	138.00
539	89.91	100.26	107.41	121.40	DD-68	72.32	78.93	86.53	94.20
546	84.66	94.34	99.35	106.47	DD-101	--	104.42	110.10	121.22
547	87.39	96.09	103.45	109.50	FF-78	--	92.38	98.33	101.80
553	77.82	86.13	98.15	111.80	GG-32	--	102.56	106.22	111.10
564	86.37	93.24	--	112.94	HH-9	--	--	128.58	133.45
569	68.50	71.33	72.26	80.13	HH-107	--	114.87	116.85	121.15
641	88.81	94.18	99.16	105.87	HH-108	--	71.98	77.39	83.49
661	90.74	98.20	--	107.72	JJ-50	--	118.03	123.07	127.16
704a	90.54	95.41	100.12	122.14	LL-35	--	103.16	107.95	115.54
714	97.25	104.30	109.06	121.10	LL-80	--	125.95	127.04	136.25
719c	--	101.38	103.53	116.10	MM-104	--	112.76	121.07	132.14

b pumped recently.

HALE COUNTY, TEXAS
DECLINE OF WATER LEVELS
January 1956 to January 1957

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



o Observation well
Decline of water levels, in feet, shown in red

WATER-LEVEL MEASUREMENTS IN HOCKLEY COUNTY, TEXAS

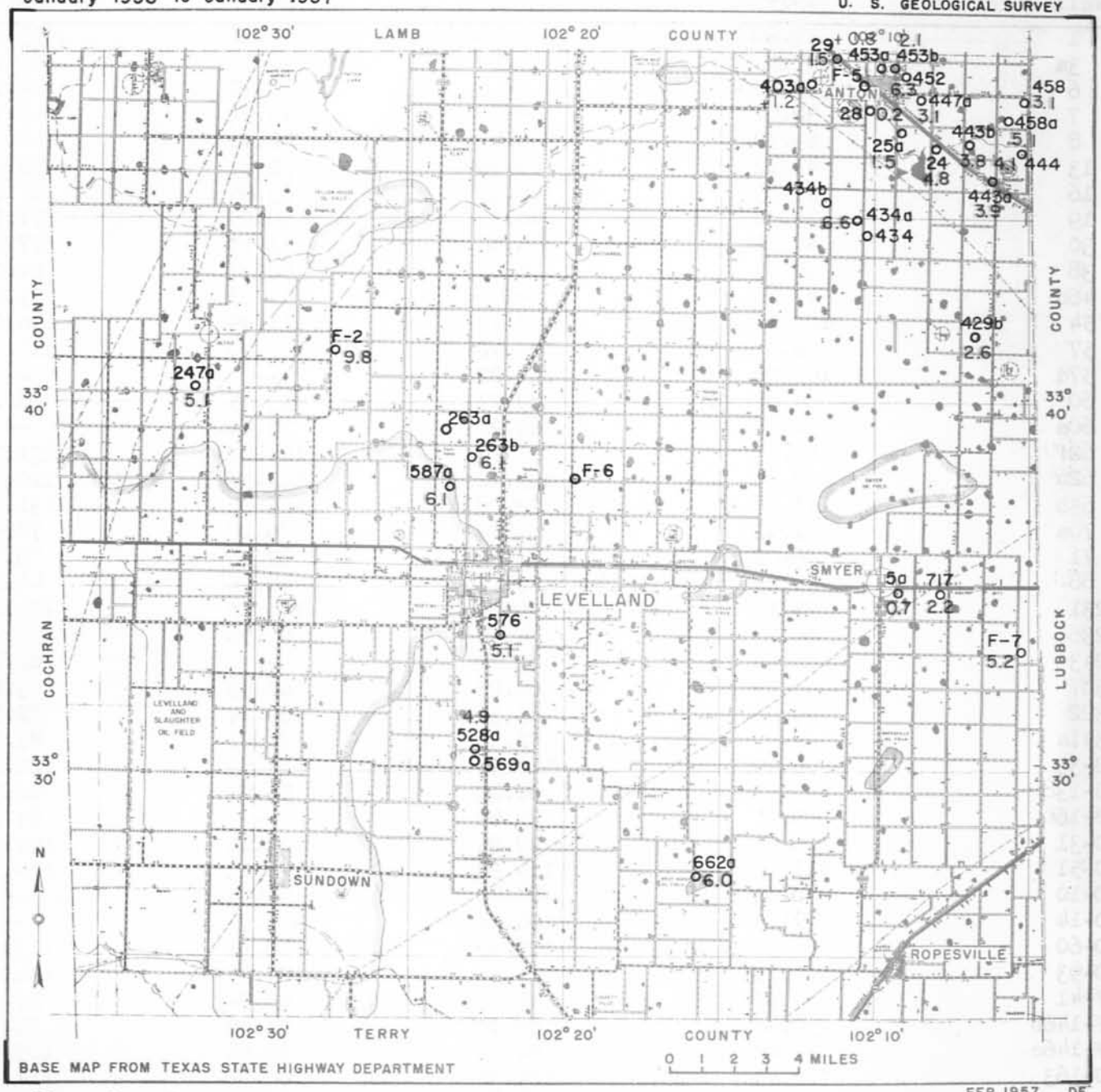
Depth to water in feet in January
(A few measurements were made in December or February)

Well	1955	1956	1957
F-2	125.27	132.81	132.60
F-5	53.36	--	--
F-6	--	--	--
F-7	87.30	90.48	95.68
5a	92.14	94.45	95.13
24	40.58	37.25	42.03
25a	40.47	39.38	40.90
28	56.70	58.00	58.22
29	53.10	53.87	55.38
247a	118.05	121.86	126.95
263a	125.04	--	--
263b	129.52	138.36	144.46
403a	62.77	66.98	65.75
429b	117.62	125.67	128.26
434	150.69	b172.99	172.77
434a	149.63	158.85	165.40
434b	113.57	--	126.08
443a	98.33	94.00	97.88
443b	50.90	51.08	54.85
444	71.80	74.96	79.08
447a	b73.25	70.40	73.46
452	86.15	90.12	96.46
453a	78.49	83.64	82.84
453b	85.65	91.17	93.29
458	101.05	108.15	111.24
458a	76.39	81.30	86.37
528a	153.45	163.80	168.68
569a	--	--	--
576	120.60	108.03	113.15
587a	129.40	134.96	141.02
662a	106.46	110.07	116.08
717	106.41	108.25	110.45

b pumped recently.

HOCKLEY COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



FEB. 1957 DF

o Observation well
Decline of water levels, in feet, shown in red
Rise of water levels, in feet, shown in blue

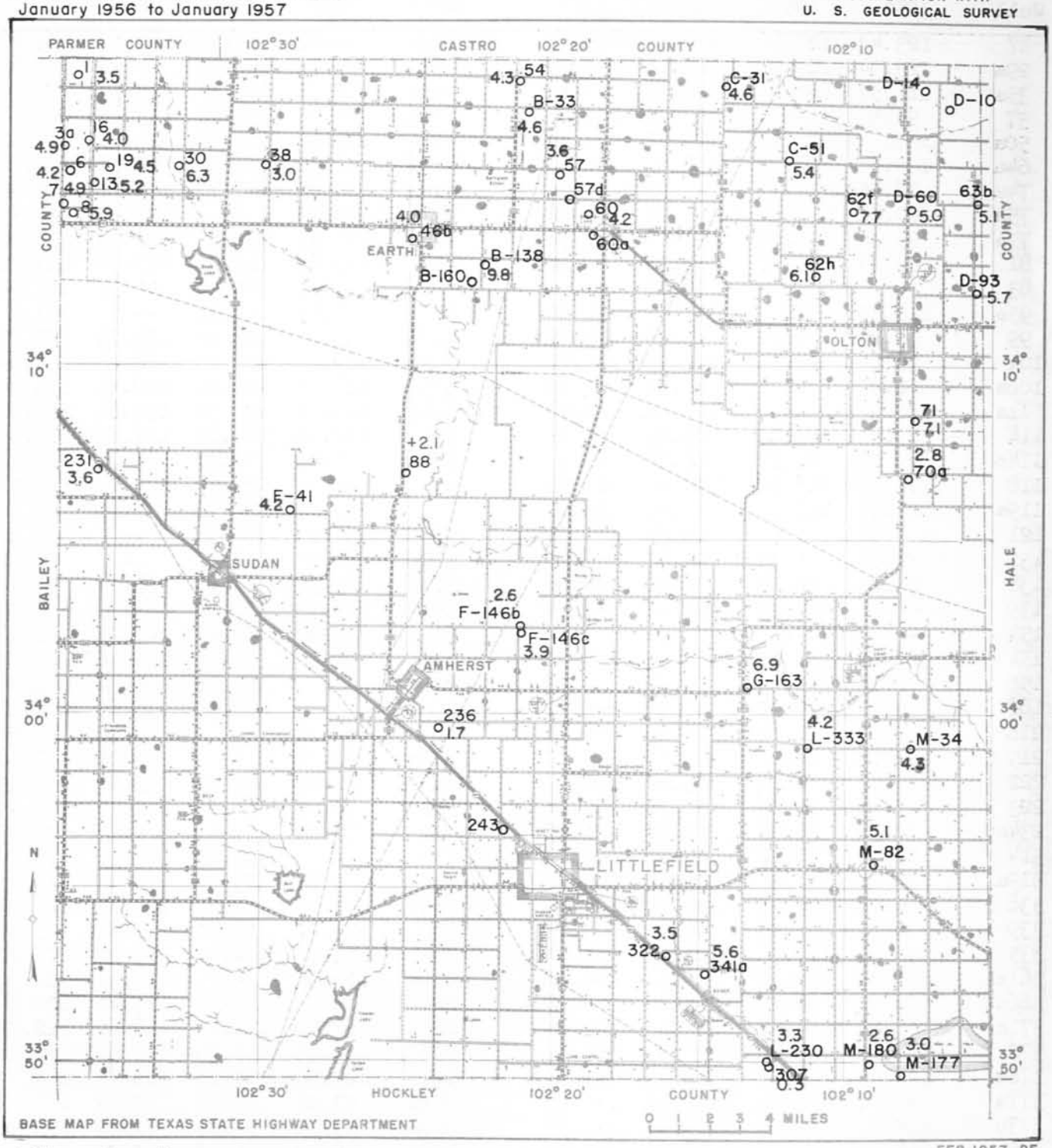
WATER-LEVEL MEASUREMENTS IN LAMB COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1954	1955	1956	1957
1	77.20	83.16	90.11	93.65
3a	47.05	50.60	56.67	61.59
6	40.65	--	50.40	54.59
7	32.07	--	43.91	48.78
8	29.70	36.01	42.45	48.38
13	41.12	48.26	52.87	58.06
16	53.83	58.35	63.65	67.61
19	39.50	46.3	50.25	54.79
30	40.12	45.66	51.10	57.40
38	48.75	52.65	56.97	60.01
46b	45.40	49.45	51.08	55.07
54	103.10	107.70	111.99	116.27
57	102.0	107.40	114.40	117.98
57d	105.29	111.22	--	--
60	84.67	89.77	93.85	98.05
60a	64.98	69.21	73.44	--
62f	115.73	121.78	124.07	131.73
62h	103.88	109.12	114.57	120.62
63b	111.78	122.08	126.80	131.91
70a	71.42	74.29	76.10	78.91
71	76.02	80.84	82.60	89.73
88	39.05	42.15	48.26	46.17
231	95.10	96.20	101.05	104.60
236	80.30	84.46	87.50	89.20
243	81.45	82.47	--	80.13
307	57.12	60.23	62.93	63.25
322	58.50	63.38	69.04	72.58
341a	--	72.39	76.07	81.71
B-33	106.40	110.95	115.53	120.17
B-138	55.53	60.80	56.81	66.58
B-160	54.95	59.40	--	64.56
C-31	95.83	99.25	103.15	107.78
C-51	113.72	119.20	124.13	129.55
D-10	82.63	87.40	92.35	--
D-14	95.75	100.34	103.93	--
D-60	98.28	103.90	108.31	113.27
D-93	112.19	117.0	124.55	130.24
F-41	40.92	45.70	46.74	50.98
F-146b	59.48	66.50	70.46	73.04
F-146c	87.40	94.91	99.46	103.39
G-163	100.45	104.30	108.00	114.93
L-230	55.00	58.32	59.34	62.59
L-333	113.17	117.00	122.05	126.23
M-34	97.88	103.02	106.82	111.13
M-82	117.57	120.15	124.78	129.89
M-177	106.96	113.50	114.25	117.23
M-180	98.40	102.50	105.55	108.19

LAMB COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



FEB. 1957 DF

o Observation well
Decline of water levels, in feet, shown in red
Rise of water levels, in feet, shown in blue

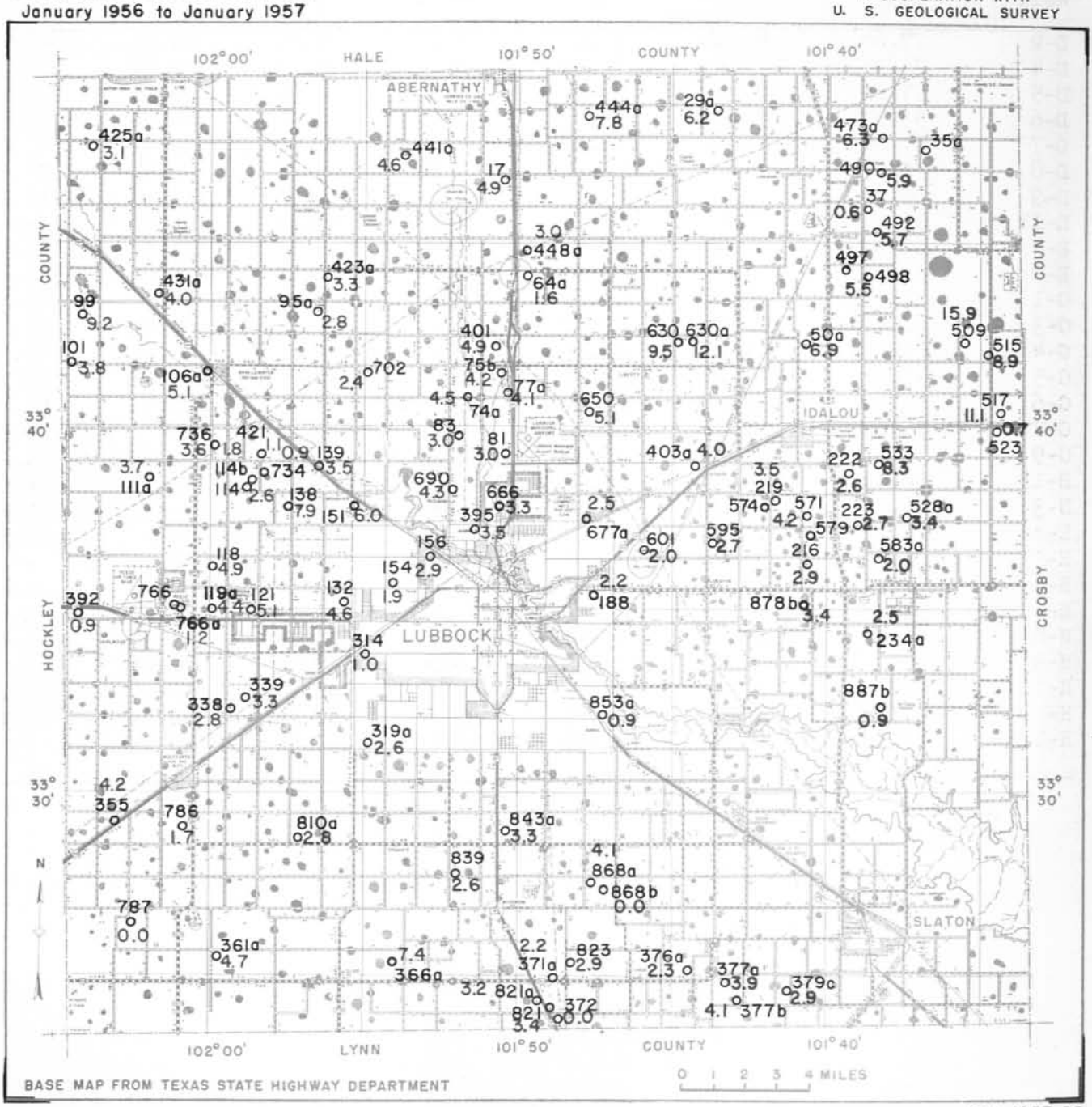
WATER-LEVEL MEASUREMENTS IN LUBBOCK COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1954	1955	1956	1957	Well	1954	1955	1956	1957
17	123.43	127.1	134.55	139.45	403a	56.12	61.10	65.82	69.78
29a	123.94	120.9	129.02	135.25	421	65.13	64.90	68.39	69.52
35a	117.57	121.2	124.4	--	423a	112.37	115.30	119.59	122.88
37	95.53	--	113.03	113.67	425a	94.83	96.50	99.45	102.57
50a	100.71	107.5	114.62	121.53	431a	109.48	112.48	114.68	118.72
64a	105.64	108.38	119.65	121.21	441a	141.70	147.30	152.11	156.72
74a	48.26	--	51.32	55.86	444a	131.85	140.20	146.16	153.95
75b	90.08	93.61	99.92	104.12	448a	120.37	--	133.40	136.43
77a	93.14	97.60	98.87	102.96	473a	115.33	121.80	125.73	132.00
81	55.93	56.39	59.32	62.32	490	109.83	116.23	127.60	133.52
83	--	--	64.66	67.7	492	95.41	102.30	107.31	113.00
95a	111.49	114.5	118.4	121.20	497	107.45	113.20	--	131.2
99	39.23	41.80	45.86	55.02	498	113.01	115.12	124.25	129.79
101	94.03	98.7	103.95	107.71	509	103.70	110.40	116.05	131.94
106a	50.02	--	58.42	63.50	515	110.72	121.00	122.55	131.44
111a	108.34	--	119.42	123.08	517	119.31	125.70	131.64	142.78
114	81.63	83.80	89.25	91.85	523	107.66	114.00	115.80	116.50
114b	79.22	80.10	86.38	88.20	528a	79.00	79.70	84.03	87.38
118	113.38	118.9	124.69	129.60	533	89.67	99.25	103.70	112.01
119a	100.97	106.5	121.59	126.00	571	63.17	64.70	68.49	72.64
121	105.00	112.5	119.61	124.75	574	69.91	76.98	--	80.06
132	72.68	85.35	92.30	96.85	579	64.27	70.50	--	74.52
138	63.23	66.70	70.20	78.06	583a	55.58	58.40	63.05	65.06
139	47.11	49.25	51.91	55.44	595	75.10	78.60	83.33	86.06
151	--	--	71.90	77.94	601	78.88	81.40	84.18	86.16
154	62.16	66.60	76.63	98.52	630	--	--	105.96	115.47
156	71.16	74.39	76.88	79.75	630a	--	97.20	104.34	116.44
188	89.94	94.90	90.12	92.33	650	--	90.00	98.67	103.77
216	--	72.80	76.89	79.75	666	68.75	--	74.10	77.40
219	62.63	67.3	71.58	75.07	677a	82.71	--	85.08	87.58
222	70.60	78.00	83.60	96.17	690	61.49	65.90	69.93	74.26
223	47.96	50.02	50.76	53.47	702	99.92	98.20	102.32	104.75
234a	70.38	76.85	73.75	76.28	734	70.69	--	76.53	77.45
314	57.4	58.00	60.26	61.29	736	--	64.05	73.58	77.20
319a	97.01	101.3	106.12	108.70	766	109.25	113.15	--	118.85
338	89.02	98.90	104.70	107.45	766a	108.28	114.3	121.35	122.53
339	88.13	91.75	97.13	100.43	786	125.12	128.20	133.53	135.24
335	98.95	103.0	107.52	111.74	787	102.70	104.90	107.22	107.22
361a	95.63	98.10	99.93	104.66	810a	110.95	--	117.34	120.11
366a	96.90	98.70	98.70	106.08	821	--	--	119.40	122.80
371a	110.41	114.50	119.98	122.20	821a	110.48	114.53	118.89	122.07
372	114.13	117.40	121.14	121.14	823	113.95	118.70	121.60	124.48
376a	104.58	106.85	110.66	112.95	839	100.56	103.25	106.73	109.34
377a	99.71	102.90	107.12	110.98	843a	93.55	96.30	99.79	103.09
377b	102.6	--	109.85	113.95	853a	53.35	53.83	54.45	53.56
379c	--	94.80	98.58	101.43	868a	96.19	100.13	103.29	107.41
392	108.70	106.70	109.00	109.88	868b	109.30	--	113.91	113.90
395	--	65.80	68.46	72.00	878b	66.31	--	72.95	76.35
401	--	--	101.8	106.72	887b	80.98	--	83.46	84.36

LUBBOCK COUNTY, TEXAS
DECLINE OF WATER LEVELS
January 1956 to January 1957

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



FEB. 1957 DF

o Observation well
Decline of water levels, in feet, shown in red

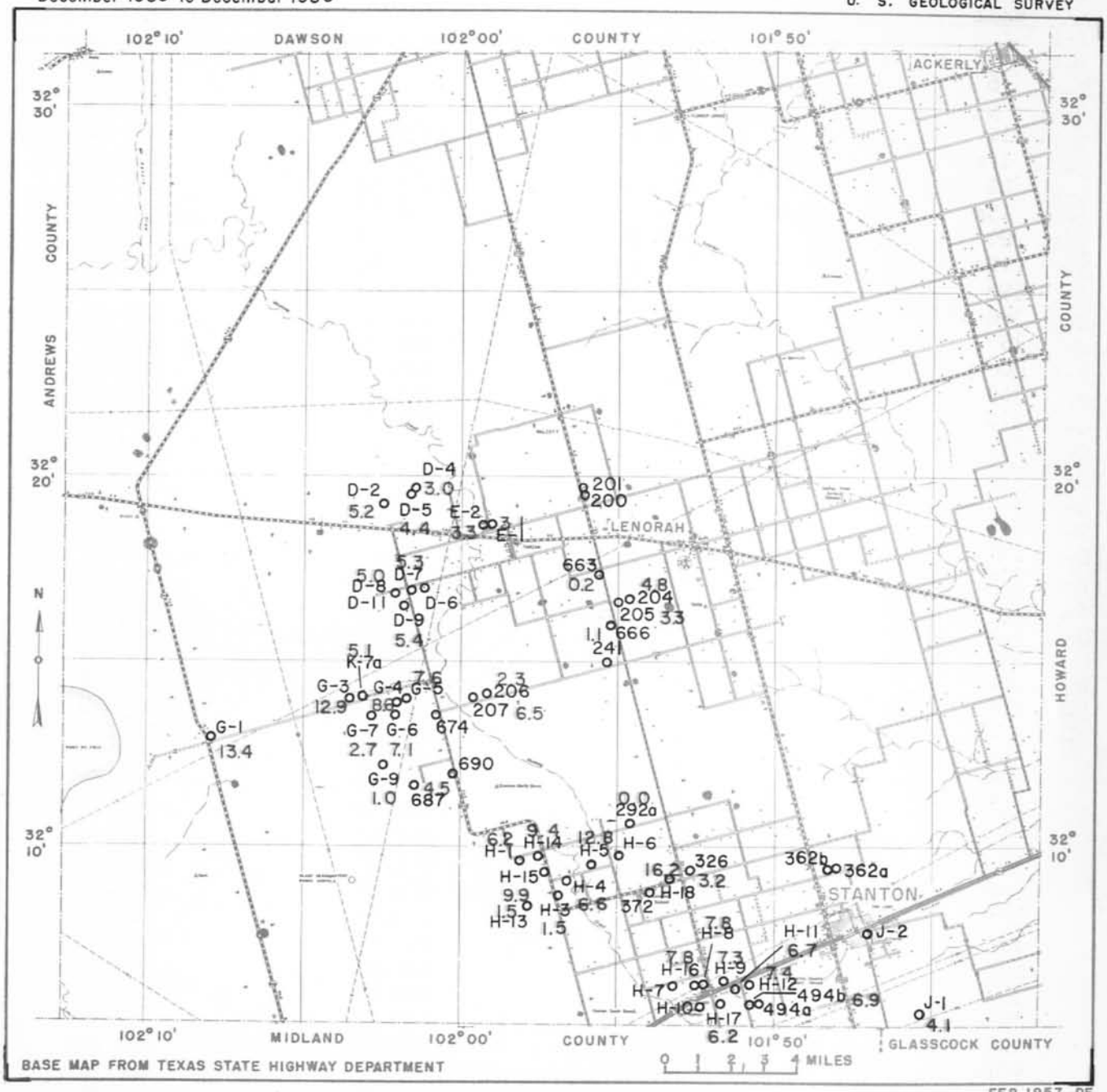
WATER-LEVEL MEASUREMENTS IN MARTIN COUNTY, TEXAS

Depth to water in feet in December

Well	1954	1955	1956	Well	1954	1955	1956
D-2	77.60	81.32	86.50	H-13	39.79	42.04	43.51
D-4	74.36	75.84	78.88	H-14	89.05	98.97	108.37
D-5	77.64	80.23	84.67	H-15	81.34	90.73	100.62
D-6	53.57	56.80	--	H-16	53.98	61.94	69.73
D-7	67.90	71.43	76.68	H-17	63.26	69.41	75.60
D-8	72.27	75.85	--	H-18	81.71	91.75	107.92
D-9	69.93	73.63	79.07	J-1	108.72	110.98	115.10
D-11	72.11	75.67	80.64	J-2	96.77	99.41	--
E-1	62.08	65.61	68.74	K-7a	--	53.67	58.77
E-2	56.61	59.66	63.00	200	80.49	--	86.41
G-1	38.81	39.44	52.87	201	80.29	--	86.35
G-3	48.48	50.43	63.32	204	--	57.02	61.85
G-4	52.53	55.56	64.15	205	--	55.01	58.31
G-5	46.81	49.76	57.31	206	--	60.28	62.58
G-6	55.90	59.16	66.24	207	--	45.35	51.82
G-7	55.10	58.47	61.20	241	80.86	--	79.34
G-9	37.31	38.40	39.41	292a	31.21	31.23	31.23
H-1	36.63	39.68	45.90	326	68.00	73.53	76.69
H-3	41.66	45.64	47.09	362a	91.19	--	115.27
H-4	77.92	90.65	97.28	362b	90.98	--	115.51
H-5	86.82	99.80	112.56	372	94.56	98.93	--
H-6	93.63	105.95	--	494a	61.02	65.47	--
H-7	59.86	69.40	--	494b	--	65.97	72.83
H-8	58.38	65.25	73.09	663	72.16	71.66	71.82
H-9	72.13	79.29	86.58	666	68.36	69.22	70.28
H-10	49.87	55.86	--	674	42.46	--	67.14
H-11	71.94	78.55	85.27	687	31.44	32.61	37.08
H-12	87.96	93.65	101.08	690	41.08	42.17	--

MARTIN COUNTY, TEXAS
DECLINE OF WATER LEVELS
December 1955 to December 1956

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



FEB. 1957 DF

o Observation well

Decline of water levels, in feet, shown in red

WATER-LEVEL MEASUREMENTS IN PARMER COUNTY, TEXAS

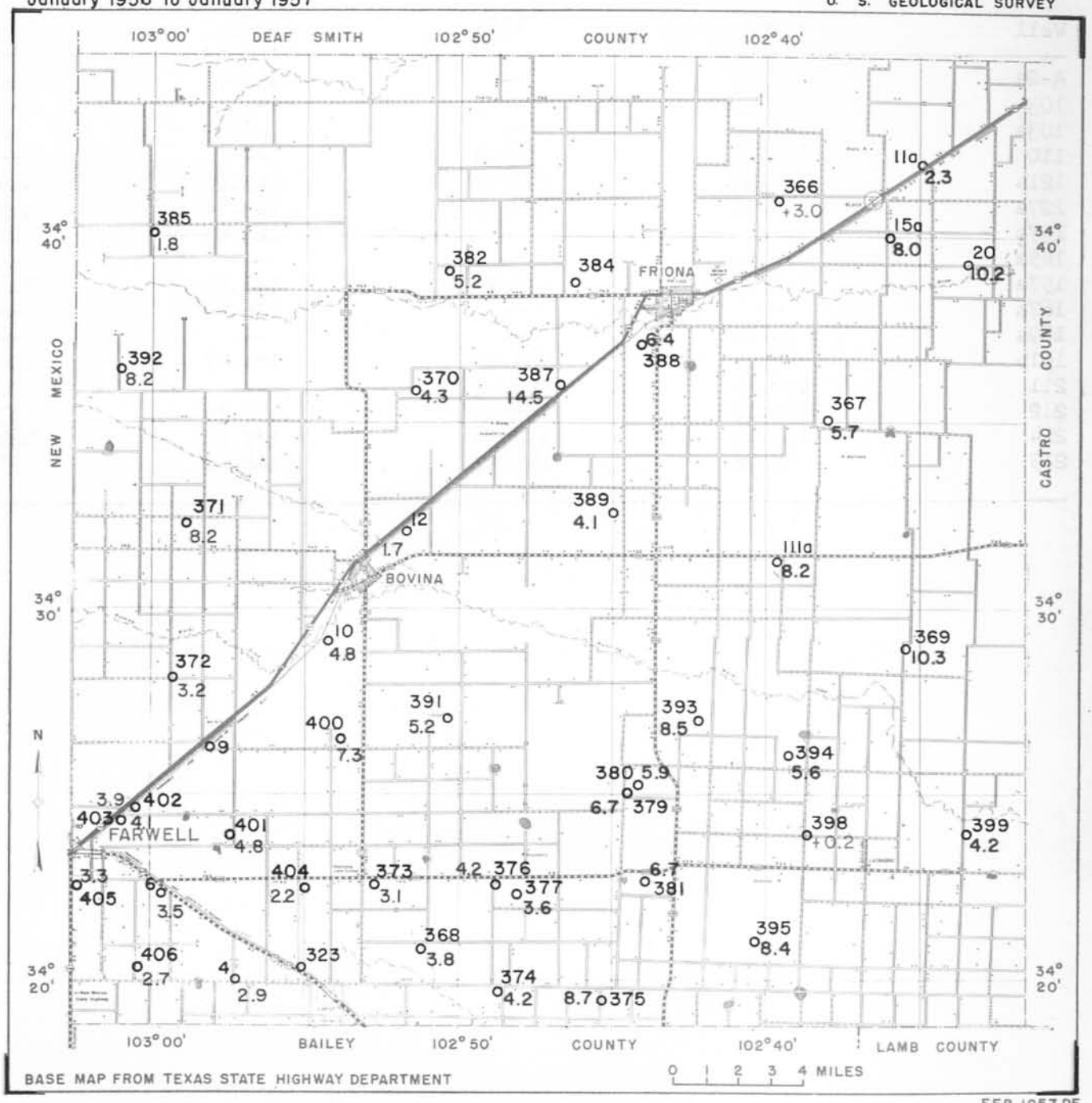
Depth to water in feet in January
(A few measurements were made in December or February)

Well	1955	1956	1957
4	117.20	121.36	124.23
6	156.80	159.64	163.12
9	217.32	--	227.66
10	172.50	b179.08	183.90
11a	129.40	131.85	134.10
12	167.30	b173.31	175.00
15a	--	156.88	164.90
20	122.35	127.98	138.20
111a	178.10	b185.45	193.60
323	104.55	106.05	--
366	--	173.21	170.17
367	--	225.18	230.84
368	--	123.17	127.01
369	--	153.7	163.96
370	--	266.84	271.12
371	--	188.90	197.08
372	--	225.13	228.35
373	--	146.30	149.36
374	--	110.70	114.92
375	--	94.8	103.46
376	--	157.70	161.85
377	--	150.63	154.25
379	--	191.71	198.60
380	--	184.60	190.54
381	--	163.10	169.75
382	--	188.56	193.76
384	--	b198.14	186.30
385	--	229.09	231.88
387	--	243.53	258.00
388	--	201.68	208.10
389	--	217.13	221.23
391	--	212.27	217.45
392	--	279.68	287.90
393	--	173.64	182.15
394	--	157.52	163.10
395	--	144.07	152.51
398	--	179.84	179.66
399	--	139.12	143.32
400	--	214.76	222.08
401	--	175.09	179.90
402	--	209.26	213.18
403	--	184.28	188.35
404	--	150.91	153.06
405	--	194.76	198.03
406	--	170.7	173.36

b pumped recently.

PARMER COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

FEB. 1957 DF

o Observation well

Decline of water levels, in feet, shown in red

Rise of water levels, in feet, shown in blue

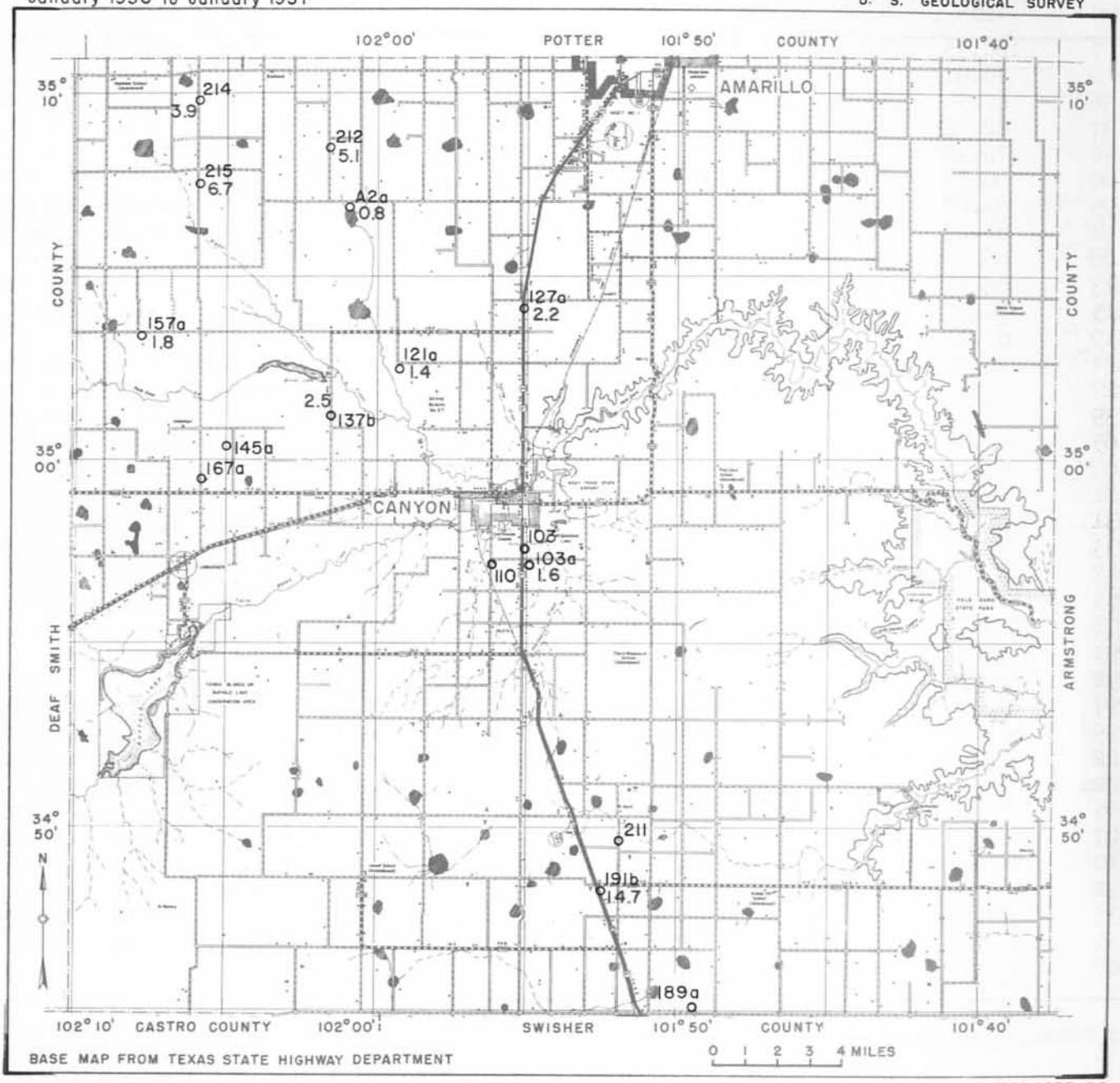
WATER-LEVEL MEASUREMENTS IN RANDALL COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1954	1955	1956	1957
A-2a	--	--	138.70	139.52
103	9.02	--	--	--
103a	--	--	6.53	8.12
110	50.68	50.96	--	--
121a	134.38	142.71	147.60	149.00
127a	135.53	138.93	143.74	145.90
137b	--	--	123.83	126.35
145a	110.56	--	--	--
157a	113.86	115.26	116.50	118.30
167a	--	--	136.44	--
189a	94.72	--	--	--
191b	178.05	183.57	184.47	199.20
211	158.39	160.13	--	170.20
212	154.12	156.44	158.15	163.25
214	168.99	172.38	177.50	181.37
215	138.76	143.27	148.60	155.29

RANDALL COUNTY, TEXAS
DECLINE OF WATER LEVELS
January 1956 to January 1957

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



FEB. 1957 DF

o Observation well
Decline of water levels, in feet, shown in red

WATER-LEVEL MEASUREMENTS IN SWISHER COUNTY, TEXAS

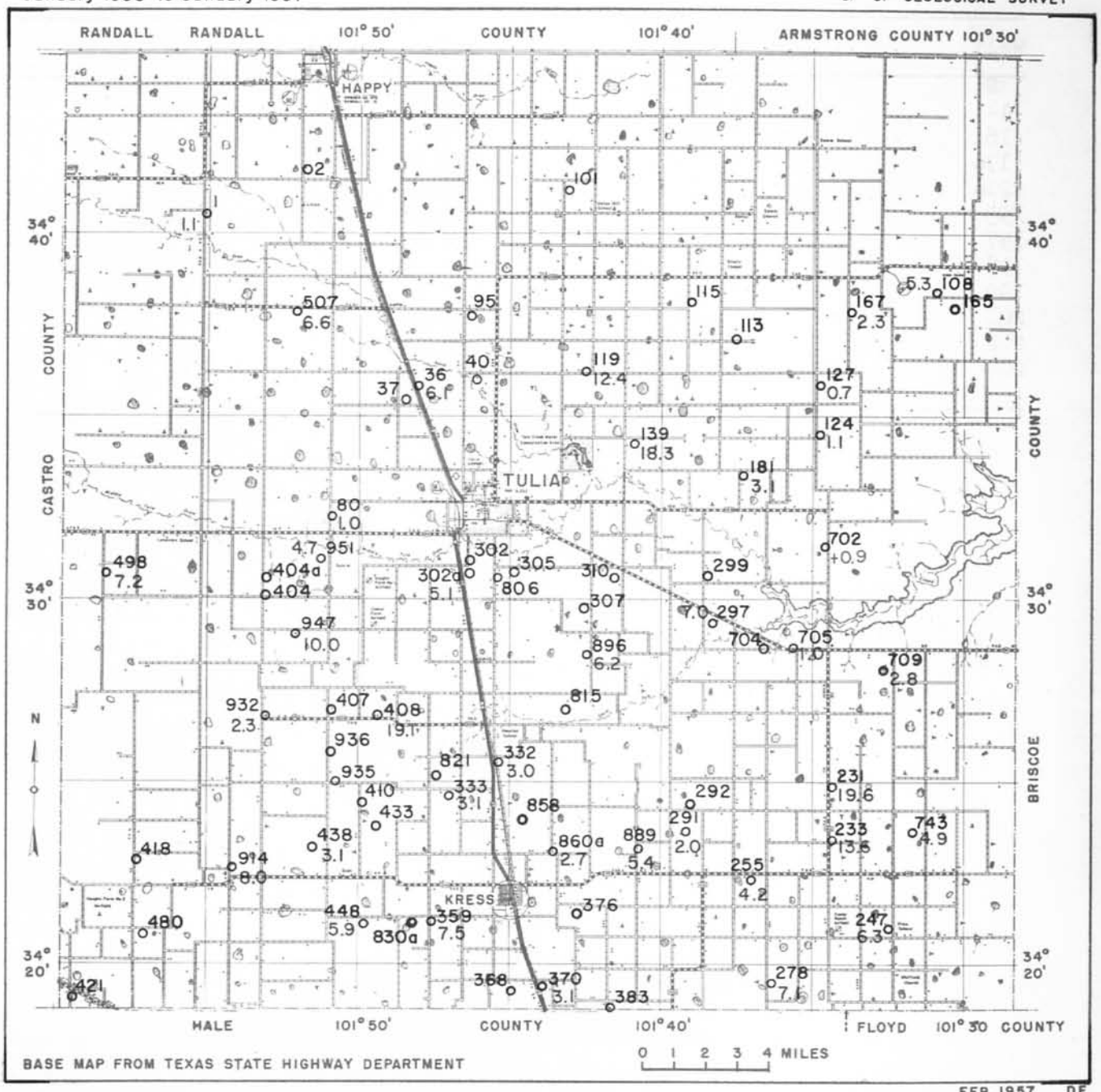
Depth to water in feet in January
(A few measurements were made in December or February)

Well	1954	1955	1956	1957	Well	1954	1955	1956	1957
1	100.35	102.37	105.25	106.32	370	105.18	113.56	116.29	119.34
2	76.67	78.07	77.08	--	376	104.21	--	--	--
36	67.54	71.30	74.30	80.37	383	101.23	106.20	109.53	c148.60
37	82.42	87.20	--	98.57	404	--	122.50	--	134.34
40	72.42	--	--	--	404a	--	119.70	--	--
80	86.53	92.68	98.68	99.70	407	134.54	137.52	--	--
95	83.82	88.02	--	97.26	408	113.62	133.90	118.58	137.64
101	80.27	86.60	90.62	--	410	116.80	129.18	126.16	--
108	86.88	92.10	95.99	101.24	418	97.91	--	--	--
113	68.46	71.24	c96.14	82.76	421	--	84.35	--	93.46
115	70.35	75.75	79.33	--	433	118.69	122.55	--	129.41
119	67.11	73.00	75.50	87.94	438	136.86	--	148.18	151.24
124	70.91	73.43	74.06	75.18	448	107.53	113.55	118.35	124.29
127	66.38	69.55	74.0	74.72	480	93.00	--	--	--
139	55.43	58.90	64.38	82.70	498	105.00	108.97	113.99	121.14
165	91.82	105.90	--	--	507	93.15	98.80	105.07	111.65
167	65.70	68.30	76.57	78.84	702	46.22	49.75	50.50	49.63
181	74.01	81.92	81.97	85.11	704	53.83	--	--	--
231	82.13	89.03	91.38	111.00	705	71.02	77.01	78.38	79.37
233	87.22	93.65	96.87	101.42	709	101.82	106.60	105.85	108.62
247	80.74	86.92	91.58	97.92	743	69.95	76.75	75.60	80.48
255	68.44	72.72	74.28	79.47	806	74.56	78.38	83.84	b97.40
278	93.23	99.08	103.55	110.64	815	88.34	94.60	--	--
291	74.97	78.00	81.74	83.78	821	106.38	110.46	--	--
292	74.58	--	--	--	830a	113.46	119.30	--	--
297	61.49	64.99	68.61	75.57	858	82.93	88.35	--	106.03
299	53.20	--	--	62.99	860a	93.30	97.72	104.26	106.96
302	77.17	--	--	--	889	95.28	96.58	101.29	106.66
302a	--	--	92.10	97.20	896	69.20	73.57	78.26	84.49
305	51.07	54.70	--	--	914	123.79	130.61	134.33	142.36
307	67.86	72.88	--	--	932	118.46	130.90	136.40	138.66
310	83.72	87.35	--	101.02	935	102.95	107.75	112.25	--
332	88.93	93.56	94.65	97.64	936	115.45	119.92	--	--
333	95.34	98.50	101.08	104.20	947	95.09	98.79	102.26	122.24
359	105.72	113.35	119.14	126.59	951	76.84	79.00	81.44	86.15
368	107.79	114.67	120.83	--					

c nearby well pumping.

SWISHER COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



FEB. 1957 DF

o Observation well

Decline of water levels, in feet, shown in red
Rise of water levels, in feet, shown in blue

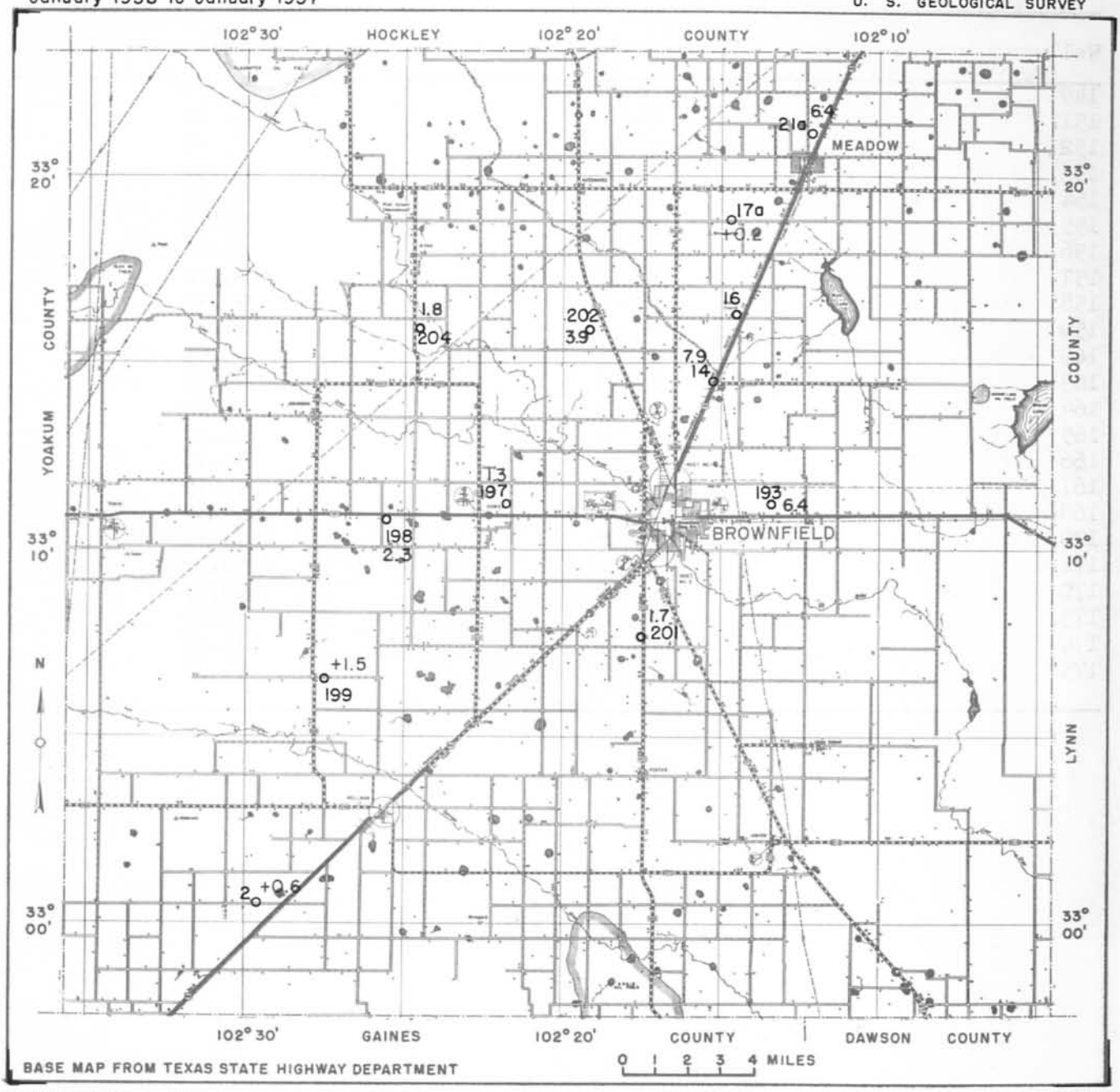
WATER-LEVEL MEASUREMENTS IN TERRY COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1955	1956	1957
2	97.40	97.27	96.65
14	74.75	78.33	86.20
16	82.45	--	--
17a	78.54	80.06	79.87
21a	62.07	62.6	69.00
193	--	73.68	80.10
197	--	101.49	102.75
198	--	141.92	144.17
199	--	67.87	66.42
201	--	79.99	81.70
202	--	101.54	105.47
204	--	124.40	126.15

TERRY COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



BKW

o Observation well
Decline of water levels, in feet, shown in red
Rise of water levels, in feet, shown in blue

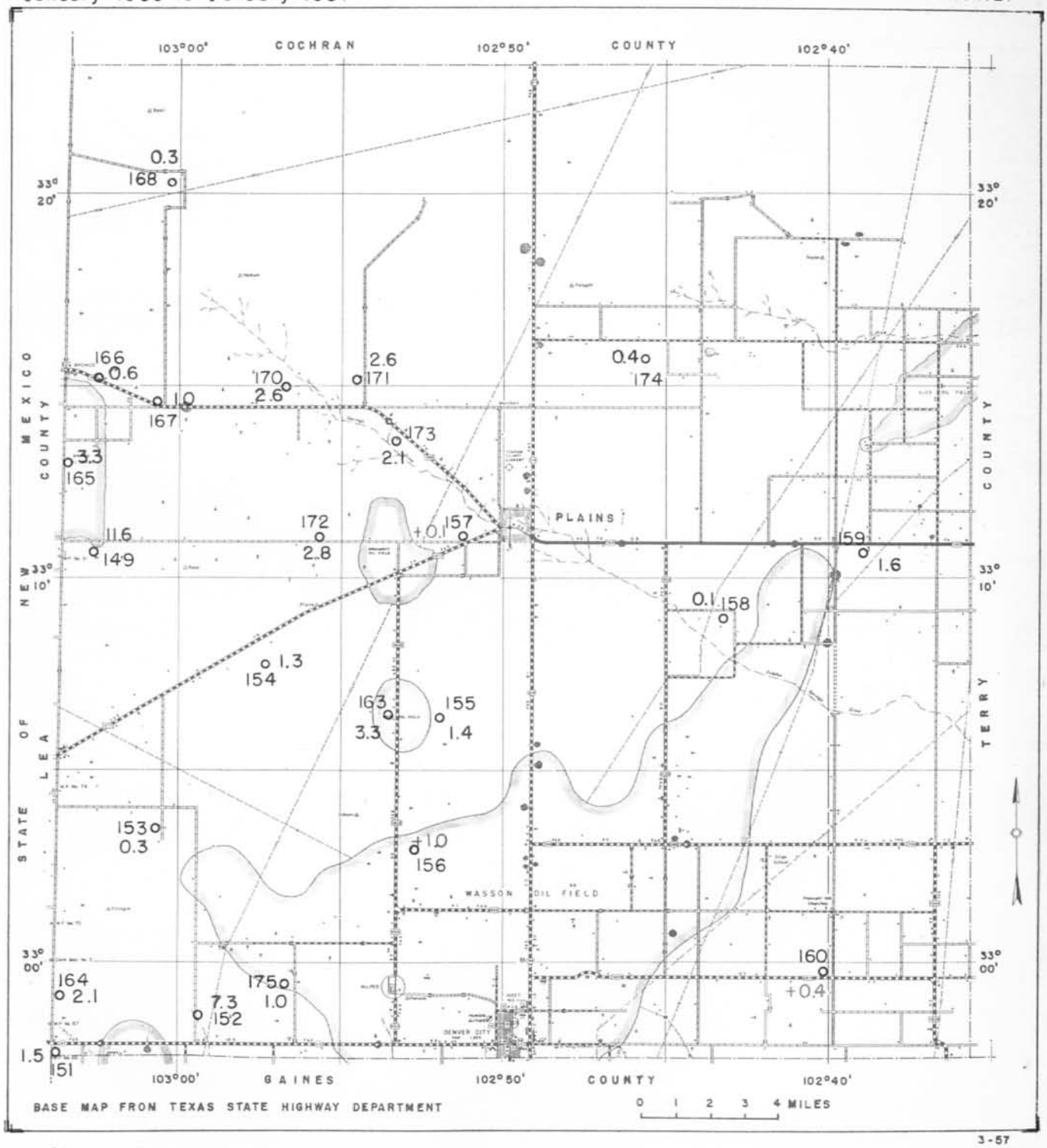
WATER-LEVEL MEASUREMENTS IN YOAKUM COUNTY, TEXAS

Depth to water in feet in January
(A few measurements were made in December or February)

Well	1956	1957
149	86.16	97.77
151	60.75	62.25
152	76.51	83.83
153	63.59	63.90
154	81.84	83.17
155	92.04	93.44
156	64.17	63.22
157	73.16	73.10
158	94.35	94.45
159	120.33	121.90
160	88.47	88.05
163	79.95	83.25
164	48.93	51.04
165	64.70	68.00
166	50.55	51.18
167	39.18	40.15
168	103.96	104.30
170	56.06	58.70
171	93.51	96.13
172	96.27	99.05
173	47.63	49.70
174	115.13	115.56
175	70.25	71.27

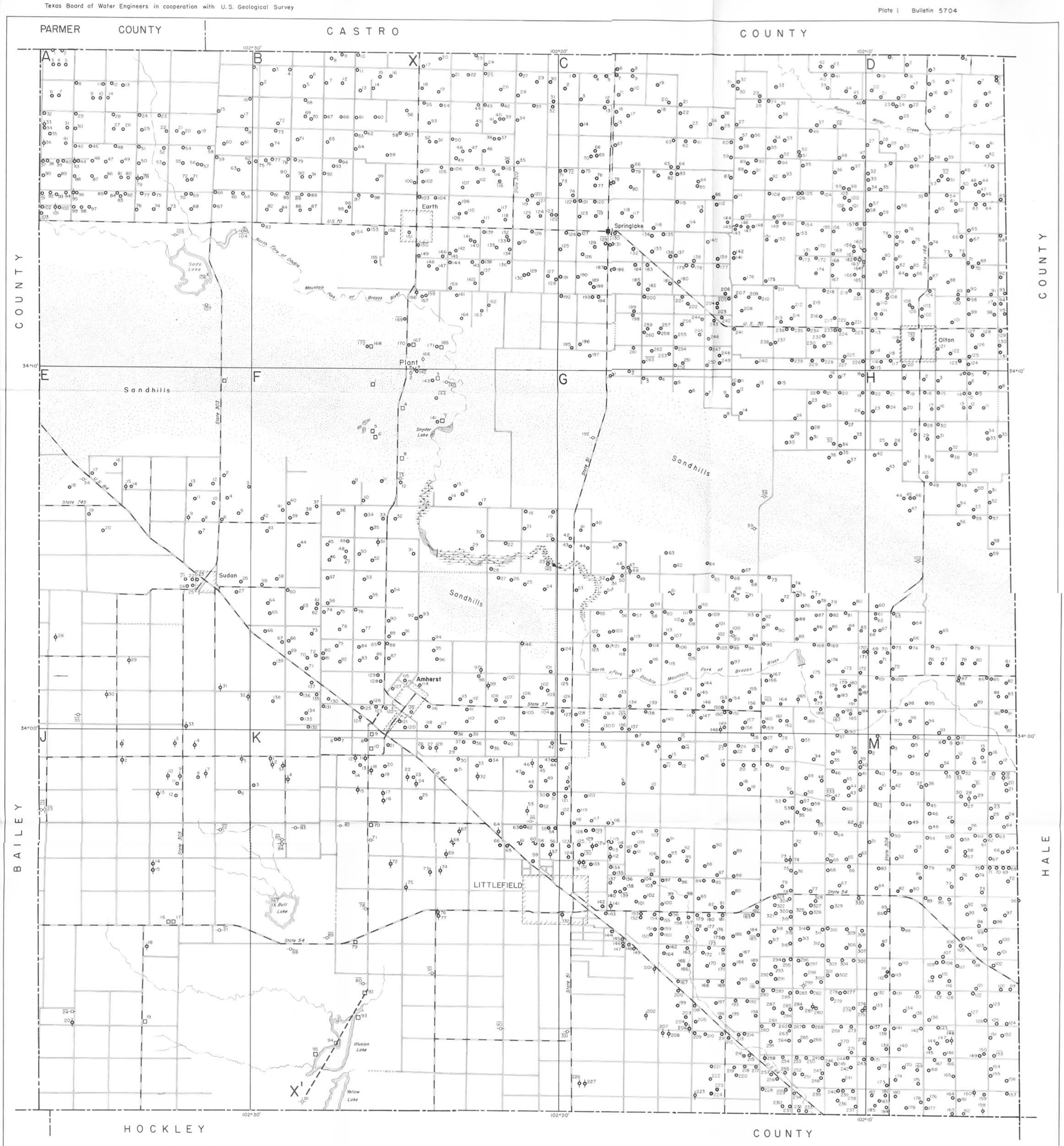
YOAKUM COUNTY, TEXAS
FLUCTUATION OF WATER LEVELS
January 1956 to January 1957

BULLETIN 5705
TEXAS BOARD OF WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY



3-57

o Observation well
Decline of water levels, in feet, shown in red.
Rise of water level, in feet, shown in blue.



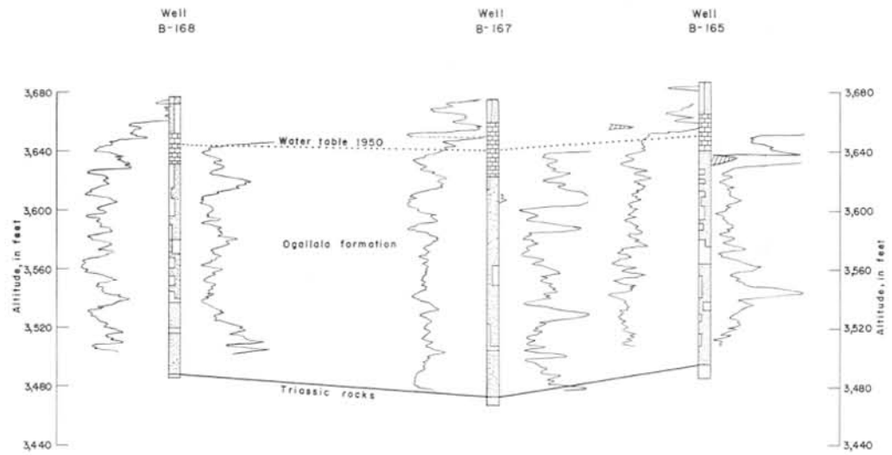
EXPLANATION

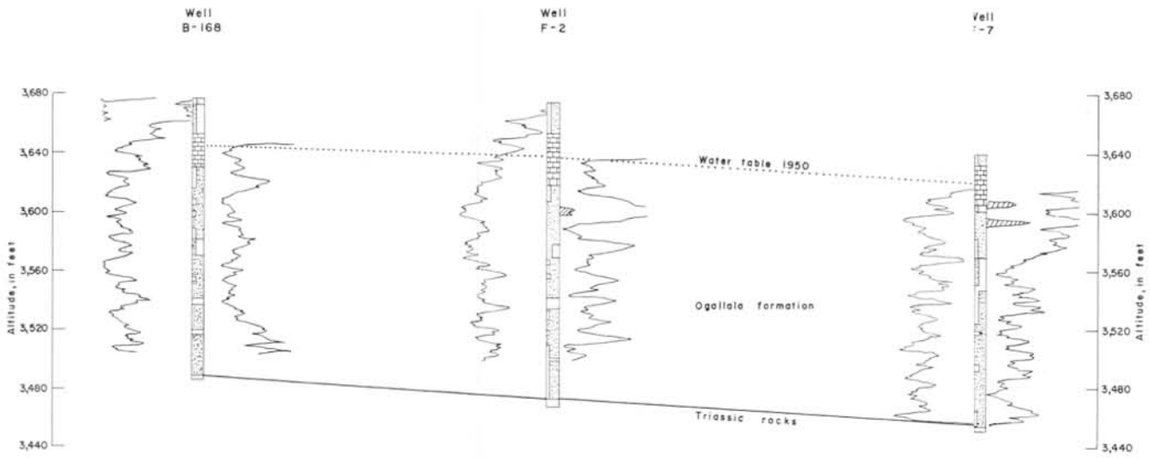
- □ Test hole
- × Lake sampling point
- Area of springs
- $\overline{69}$ Line above number indicates chemical analysis in table
- X------X' Line of geologic cross section shown on plate 3
- ○ Well used for irrigation, municipal, or industrial supplies
- ○ Well used for domestic or stock supplies
- ϕ or ϕ Unused well
- Oil test
- Spring

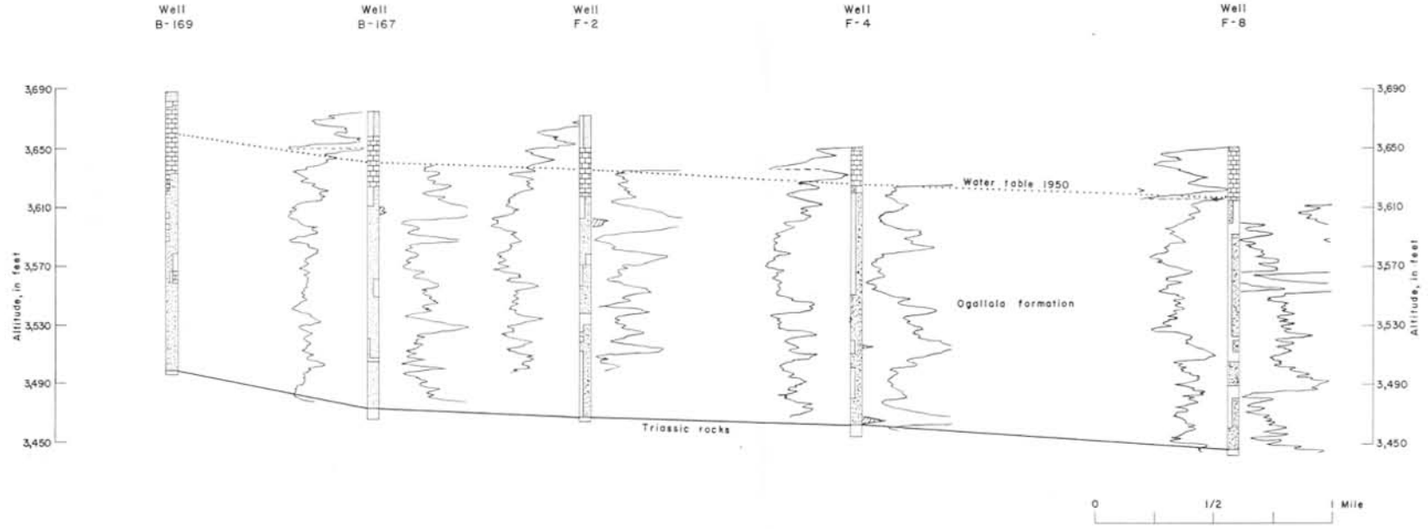
1 0 1 2 3 4 5 Miles

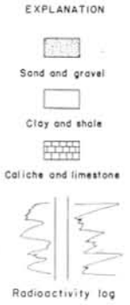
Base compiled from general highway map and field notes — 1953

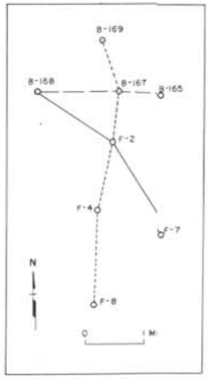
MAP OF LAMB COUNTY, TEXAS, SHOWING LOCATIONS OF WELLS, SPRINGS, AND LAKES.



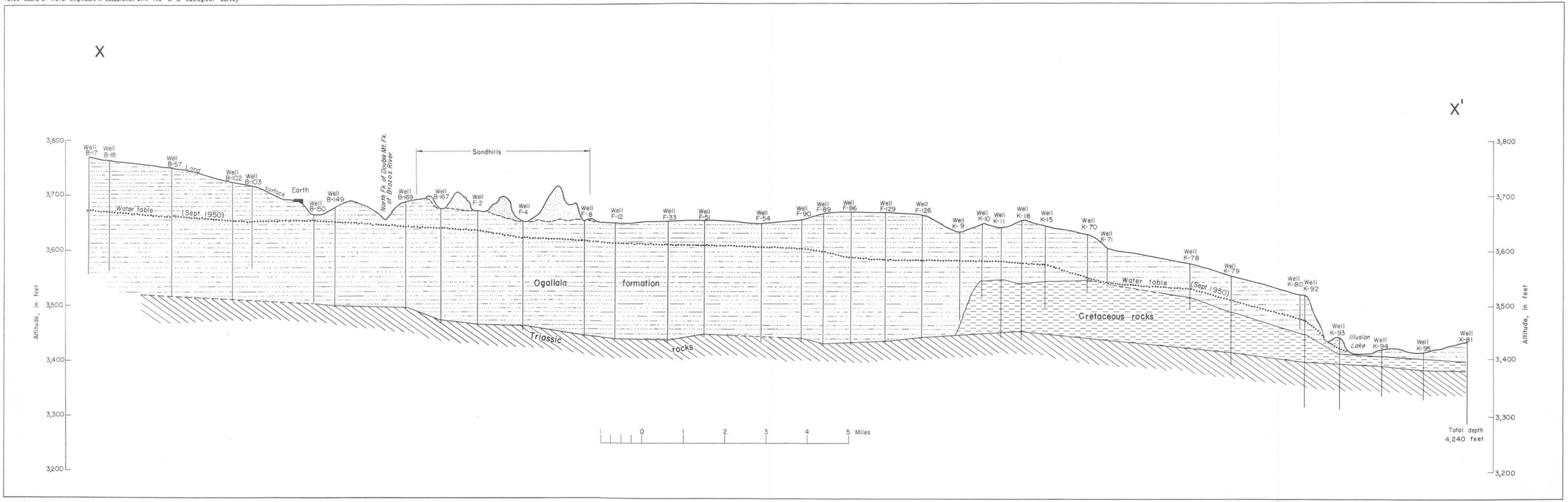








GEOLOGIC CROSS SECTIONS IN SANDHILLS, LAMB COUNTY, TEXAS



GEOLOGIC CROSS SECTION X-X' (PL. I), LAMB COUNTY, TEXAS