EXPLANATION

Well with windmill or small pumping plant

Well with pumping plant, 5-horsepower or larger

Unused well

Oil or gas test

Spring

35

Line above well number indicates analysis is available

A ——— A'

Line showing location of geologic section

Base compiled from general highway map of Texas Highway Department, Land Office map, aerial photographs, and field notes
1959

0 2 3 4 5 Miles

MAP OF REEVES COUNTY AND SOUTHWESTERN WARD COUNTY, SHOWING LOCATION OF WELLS AND SPRINGS

EXPLANATION

900
●
Well

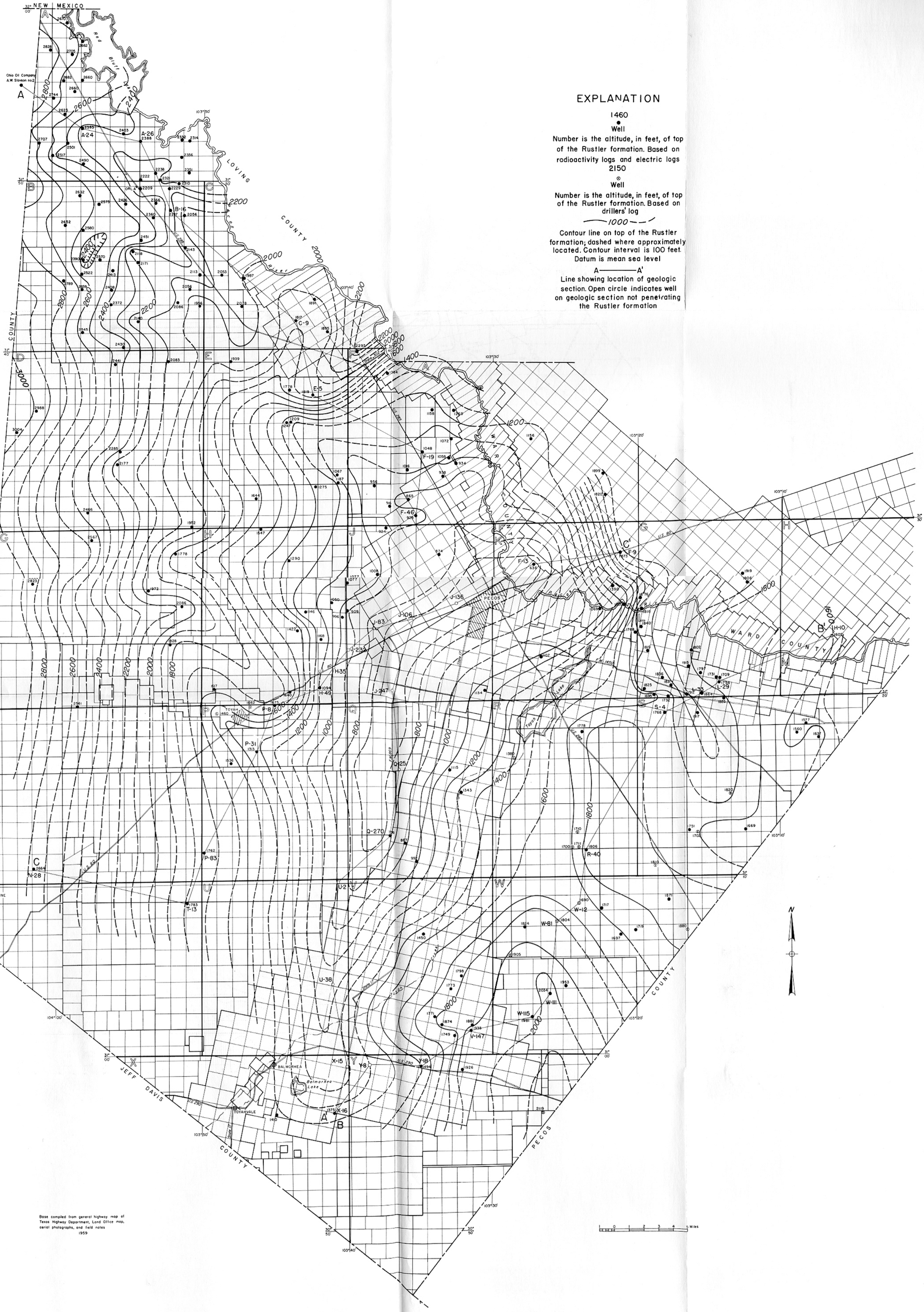
Number is the altitude, in feet, of top of the Delaware Mountain group Based on radioactivity logs and electric logs

---1000---

Contour line on top of the Delaware Mountain group. Contour interval is 100 feet. Datum is mean sea level

Base compiled from general highway map of Texas Highway Department, Land Office map, aerial photographs, and field notes 1959

CONFIGURATION OF TOP OF THE DELAWARE MOUNTAIN GROUP, REEVES COUNTY



EXPLANATION

1460
●
Well
Number is the altitude, in feet, of top of the Rustler formation. Based on radioactivity logs and electric logs

2150
⊗
Well
Number is the altitude, in feet, of top of the Rustler formation. Based on drillers' log

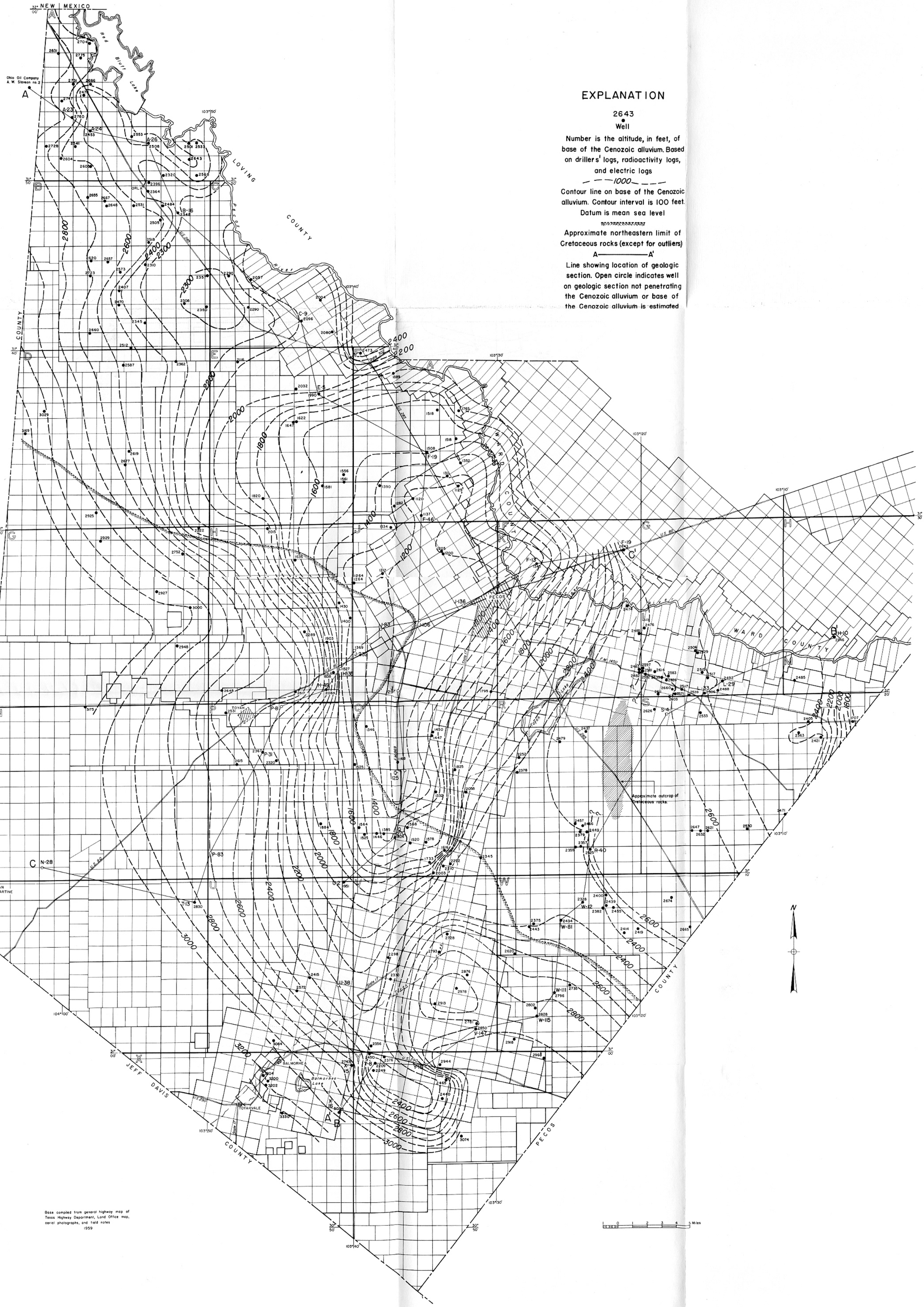
1000
Contour line on top of the Rustler formation; dashed where approximately located. Contour interval is 100 feet. Datum is mean sea level

A——A'
Line showing location of geologic section. Open circle indicates well on geologic section not penetrating the Rustler formation

Base compiled from general highway map of Texas Highway Department, Land Office map, aerial photographs, and field notes
1959

89

CONFIGURATION OF TOP OF THE RUSTLER FORMATION, REEVES COUNTY



EXPLANATION

2643
Well

Number is the altitude, in feet, of base of the Cenozoic alluvium. Based on drillers' logs, radioactivity logs, and electric logs

1000

Contour line on base of the Cenozoic alluvium. Contour interval is 100 feet. Datum is mean sea level

Approximate northeastern limit of Cretaceous rocks (except for outliers)

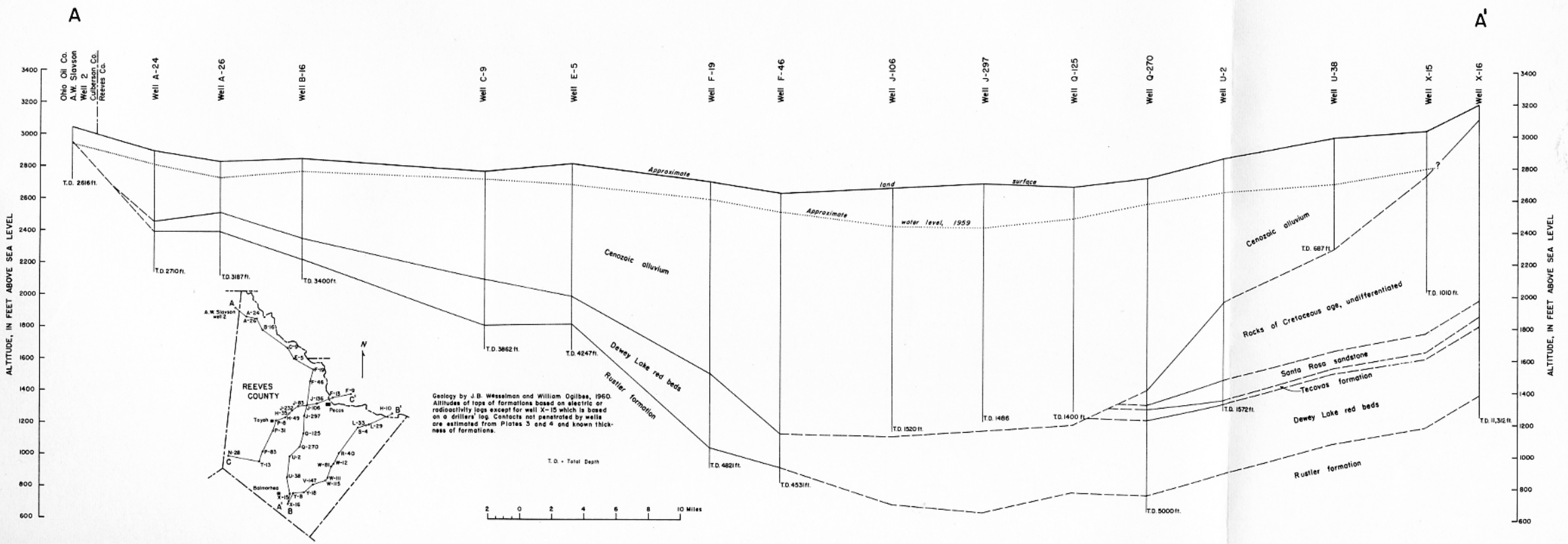
A——————A'

Line showing location of geologic section. Open circle indicates well on geologic section not penetrating the Cenozoic alluvium or base of the Cenozoic alluvium is estimated

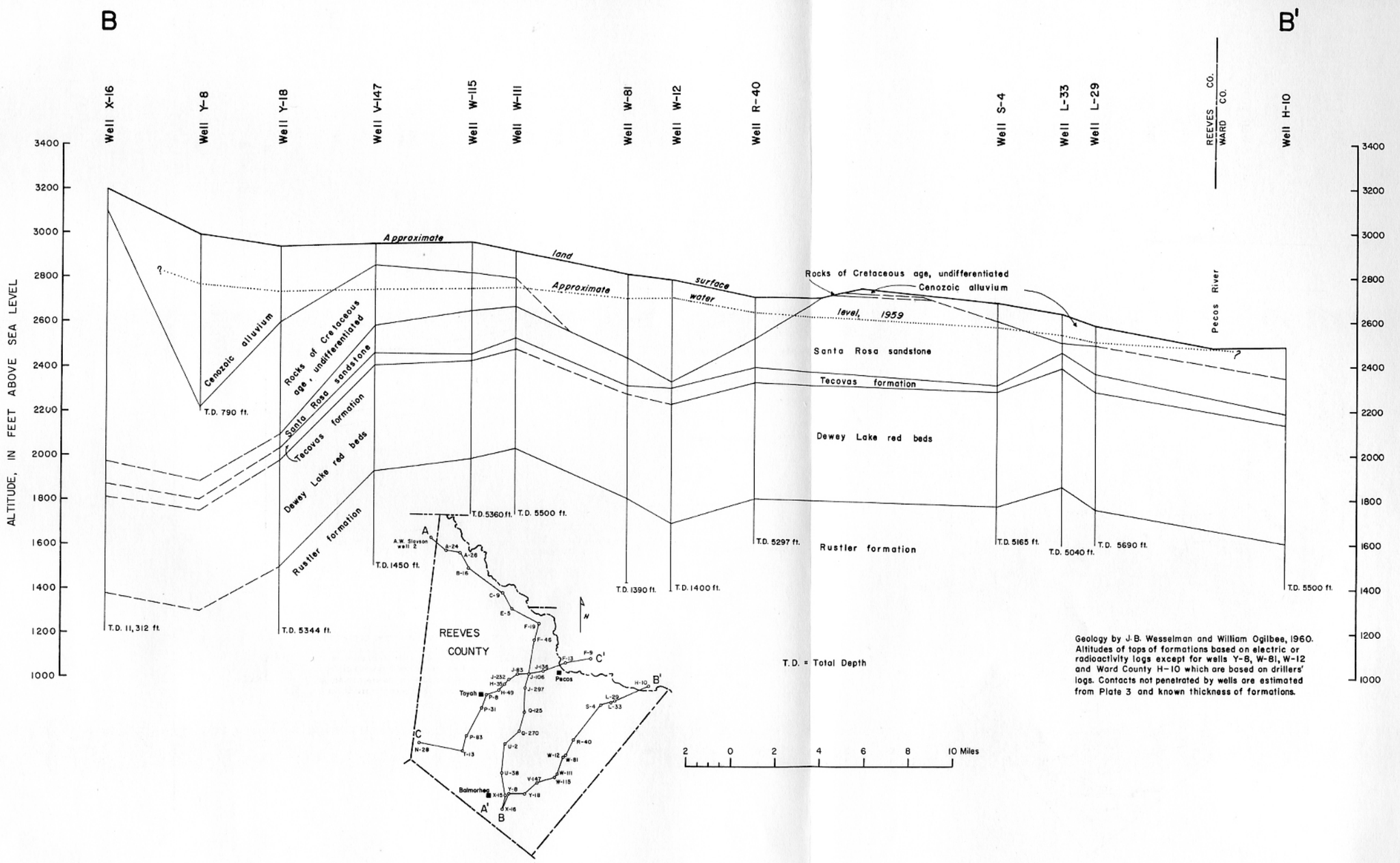
Base compiled from general highway map of Texas Highway Department, Land Office map, aerial photographs, and field notes
1959

89

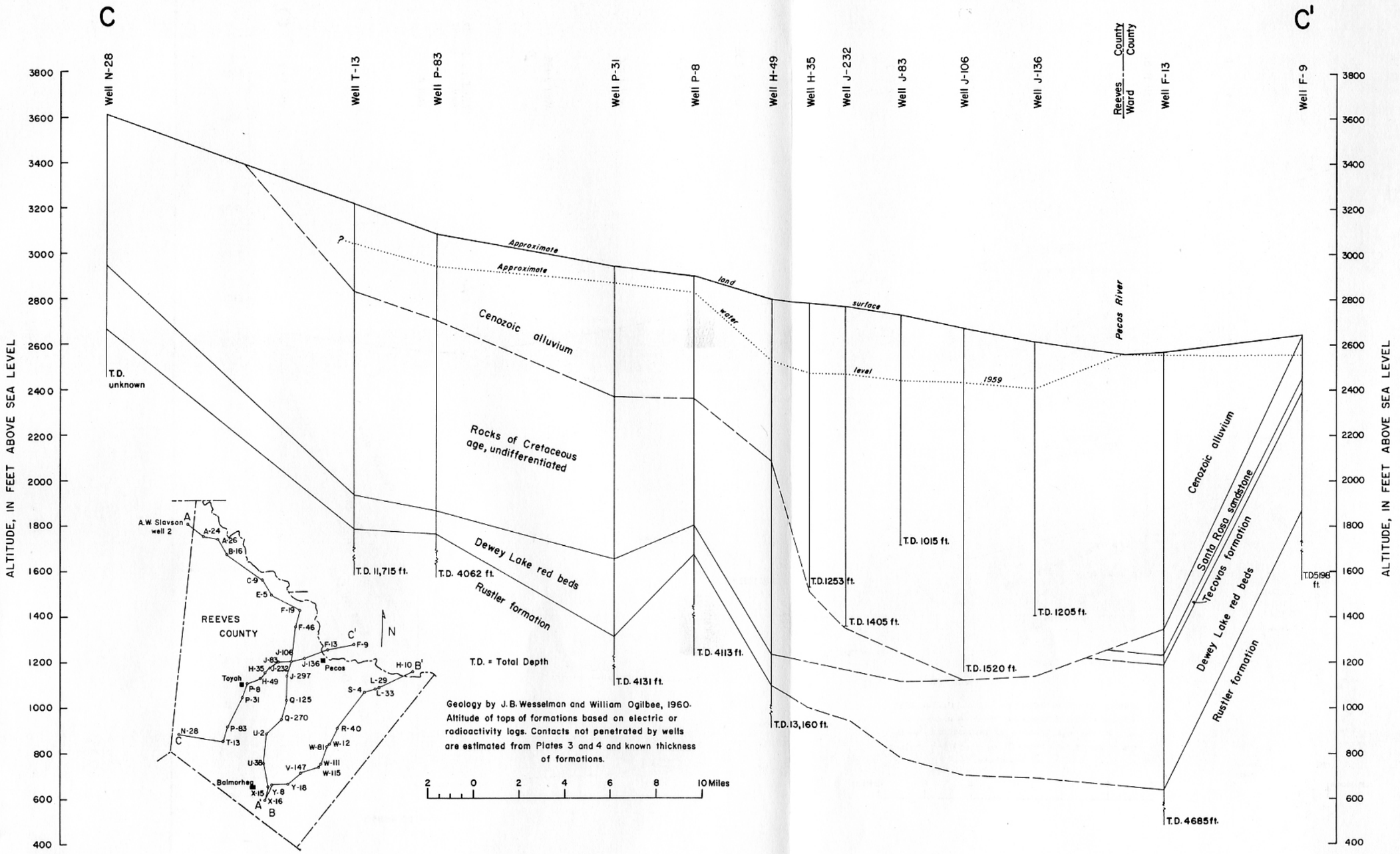
CONFIGURATION OF BASE OF THE CENOZOIC ALLUVIUM, REEVES COUNTY



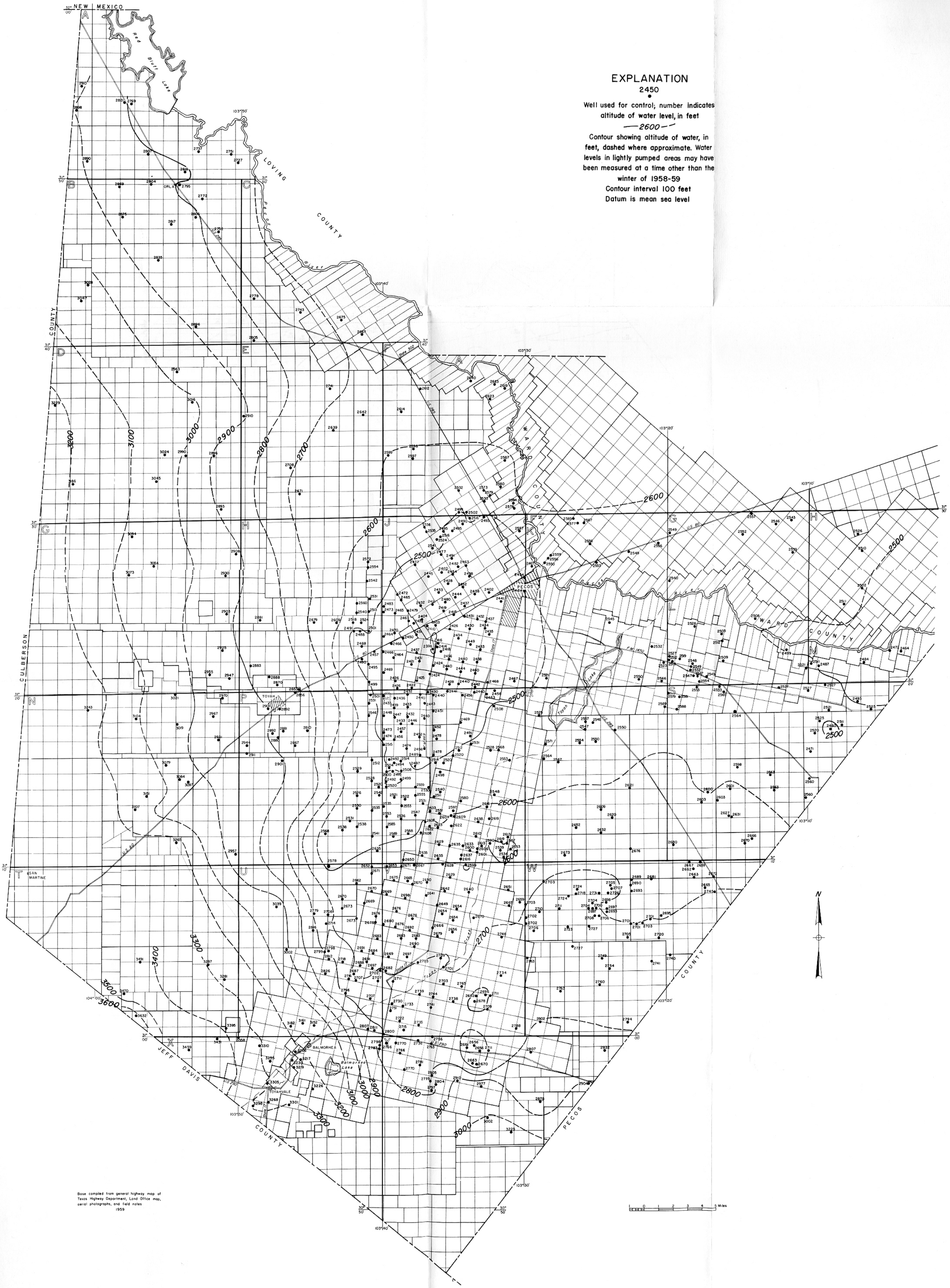
GEOLOGIC SECTION A-A', REEVES COUNTY, SHOWING APPROXIMATE WATER LEVEL IN 1959



GEOLOGIC SECTION B-B', REEVES COUNTY, SHOWING APPROXIMATE WATER LEVEL IN 1959



GEOLOGIC SECTION C-C', REEVES COUNTY, SHOWING APPROXIMATE WATER LEVEL IN 1959



EXPLANATION

2450
•
Well used for control; number indicates altitude of water level, in feet

—2600—
Contour showing altitude of water, in feet, dashed where approximate. Water levels in lightly pumped areas may have been measured at a time other than the winter of 1958-59

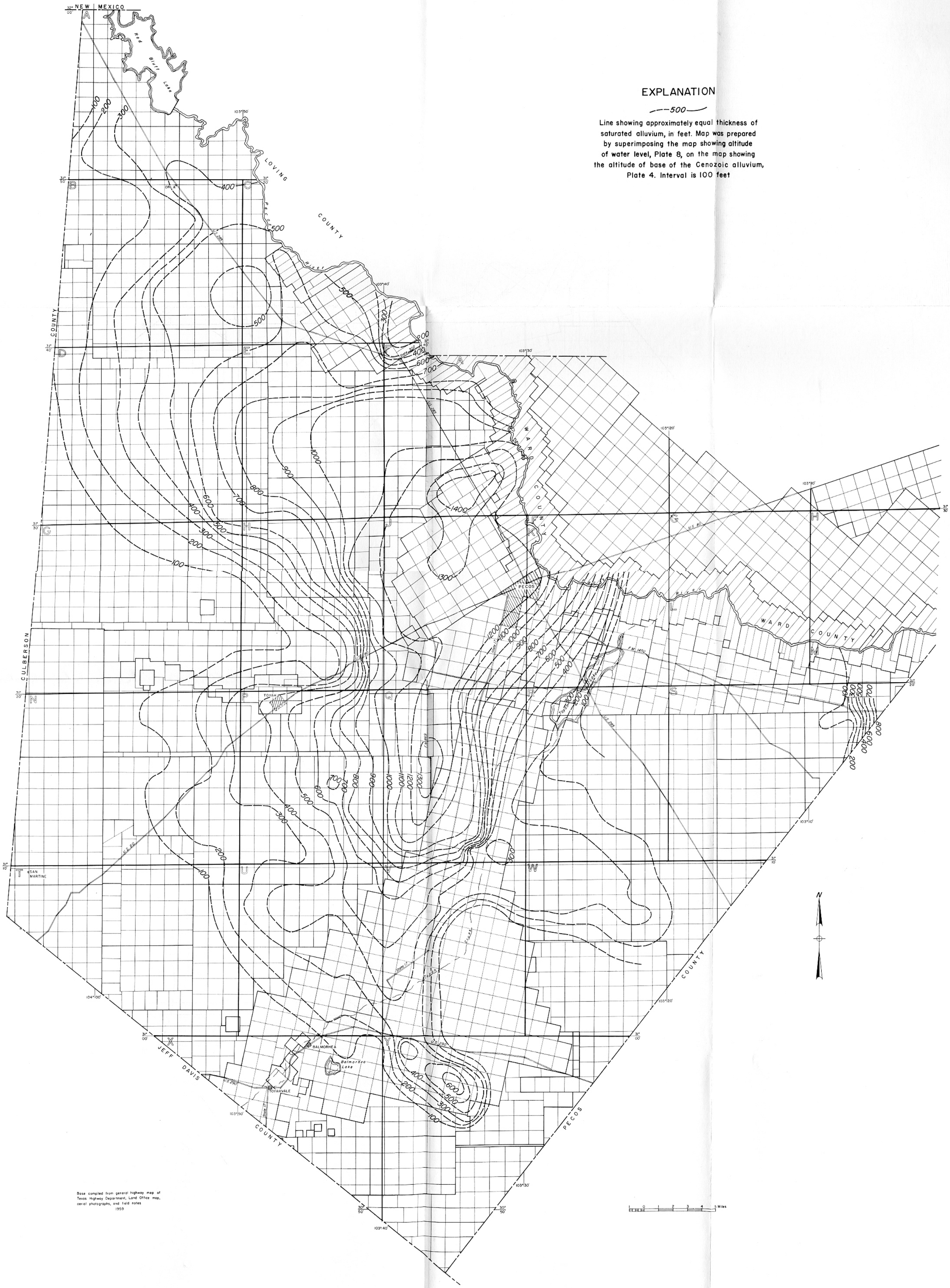
Contour interval 100 feet

Datum is mean sea level

Base compiled from general highway map of Texas Highway Department, Land Office map, aerial photographs, and field notes 1959

89

ALTITUDE OF WATER LEVEL, REEVES COUNTY, WINTER 1958-59



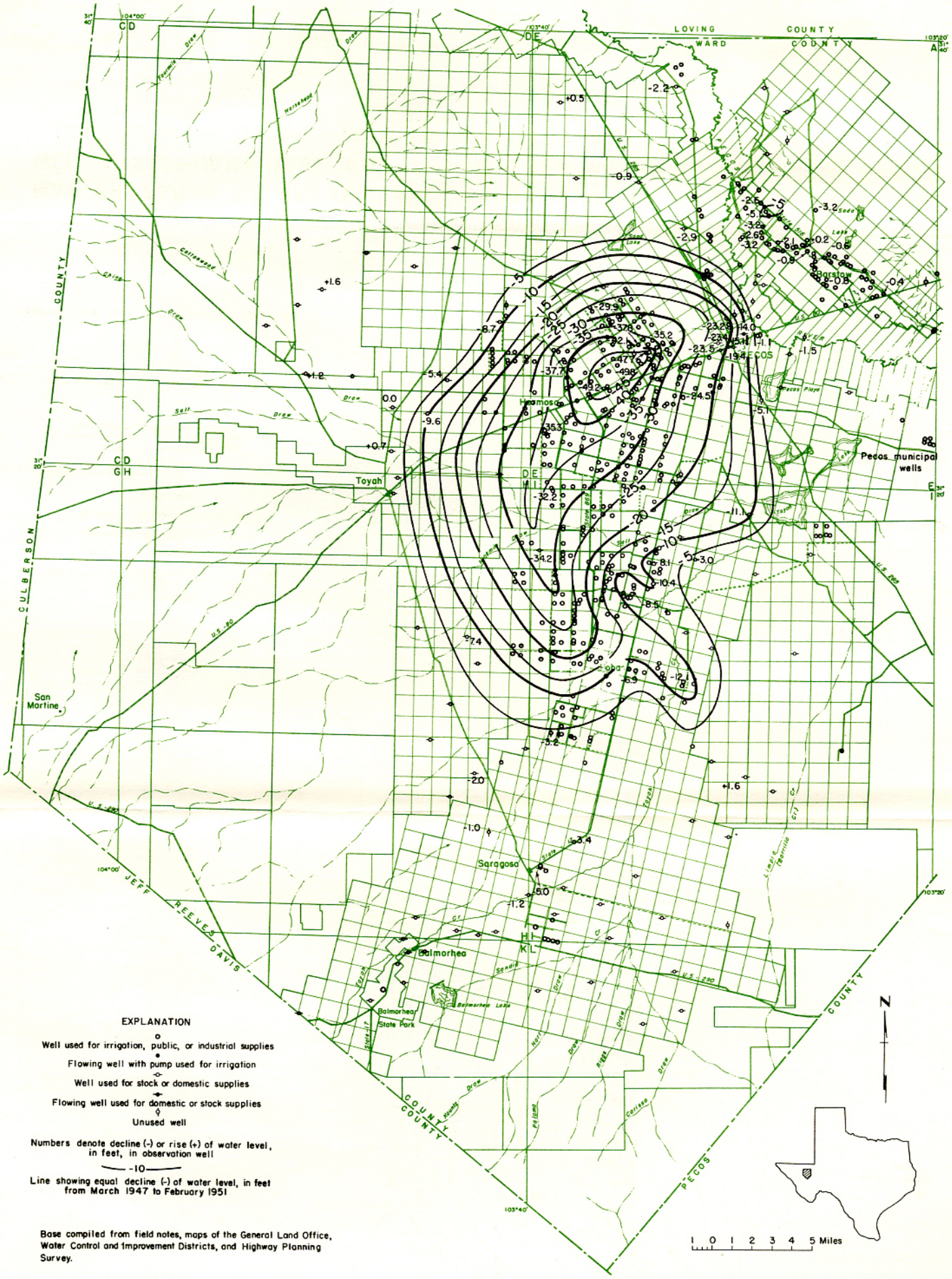
EXPLANATION

—500—

Line showing approximately equal thickness of saturated alluvium, in feet. Map was prepared by superimposing the map showing altitude of water level, Plate 8, on the map showing the altitude of base of the Cenozoic alluvium, Plate 4. Interval is 100 feet

Base compiled from general highway map of Texas Highway Department, Land Office map, aerial photographs, and field notes 1959

SATURATED THICKNESS OF CENOZOIC ALLUVIUM, REEVES COUNTY, WINTER 1958-59



Base compiled from field notes, maps of the General Land Office, Water Control and Improvement Districts, and Highway Planning Survey.

Adapted from Hood and Knowles, 1952, p. 9

89

MAP OF PARTS OF REEVES AND WARD COUNTIES, SHOWING IRRIGATION WELLS, FEBRUARY 1951, AND CHANGES IN WATER LEVEL FROM MARCH 1947 TO FEBRUARY 1951

EXPLANATION

100 75e
Well

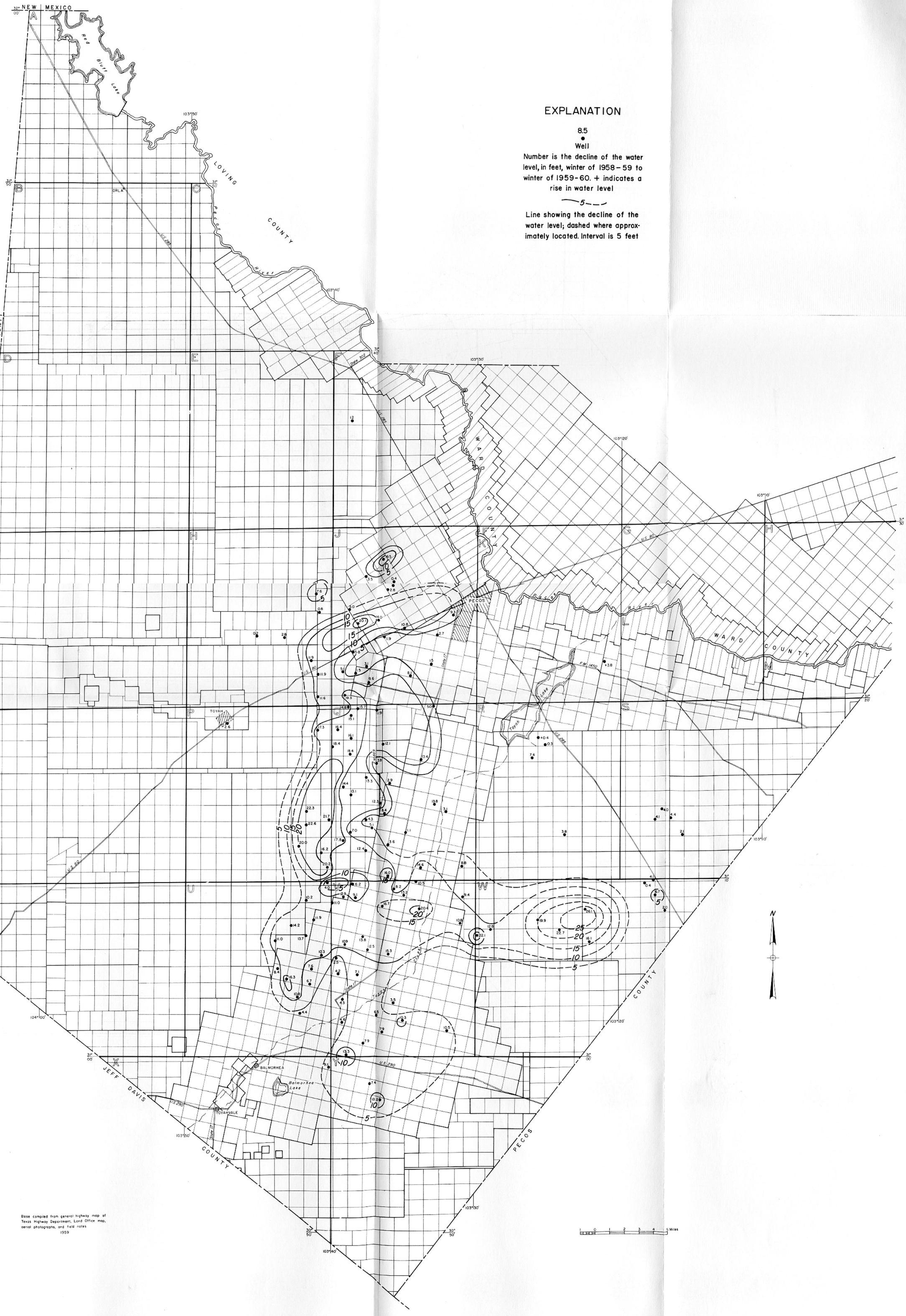
Number is the water level decline, in feet, 1951-59. e indicates the water level decline is estimated. + indicates a rise in water level

20

Line showing the decline of the water level; dashed where approximate. Interval is 20 feet

Base compiled from general highway map of Texas Highway Department, Land Office map, aerial photographs, and field notes 1959

DECLINE OF WATER LEVEL, REEVES COUNTY, 1951-59



EXPLANATION

8.5
●
Well

Number is the decline of the water level, in feet, winter of 1958-59 to winter of 1959-60. + indicates a rise in water level

—5— —

Line showing the decline of the water level; dashed where approximately located. Interval is 5 feet

Base compiled from general highway map of Texas Highway Department, Land Office map, aerial photographs, and field notes
1959

1 0 1 2 3 4 5 Miles

DECLINE OF WATER LEVEL, REEVES COUNTY, WINTER 1958-59 TO WINTER 1959-60

EXPLANATION

Symbol	Type of water	
□	A	Water containing less than 1,000 ppm dissolved solids and not more than 250 ppm either chloride or sulfate
◪	AI	Water commonly contains 1,000 to 1,800 ppm dissolved solids and 250 to 500 ppm each of chloride and sulfate
○	B	Water contains slightly less than 2,000 to about 4,000 ppm dissolved solids, nearly equal concentrations of chloride and sulfate, calcium to magnesium ratio about 3 to 1
◑	BC	Water contains sulfate ranging from about 1,000 to 2,000 ppm, sulfate to chloride ratio ranges from about 3 to 1 to 3 to 2
●	C	Water contains slightly less than 2,000 to about 6,000 ppm dissolved solids, sulfate to chloride ratio commonly 10 to 1, calcium content generally more than 400 ppm
△	D	Water contains from about 5,000 to 12,000 ppm dissolved solids

Base compiled from general highway map of Texas Highway Department, Land Office map, aerial photographs, and field notes 1959

MAP SHOWING THE OCCURRENCE OF THE DIFFERENT TYPES OF GROUND WATER IN REEVES COUNTY