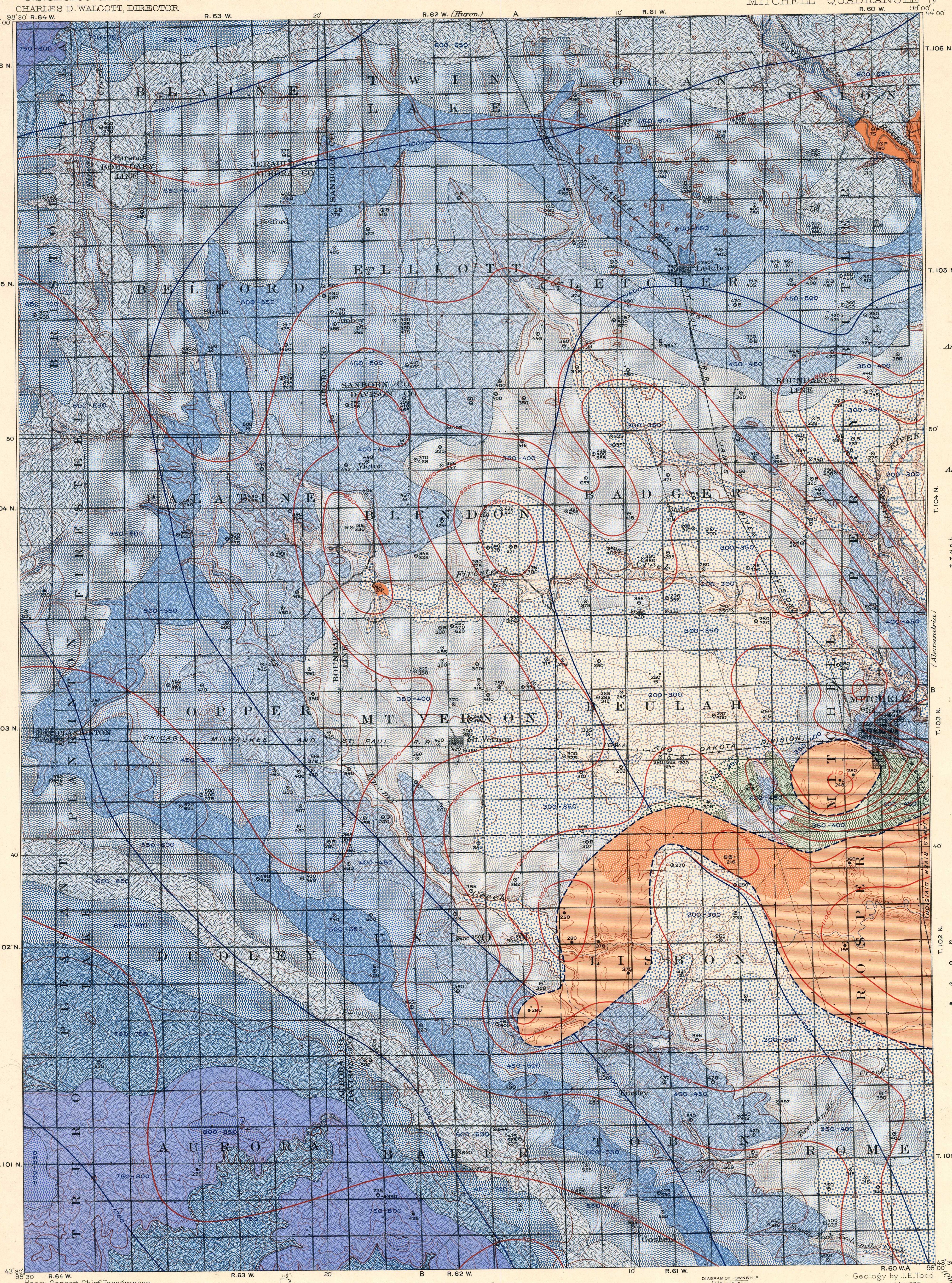
U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

ARTESIAN WATER SHEET

SOUTH DAKOTA
MITCHELL QUADRANGLE



R. 64 W. R. 63 W. 20' B R. 62 W. 10' R. 61 W. R. 60 W. A

Henry Gannett, Chief Topographer.
Jno. H. Renshawe, Topographer in charge.
Control by Geo. T. Hawkins.
Topography by D.C. Harrison and H.S. Wallace.
Surveyed in 1894-95.

TRUE NORTH · MAGNETIC NORTH · 11½°
APPROXIMATE MEAN DECLINATION 1902.

Scale $\frac{1}{125000}$

1 ½ 0 1 2 3 4 5 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 20 feet.

Datum is mean sea level.

Edition of Oct. 1903.

DIAGRAM OF TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Geology by J.E. Todd
Surveyed in 1899.

LEGEND

200-300
300-350
350-400
400-450
450-500
500-550
550-600
600-650
650-700
700-750
750-800
800-850

Area of Dakota sandstone which will probably yield flowing wells

(depth to top of Dakota sandstone indicated by pattern. Flowing water may be expected at various horizons below the top of Dakota sandstone. Local flows are often obtainable in the Benton formation above the Dakota sandstone)

300-350
350-400
400-450

Area of Dakota sandstone which will probably yield pumping wells

(depth to top of Dakota sandstone indicated by pattern)

Area in which Pleistocene deposits or sandstones in the Benton formation will probably yield flowing wells at less than 200 feet depth

(in part underlain by Dakota sandstone)

Area in which Dakota sandstone is absent but which will probably yield flowing wells in Benton formation at greater depth than 200 feet

Area in which Dakota sandstone is absent and flowing wells can probably not be obtained

Approximate limit of the Dakota sandstone

1500

Artesian head

(contour lines show approximate altitude above sea to which the principal artesian flow may rise)

900

Contours on surface of Sioux quartzite

(lines show altitude above sea and configuration of the surface of "bed rock" of well drillers, the limit of profitable boring)

425 504 *Flowing wells in Dakota sandstone, showing depths to principal flows*

B *Flowing wells in Benton formation*

P *Flowing wells in Pleistocene deposits*

Nonflowing wells over 200 feet deep

Sections

A B B A