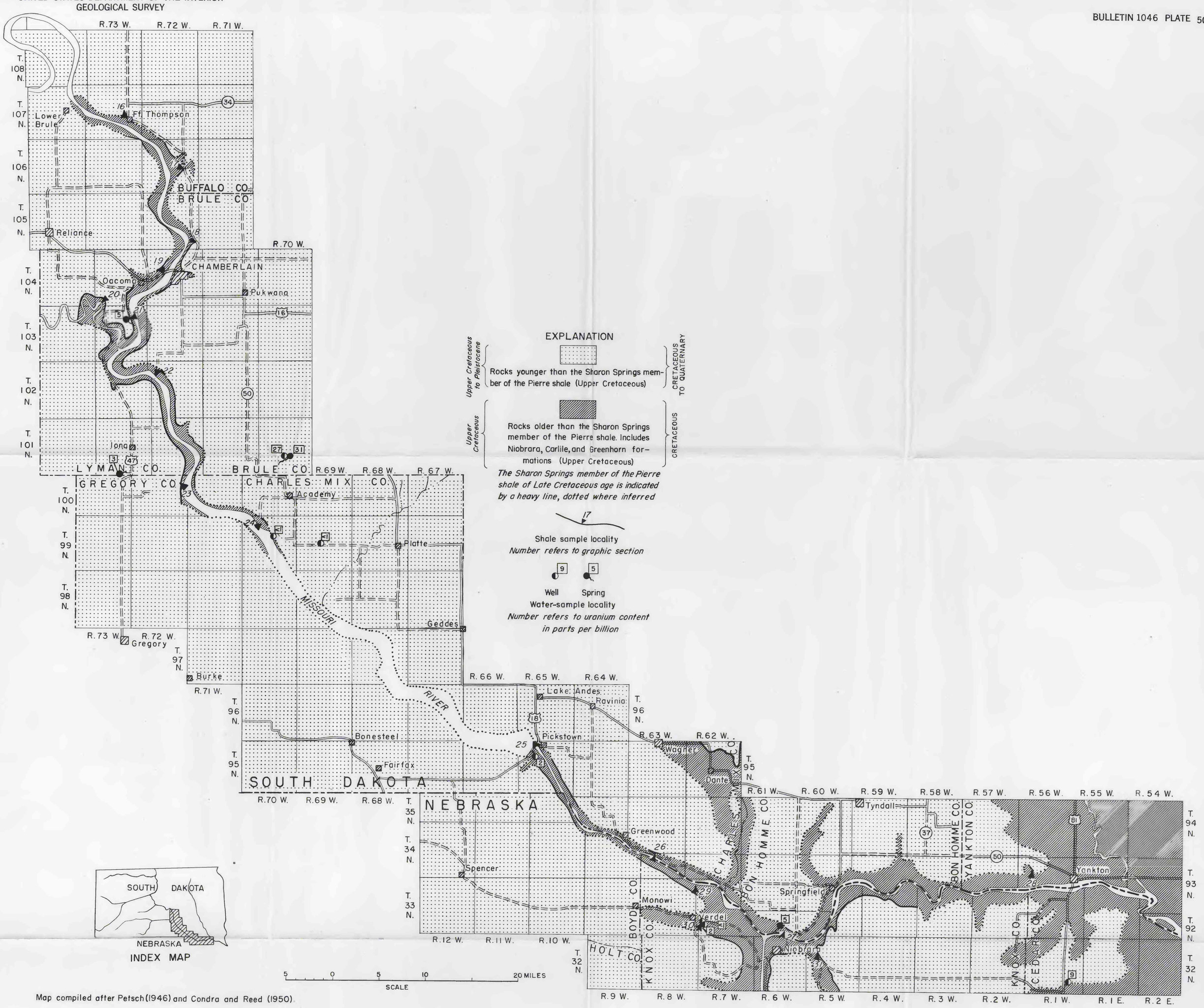


EXPLANATION

Upper Cretaceous to Pleistocene — CRETACEOUS TO QUATERNARY

Rocks younger than the Sharon Springs member of the Pierre shale (Upper Cretaceous)

Upper Cretaceous — CRETACEOUS

Rocks older than the Sharon Springs member of the Pierre shale. Includes Niobrara, Carlile, and Greenhorn formations (Upper Cretaceous)

The Sharon Springs member of the Pierre shale of Late Cretaceous age is indicated by a heavy line, dotted where inferred

17 — Shale sample locality
Number refers to graphic section

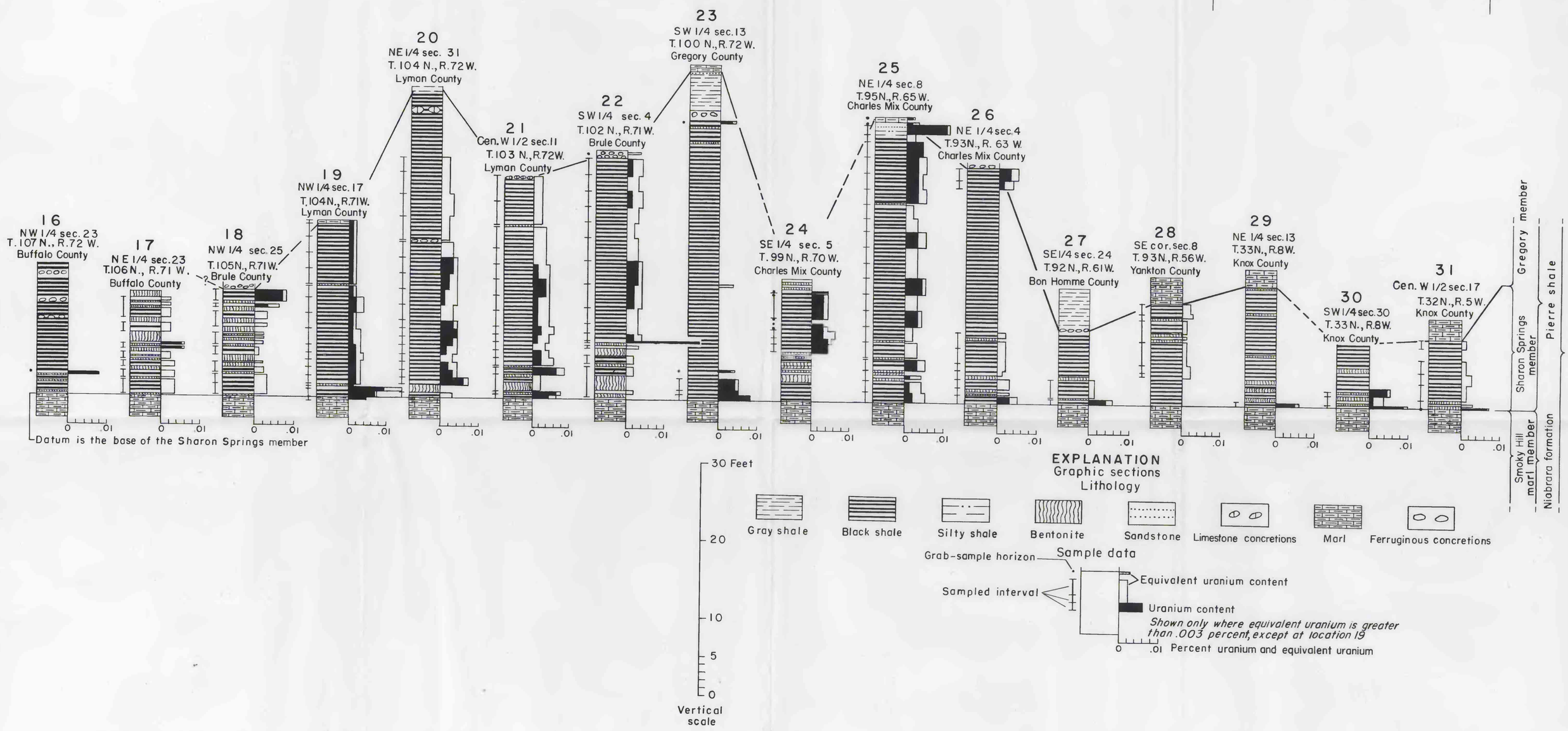
9 Well — 5 Spring
Water-sample locality
Number refers to uranium content in parts per billion

INDEX MAP

5 0 5 10 20 MILES
SCALE

Map compiled after Petsch (1946) and Condra and Reed (1950).

SOUTH DAKOTA — NEBRASKA



EXPLANATION
Graphic sections
Lithology

Gray shale — Black shale — Silty shale — Bentonite — Sandstone — Limestone concretions — Marl — Ferruginous concretions

Sample data
Grab-sample horizon
Sampled interval
Equivalent uranium content
Uranium content
Shown only where equivalent uranium is greater than .003 percent, except at location 19
0 .01 Percent uranium and equivalent uranium

30 Feet
20
10
5
0
Vertical scale

GEOLOGIC MAP AND GRAPHIC SECTIONS SHOWING SAMPLE LOCALITIES AND URANIUM CONTENT OF THE SHARON SPRINGS MEMBER OF THE PIERRE SHALE ALONG THE MISSOURI RIVER, SOUTH DAKOTA AND NEBRASKA

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