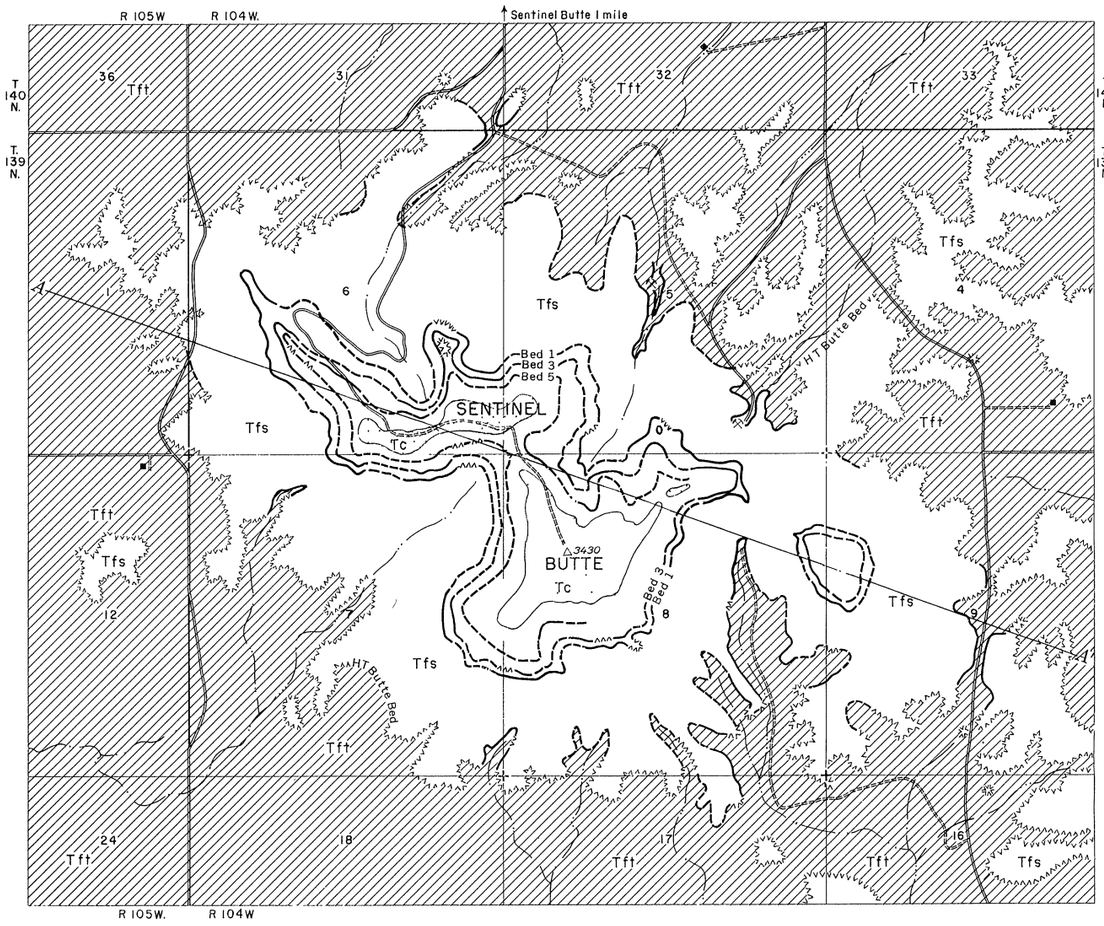
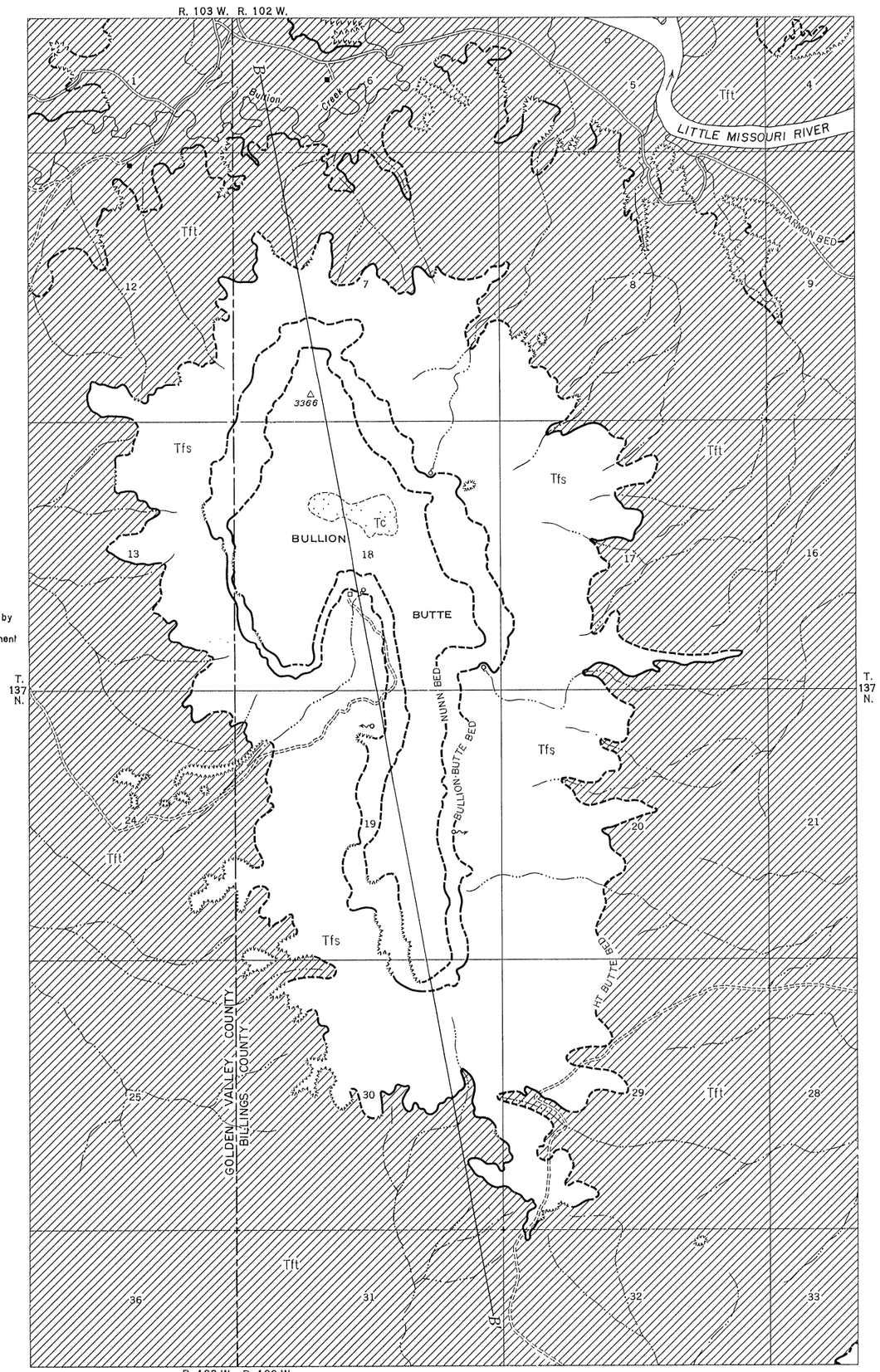
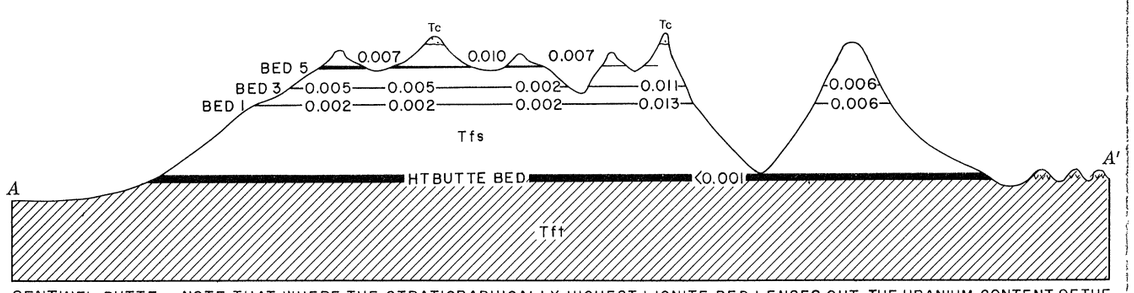


Geology mapped on aerial photographs by G W. Moore and R E. Melin, 1953. Base compiled from Bureau of Land Management plats

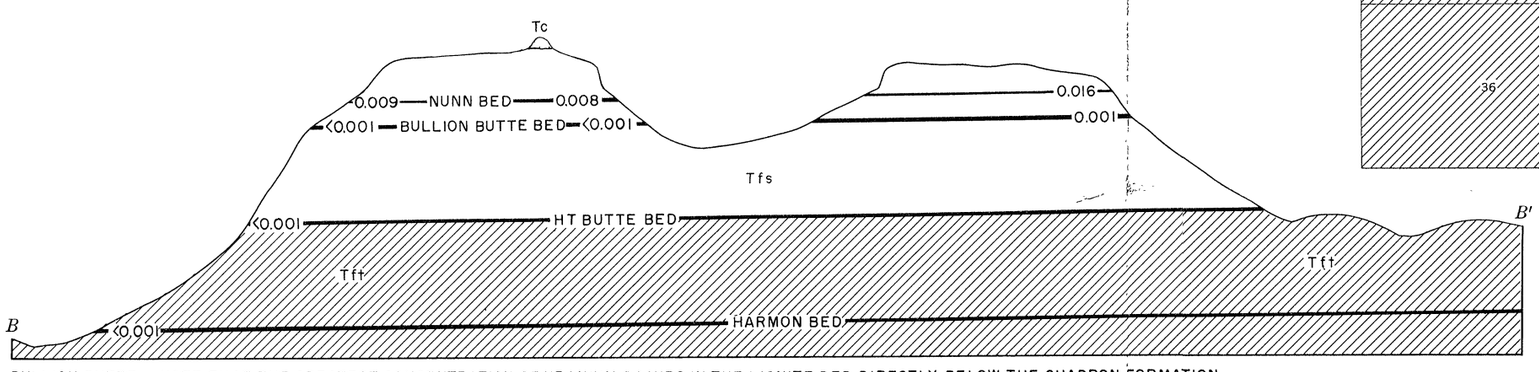
GEOLOGIC MAP OF THE SENTINEL BUTTE AREA



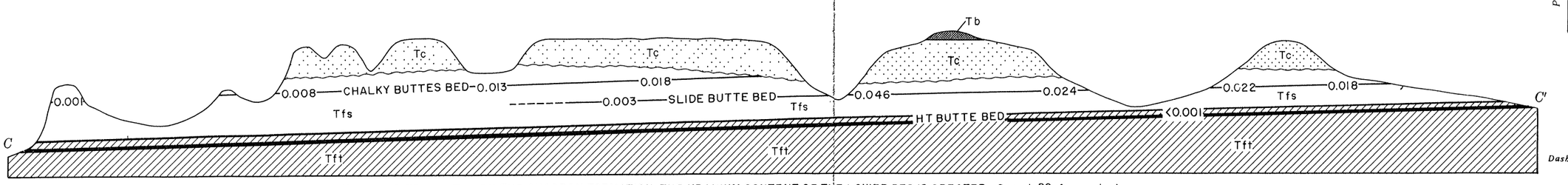
GEOLOGIC MAP OF THE BULLION BUTTE AREA



SENTINEL BUTTE — NOTE THAT WHERE THE STRATIGRAPHICALLY HIGHEST LIGNITE BED LENSES OUT, THE URANIUM CONTENT OF THE LOWER BEDS IS GREATER



BULLION BUTTE — NOTE THAT THE GREATEST CONCENTRATION OF URANIUM OCCURS IN THE LIGNITE BED DIRECTLY BELOW THE CHADRON FORMATION



CHALKY BUTTES — NOTE THAT WHERE THE UPPER LIGNITE BED IS TRUNCATED BY THE CHADRON FORMATION, THE URANIUM CONTENT OF THE LOWER BED IS GREATER. See pl. 30 for geologic map

600
500
400
300
200
100
0
Scale, in feet

EXPLANATION

TERTIARY

Oligocene — White River group

Tb — Brule formation *Shown in section only*

Tc — Chadron formation

Paleocene — Fort Union formation

Tfs — Sentinel Butte member

Tft — Tongue River member

Contact *Dashed where approximately located*

Lignite bed *Dashed where approximately located. Number in section indicates percent uranium content*

Clinker

Mine

GEOLOGIC MAPS AND STRUCTURE SECTIONS OF THE SENTINEL BUTTE AND BULLION BUTTE AREAS, AND STRUCTURE SECTION OF THE CHALKY BUTTES AREA, SOUTHWESTERN NORTH DAKOTA

0 1 2 Miles

469117 O - 59 (In pocket)