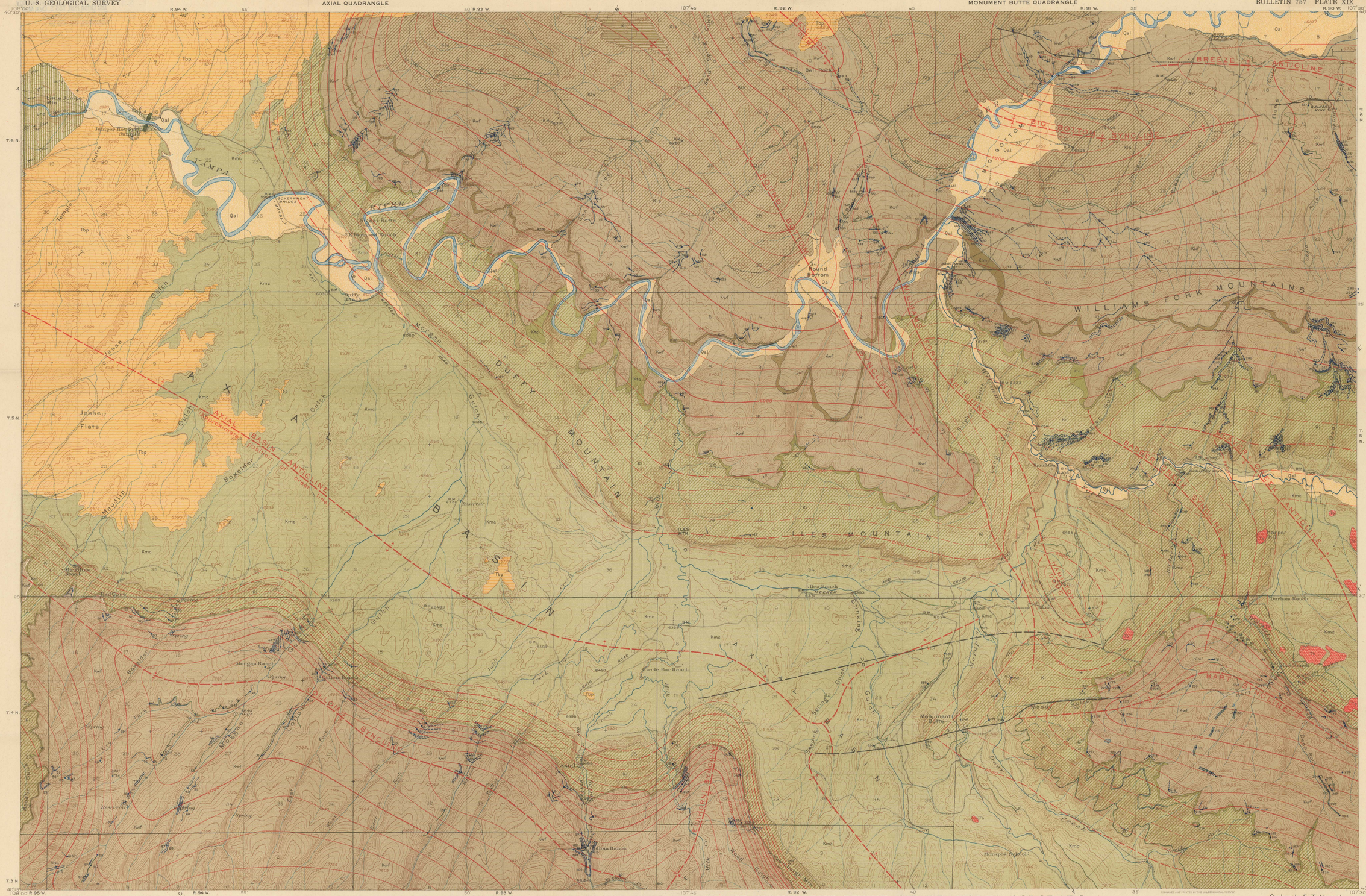


Base from U. S. Geological Survey topographic maps of Axial and Monument Butte quadrangles

GEOLOGIC MAP AND STRUCTURE SECTIONS OF THE AXIAL AND MONUMENT BUTTE QUADRANGLES, COLORADO

Scale $\frac{1}{62500}$

Contour interval 50 feet.
Datum is mean sea level.
1924

Geology by E. T. Hancock, assisted by C. B. Anderson

EXPLANATION

SEDIMENTARY ROCKS

QUATERNARY

Recent

Qal — Alluvium

TERTIARY

Miocene (?)

Tbp — Browns Park formation
(Chiefly soft friable chalky-white sandstone; banal beds in places reddish or yellowish brown and contain considerable conglomerate)

MARKED UNCONFORMITY

CRETACEOUS

Upper Cretaceous

Ki — "Laramie" formation
(Massive sandstones, interbedded with sandy shale and some beds of carbonaceous shale)

Kls — Lewis shale
(Soft clay shale, dark gray to drab; at top massive sandstone and sandy shale with some coal)

Mesaverde group

Kwf, Ktm, Kwf — Williams Fork formation
(Alternating sandstones, sandy shales, carbonaceous shales, and coal beds; Twenty-mile sandstone member, Ktm, about 700 feet below top)

Kto, Ki — Iles formation
(Alternating thick sandstones and sandy shales with few thin coal beds near top and near base; at top massive white sandstone, Trout Creek sandstone member, Kto)

Kmc — Mancos shale
(Chiefly homogeneous clay shale with local sandy layers and beds of sandstone; Morapos sandstone member 800 feet below top)

Dakota sandstone
(Slightly banded greenish-gray quartzitic sandstone changing upward to highly quartzitic sandstone; pebbles at base)

UNCONFORMITY

CARBONIFEROUS TO CRETACEOUS (?)

Pennsylvanian to Lower Cretaceous (?)

Pre-Dakota Mesozoic and Carboniferous rocks, undifferentiated

IGNEOUS ROCKS

TERTIARY

Tb — Basalt
(Lava flows)

Fault
U. Upthrow D. Downthrow

Axis of anticline

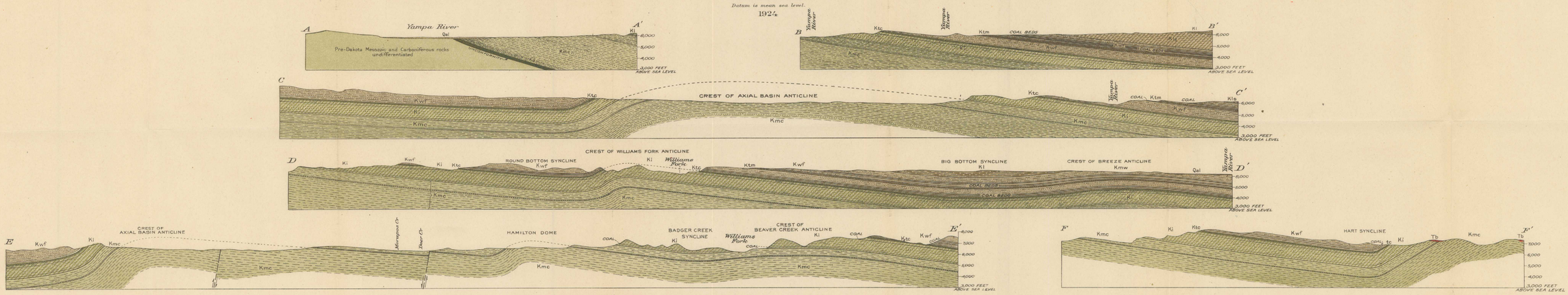
Axis of syncline

Structure contours on top of Trout Creek sandstone; interval 250 feet, datum mean sea level

Outcrop of coal bed
(Where outcrop is uncertain line is dashed. Figures referred to in text show measured sections of bed)

Outcrop of sandstone bed
(Where outcrop is uncertain line is dashed. Figures are referred to in text)

Strike and dip of rocks

Mine

Prospect