GEOLOGIC MAP OF ROCK SPRINGS AREA, SWEETWATER COUNTY, WYOMING

By Alfred R. Schultz

Scale 250,000

5 0 5 10 12 Miles

1920

EXPLANATION

SEDIMENTARY ROCKS

LATE TERTIARY OR EARLY QUATERNARY

Tbc — Bishop conglomerate
(Waterworn and subangular pebbles and boulders embedded in finer gravel and sand)

UNCONFORMITY

TERTIARY

Tb — Bridger formation
(Green and buff tuffaceous shales and sandstones; coarse pumiceous tuffs, marls, and shales; conglomerate, cherts, limestones, and thin beds of lignite; red, green, and buff gypsiferous tuffs and white marls. As here mapped includes the typical Browns Park formation of Powell, represented by the mass southeast of Cold Spring Mountain. South of area covered by this map the author has traced these beds into the Bridger deposits of Washakie Basin.)

UNCONFORMITY

Tug — "Tower sandstone" and plant beds of Powell, including older beds in southwest corner of area

UNCONFORMITY

Tl — Laney shale member
(Thin-bedded shale, sandstone, and limestones; some of the limestones oolitic; also some dark bituminous shale)

UNCONFORMITY

Tcb — Cathedral Bluffs red-beds member
(Variegated clay, shale, and sandstone, in places slightly conglomeratic)

Tt — Tipton shale member
(Thin fissile shale and sandstone; pronounced oolitic limestone, in places 20 to 50 feet thick, near base; some oolitic and concretionary beds)

Tw — Wasatch formation
(Alternating layers of white, yellow, and brown sandstone and gray, drab, and carbonaceous shale, with coal beds and conglomerate)

Eocene — Green River formation

UNCONFORMITY

CRETACEOUS ?

Kpl — Post-"Laramie" formation
(Alternating layers of soft yellowish-brown and white sandstones and drab, brown, and black shales)

UNCONFORMITY

CRETACEOUS

Kl — "Laramie" formation
(Sandstone, clay, and coal beds, with massive basal bed of white and yellow sandstone showing traces of conglomerate in places)

Kls — Lewis shale
(Dark-gray, drab, and black shales, highly gypsiferous; some soft shaly sandstone, and large concretions; lenticular beds of white sandstone near base)

Kmv — Mesaverde formation
(Sandstones and shales. Almond coal group, Kma at top, and Rock Springs coal group, Kmr, at base)

Montana group

Kb — Blair formation
(Drab, yellow, and brown sandstones, interbedded shale and shaly sandstone; little or no bituminous matter; massive sandstones near top give rise to the "golden wall")

Kbs — Baxter shale
(Black and drab shales, very soft and friable; shaly sandstones and arenaceous shale, in places highly gypsiferous)

Kf — Frontier formation
(Sandstones and shales)

Ka — Aspen shale
(Silver-gray and dark shales)

Colorado group

Upper Cretaceous

UNCONFORMITY

JURASSIC AND CRETACEOUS (?)

Jb — Beckwith formation
(White to yellow sandstones; maroon, green, and reddish shales, with bands of conglomerate near middle)

UNCONFORMITY

JURASSIC

Jtc — Twin Creek limestone
(Thin-bedded limestones and thin beds of calcareous sandstone)

UNCONFORMITY

Jn — Nugget sandstone
(White to red cross-bedded sandstones, with some thin beds of red shale)

TRIASSIC (?)

Ra — Ankareh shale
(Very bright-red shales, with local thin red sandstones)

UNCONFORMITY

TRIASSIC

Trt — Thaynes (?) formation and Woodside shale
(Upper part or Thaynes (?) sandstones and shales with thin and thick beds of limestone interlaminated; lower part or Woodside, red to greenish argillaceous shales, drab calcareous shales, and thin beds of sandstone)

Lower Triassic

CARBONIFEROUS

Cpc — Park City formation
(Thick-bedded limestones with bands of shale and with cherty bands in which white phosphate occurs)

UNCONFORMITY

Cw — Weber quartzite
(White sandstone)

Cp — Older Pennsylvanian
(Mostly dark-blue limestones underlain by beds of shale and sandstone in which coal occurs)

Pennsylvanian

Permian and Pennsylvanian

Cm — Mississippian
(Massive white and blue limestones, very fossiliferous)

UNCONFORMITY

DEVONIAN (?) TO CAMBRIAN, INCLUSIVE

D-C — Devonian (?) to later Cambrian
(Shales, calcareous shales, and sandstones, with pinkish quartzites)

PRE CAMBRIAN

€ — Earlier Cambrian and pre-Cambrian
(Cambrian reddish sandstone overlying pre-Cambrian reddish sandstones with beds of conglomerate carrying white pebbles in some places)

rcq — Red Creek quartzite (white quartzite) and schists of intrusive igneous origin

IGNEOUS ROCKS

i — Lava flows, stocks, and dikes

STRUCTURE DATA

8500 — Structure contours on upper surface of highest sandstone lentil of Baxter formation

Anticlinal axis

Synclinal axis

Fault
D—Downthrow

Concealed fault

Strike and dip

(36) Location referred to in text

CRETACEOUS

Kh — Hilliard shale
(Includes equivalents of Blair formation, Baxter shale, and great thickness of older post-Frontier beds)

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