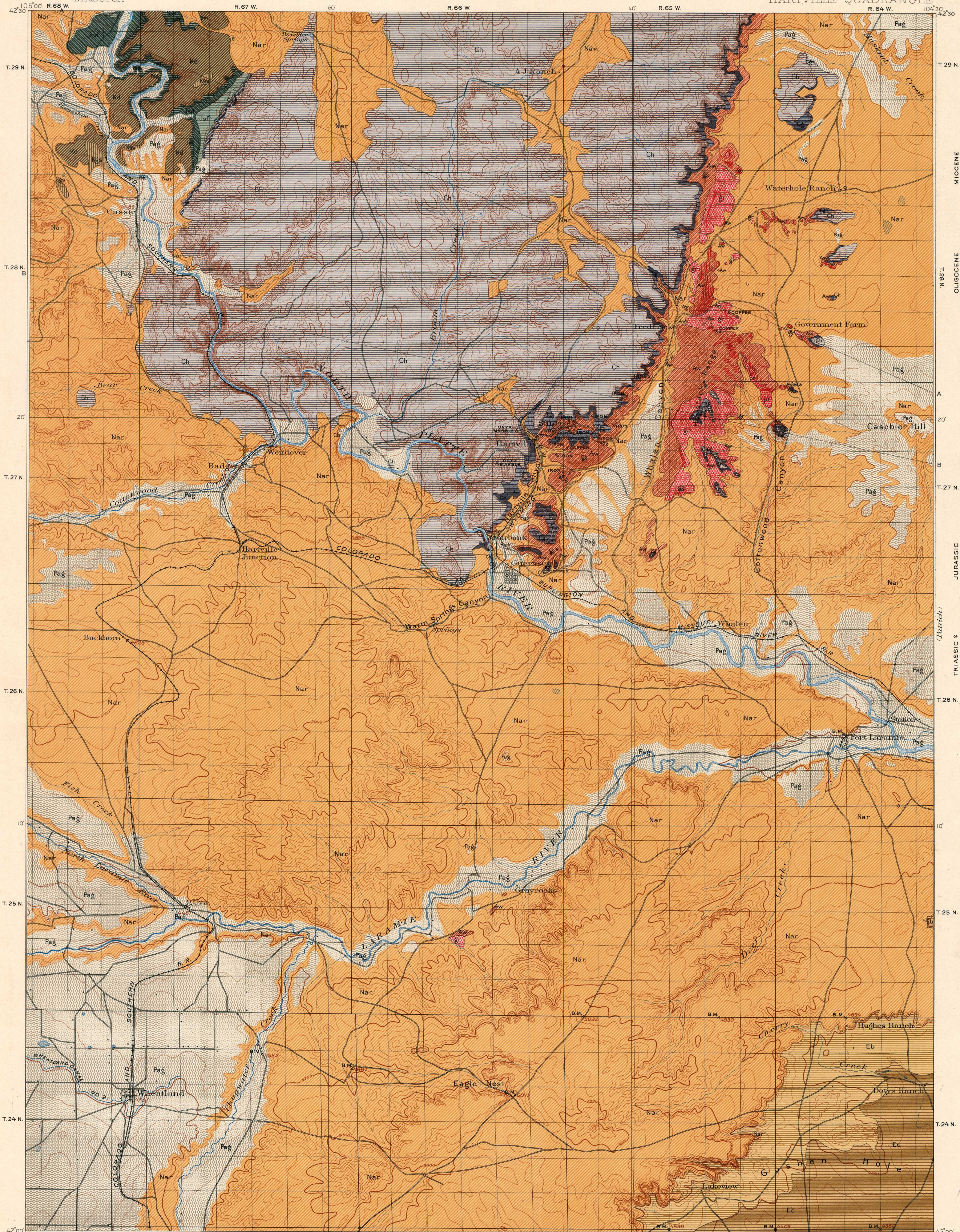


U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT
DIRECTOR

AREAL GEOLOGY SHEET

WYOMING
(LARAMIE COUNTY)
HARTVILLE QUADRANGLE



Henry Gannett, Chief Topographer.
Jno. H. Renshaw, Topographer in charge.
Topography by W.S. Post.
Surveyed in 1895.

Scale 1:62,500
Contour interval 50 feet.
Datum is mean sea level.
Edition of Sept. 1902.

Scale 1:62,500
1 2 3 4 5 Miles
1 2 3 4 5 Kilometers
Contour interval 50 feet.
Datum is mean sea level.
Edition of Sept. 1902.

Geology of Cretaceous and older rocks
by W.S. Tangier Smith.
Geology of post-Cretaceous rocks
by N.H. Darton, assisted by C.A. Fisher.
Surveyed in 1900 and 1902.

LEGEND

SURFICIAL ROCKS
(Areas of surficial
rocks are shown by
patterns of dots
and circles)

Pag
Alluvium and
terrace gravels
(gravel, sand, and silt on
old terraces and in re-
cent stream bottoms of
which only the larger
areas are shown)

SEDIMENTARY ROCKS
(Areas of sedimentary
rocks are shown by
patterns of parallel
lines)

Nar
Ankaree
formation
(white sand and soft
stone with concretions)

Eb
Brule
formation
(red-colored sandy clay
with sandstone layers)

Ec
Chadron
formation
(greenish-brown and pink
sandy clay and gray
sandstone)

Kgs
Graneros
formation
(dark-colored flinty shale
containing calcareous
concretions and some
massive sandstone)

Kd
Dakota
sandstone
(massive sandstone with
thin beds of shale
possibly including lower
cretaceous strata at the base)

Jm
Morrison
clay
(clay of various colors,
green, purplish, reddish,
light gray, dark gray,
and nearly black)

Jad
Sundance
formation
(buff sandstone with
interbedded clay near
the top)

Jsf
Spearfish
sandstone
(soft thin bedded red
sandstone, red beds)

Cmk
Mimikahta
limestone
(very thin bedded
gray limestone)

Cb
Opeche
formation
(fine grained red sand-
stone with some shale)

Ch
Hartville
formation
(massive limestone with
beds of sandstone and
quartzite)

Cg
Guernsey
formation
(limestone with some sand-
stone and quartzite)

Aw
Whalen group
(quartzite, calcareous
sandstone, and some
limestone)

gr
Granite
(large masses intrusive
in the Algonkian rocks)

pt
Pegmatite
(large masses intrusive
in the Algonkian rocks)

Dikes
(granite, pegmatite,
and some aplite)

Mines
X Prospects

Sections
A
B