

LEGEND

SEDIMENTARY ROCKS
(continued)

SHEET SYMBOL SECTION SYMBOL

Cmk Cmk

Mimelahta limestone
(very thin bedded
limestone in
massive ledges)

Co Combined with
Mimelahta
sandstone

Opeche formation
(light red sandy shale,
purple at top)

Cml Cmo

Mimelahta sandstone
(red, yellow and grey,
oolitic sandstone)

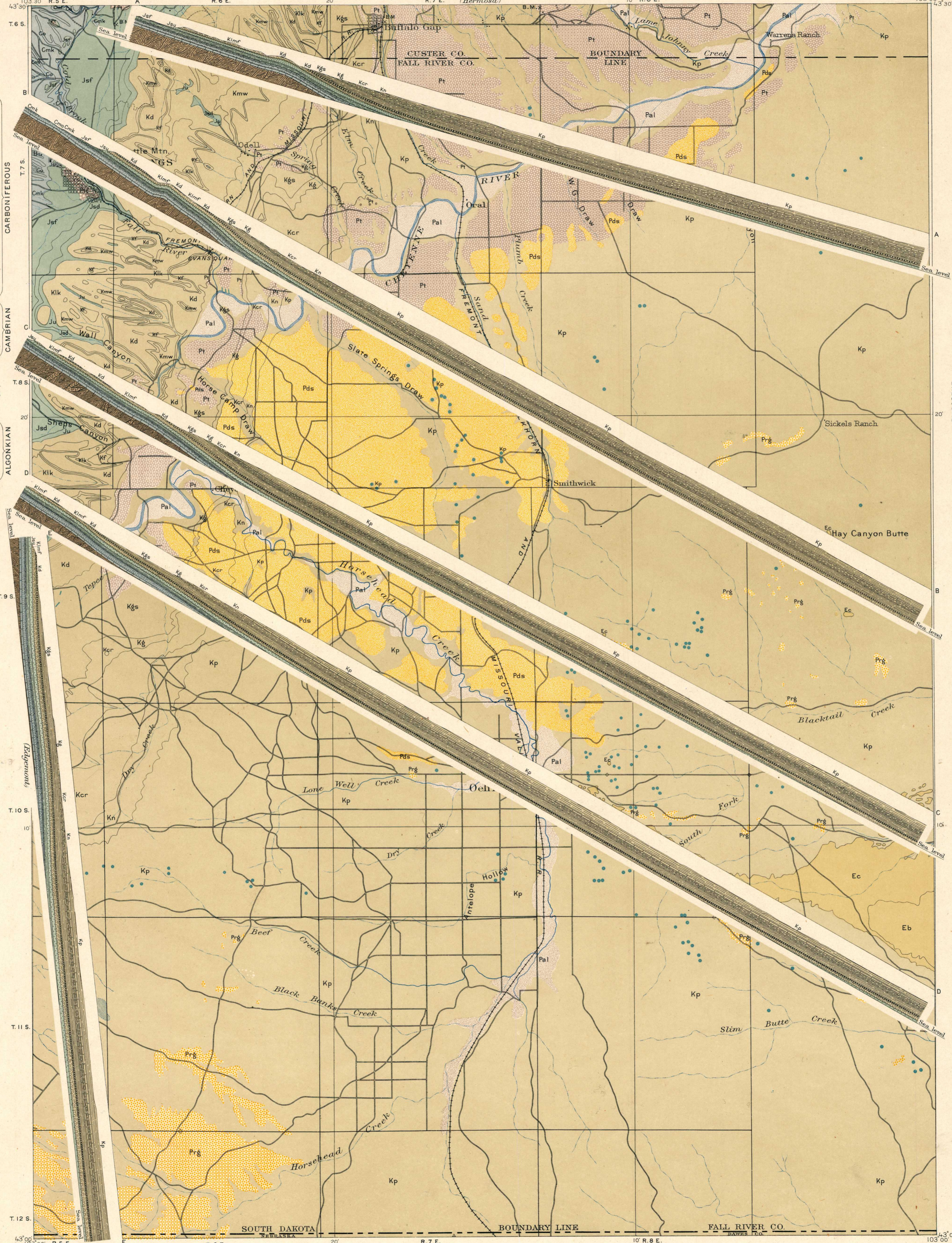
Pahasapa limestone
and
Deadwood sandstone
(do not outcrop in
this quadrangle)

ANCIENT
CRYSTALLINE ROCKS

SECTION SYMBOL

Schist and
granite
(do not outcrop in
this quadrangle)

Sandstone dikes
in Graneros shale
(material derived from
Dakota sandstone)



LEGEND

SURFICIAL ROCKS

SHEET SYMBOL

Pds

Dune sand

Pal

Alluvium
(only the larger de-
posits represented)

Pt

Older terrace
deposits
(sand, gravel and loam)

Prc

Terrace
conglomerate
(locally light colored gravel
beds in a red terrace
deposits)

Prg

Residual
gravel
(from Chadron sand)

SEDIMENTARY ROCKS

SHEET SYMBOL SECTION SYMBOL

Eb

Beule clay
(massive sandy, pale pink
and buff clay)

Ec

Chadron
sand
(white to grey sand with
thin limestone near top)

Kp

Pierre shale
(dark grey shale or clay
with thin concretions)

Kn

Niobrara
formation
(impure cherty limestone
or calcareous clay,
weathers light buff)

Kcr

Carlile
formation
(grey shale and
thin sandstone)

Kg

Greenhorn
limestone
(impure starchy limestone)

Kgs

Graneros
shale
(black shale shale)

Kd

Dakota
sandstone
(massive buff sandstone
with thinner beds at top)

Kf

Fuson
formation
(massive sandy clay
of various colors)

Kmw

Minnewaste
limestone
(massive grey limestone)

Klk

Lakota
formation
(massive buff sandstone
with clay intercalations)

Ju

Unkpapa
sandstone
(massive blue, greenish,
purple, red, purple,
white, yellow and buff)

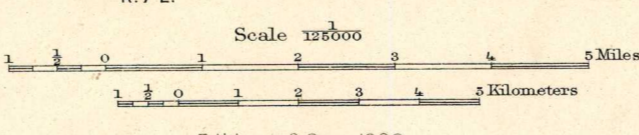
Jsd

Sundance
formation
(buff sandstone and
greenish shale)

Jsf

Spearfish
shale
(red sandy shale)

A.H. Thompson, Geographer.
E.M. Douglas, Topographer in charge.
Triangulation by E.M. Douglas.
Topography by T.M. Bannon.
Surveyed in 1893.



Geology by N.H. Darton.
Surveyed in 1893.

Legend is continued
on the left margin.