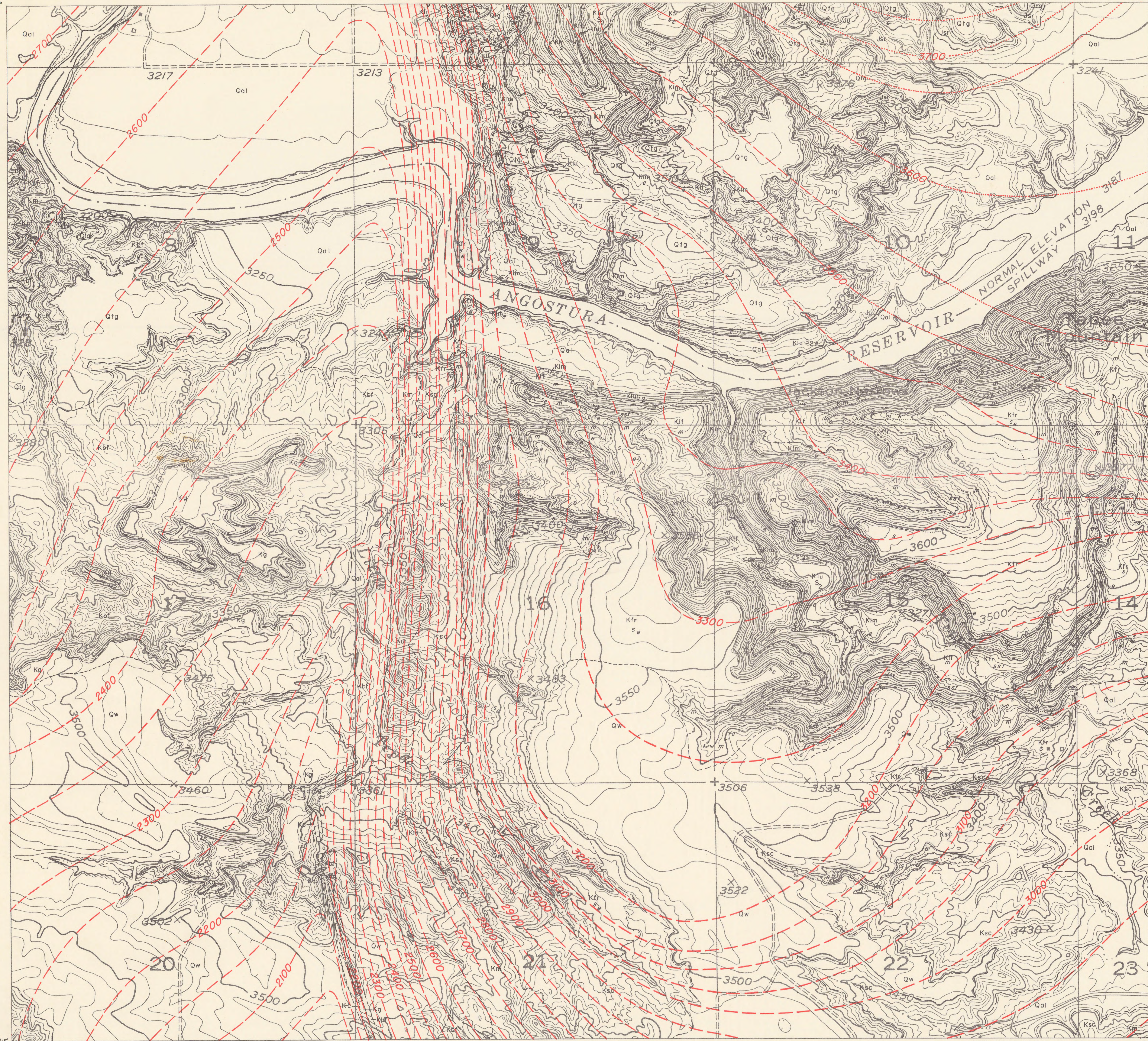


43°17'30"

103°32'30"

103°30'  
43°17'30"



EXPLANATION

Qal

Alluvium

Qw

Wind-blown sand  
May include deposits of possible alluvial origin

Qtg

Terrace gravel

Kc

Carlile shale  
Dark-gray marine shale, in part calcareous. Limestone  
concretions abundant in upper 40 feet, fossiliferous  
silty concretions in middle

Kg

Greenhorn limestone  
Slabby grayish-yellow limestone 15 to 30 feet thick  
containing abundant *Inoceramus lobatus*. Calcareous  
shale above and below mapped with Carlile and  
Belle Fourche shales

Kbf

Belle Fourche shale  
Dark-gray marine shale. Includes zone 70 feet thick  
of large manganese concretions at base

Km

Mowry shale  
Medium-gray marine shale. Sandstone dikes and  
masses indicated by crenulated line and s

Ksc

Skull Creek shale  
Dark-gray marine shale

Kfr

Fall River formation  
s, sandstone; m, mudstone; ssf, sandstone and silt-  
stone interbedded

Klf

m

Fuson member  
m, mudstone

Klm

Minnewaste limestone member  
Thin medium-gray sandy limestone

Klu

m S<sub>2</sub>

Unnamed lower unit  
m, mudstone; S<sub>2</sub> is a prominent fine-grained yellowish-  
gray to pale-red crossbedded sandstone, the top of  
which is marked locally by a prominent 5-foot red  
sandstone. S<sub>2</sub> contains discontinuous lenses of  
mudstone and siltstone

Ju

Unkappa sandstone  
White to pale-red fine-grained argillaceous indistinctly  
crossbedded sandstone. Top locally grades into clay-  
stone

Jsr

Redwater shale member of the Sundance formation  
Gray marine shale, siltstone, and thin fossiliferous  
limestone beds, glauconitic at top

Contact

Dashed where approximately located

Indefinite or inferred contact

Top and bottom contacts of Inyan Kara group  
Dashed where approximately located

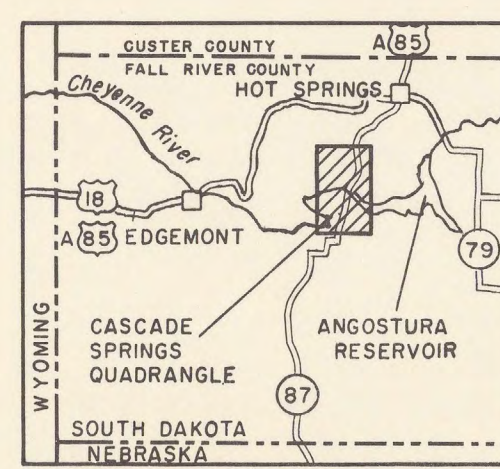
Contact within Inyan Kara group  
Dashed where approximately located

Limit of exposure  
"e" indicates exposure. Exposures mapped only in Inyan  
Kara group, Unkappa sandstone, and Sundance formation

Structure contour  
3200  
Drawn on top of unnamed lower unit of Lakota formation;  
interval 50 feet; datum is mean sea level. Long dashes  
where unnamed lower unit of Lakota formation is buried,  
dotted where eroded

X

Uranium occurrence

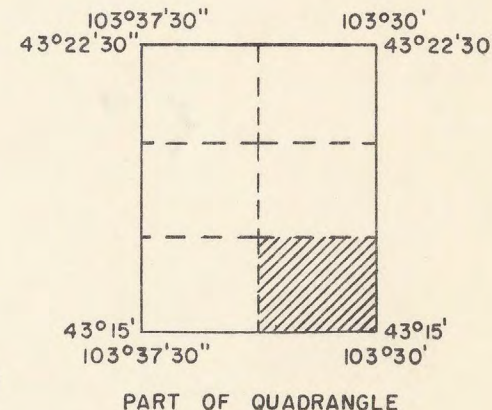


INDEX MAP SHOWING LOCATION  
OF CASCADE SPRINGS QUADRANGLE

0 5 10 Miles

TRUE NORTH  
MAGNETIC NORTH

APPROXIMATE MEAN  
DECLINATION, 1959



Topography by U. S. Geological Survey by  
multiplex methods from aerial photographs

PRELIMINARY GEOLOGIC AND STRUCTURE MAP OF THE SOUTHEAST PART OF THE CASCADE SPRINGS QUADRANGLE, FALL RIVER COUNTY, SOUTH DAKOTA

By  
Edwin V. Post

Scale 1:7200

1000 0 1000 2000 3000 Feet

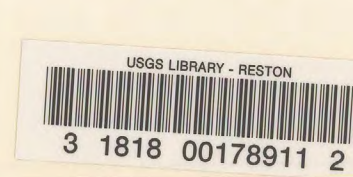
Contour interval 10 feet

Datum is mean sea level

1959

MINERAL INVESTIGATIONS  
FIELD STUDIES MAP MF-212

South Dakota (SE Cascade Springs quad). Geol. 1:7200. 1959.  
esp. 1.



M(200)  
MF 212  
Sheet 6 of 6  
No. 212

For sale by U. S. Geological Survey, price 50 cents