PREPARED IN COOPERATION WITH THE
DIVISION OF RAW MATERIALS OF THE
U. S. ATOMIC ENERGY COMMISSION

(200)
T67rm
no. 1049

Topography by U.S. Geological Survey, 1951, using multiplex methods; aerial photographs taken in 1948.

Geology mapped in 1956.

U.S. GEOLOGICAL SURVEY
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EXPLANATION

QUATERNARY

Qal — Alluvium

Qtg 3 — Terrace gravel

Number indicates vertical position above terrace number 1. Unnumbered terraces are intermediate in altitude between numbered terraces.

CRETACEOUS

Upper Cretaceous

Kc — Carlile shale

Kg — Greenhorn limestone

Kbf — Belle Fourche shale

Km, Kmw — Mowry shale

Whoopup sandstone unit (Kmw) is indicated by line and circles. Line is dashed where inferred.

Kn — Newcastle sandstone

Ksc — Skull Creek shale

Sandstone dikes are indicated by lines and squares.

Lower Cretaceous

Inyan Kara group

Kfr (st, sst, s, S_5) — Fall River sandstone

st, *siltstone*; sst, *siltstone with thin beds of sandstone*; s, *sandstone*; S_5, *a major sandstone which correlates with S_5, as shown on the preliminary geologic maps of parts of the Flint Hill, Edgemont NE, and Minnekahta quadrangles. In the Clifton quadrangle, S_5 is a yellow to light-gray, fine- to medium-grained, well sorted, moderately cemented, thick-bedded, quartz sandstone. Where yellow, it has many ferruginous, calcareous, or siliceous nodules and is uranium-bearing locally.*

Kfl (m, ms, st, s, S_1, S_{1a}) — Fuson formation and Lakota sandstone undifferentiated

m, *mudstone*; ms, *mudstone with thin beds of sandstone*; st, *siltstone*; s, *sandstone*; S_1 and S_{1a}, *major sandstones which may correlate with unit S_1 as shown on the preliminary geologic maps of the Flint Hill, Edgemont NE, and Minnekahta quadrangles. S_1 is a light-gray to light-brown, medium- to coarse-grained, poorly sorted, strongly cemented, thin- to thick-bedded, cross-laminated, granule sandstone. S_{1a} is a white to light brown, fine- to medium-grained, well sorted, moderately cemented, thick-bedded, quartz sandstone.*

JURASSIC

Upper Jurassic

Jm — Morrison formation

Jsr — Sundance formation
Redwater shale member

Contact
Dashed where approximately located

Indefinite or inferred contact

Ticked contact
Shows position of upper and lower boundaries of Inyan Kara group. Dashed where inferred.

Doubly ticked contact
Shows position of lower boundary of Fall River sandstone. Dashed where inferred.

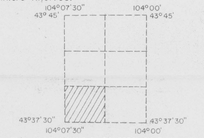
Limit of exposure
Areas of exposure denoted by "e"

Area of much landslide debris
Triangles point toward area.

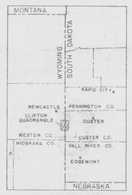
G, Y — Color boundary in sandstone S_5
G, *light gray*; Y, *yellow*

Structure contour
Represents the altitude of the base of the Fall River sandstone. Long dashes where approximate, short dashes where restored. Contour interval is 100 feet. Datum is mean sea level

U, D — Fault
U, *upthrown side*; D, *downthrown side. Dashed where inferred.*



PART OF QUADRANGLE COVERED BY THIS MAP



INDEX MAP
0 20 40 MILES

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1957.

PRELIMINARY GEOLOGIC MAP OF THE SOUTHWEST PART OF THE CLIFTON QUADRANGLE, WESTON COUNTY, WYOMING

By
N. P. Cuppels and F. R. Conwell

Scale 1:7200

1000 0 1000 2000 3000 FEET

Contour interval 20 feet
Datum is mean sea level

1957