DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
U. S. ATOMIC ENERGY COMMISSION

TRACE ELEMENTS MEMORANDUM REPORT 1093

EXPLANATION

QUATERNARY

Qal — Alluvium

Alluvial deposits on present flood plains.

Qd — Dune sand

Drifting and stabilized sand dunes.

UNCONFORMITY

JURASSIC AND JURASSIC(?)

Jn — Navajo sandstone

Cross-stratified light-brown to white medium-grained sandstone with scattered lenses of gray limestone.

JURASSIC(?)

Glen Canyon group

Jk — Kayenta formation

Irregularly bedded red, gray, and pale-purple sandstone, siltstone, and clay-pebble conglomerate. Locally as much as 60 feet of the upper part of the Kayenta grades laterally into Navajo sandstone; and as much as 30 feet of the lower part of the Kayenta grades laterally into Wingate sandstone.

TRIASSIC

Upper Triassic

Rw — Wingate sandstone

Cross-stratified light-gray, reddish-brown, and light-brown fine-grained sandstone. Locally forms vertical cliffs.

Rc — Chinle formation, undifferentiated

Reddish-orange very fine grained sandstone and siltstone in upper one-third, variegated siltstone and claystone and lenticular beds of sandstone and limestone in lower two-thirds. Although this formation contains uranium minerals in adjacent areas, none were found in this area.

Contact

(Dashed where approximately located; short dashes where indefinite boundaries of surficial deposits)

U / D — High angle fault

(Dotted where concealed; U, upthrown side; D, downthrown side)

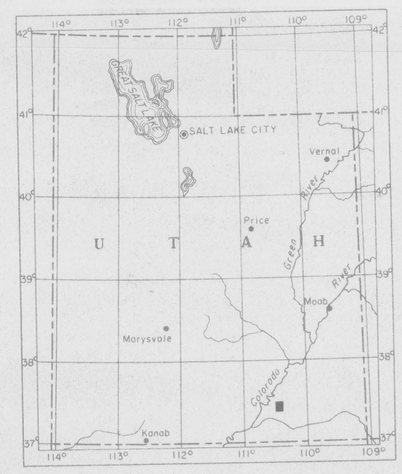
Anticline

(Showing crest line. Dotted where concealed)

Indefinite syncline

(Showing position of trough. Dotted where concealed)

Strike and dip of beds



INDEX MAP OF UTAH SHOWING AREA OF THIS REPORT

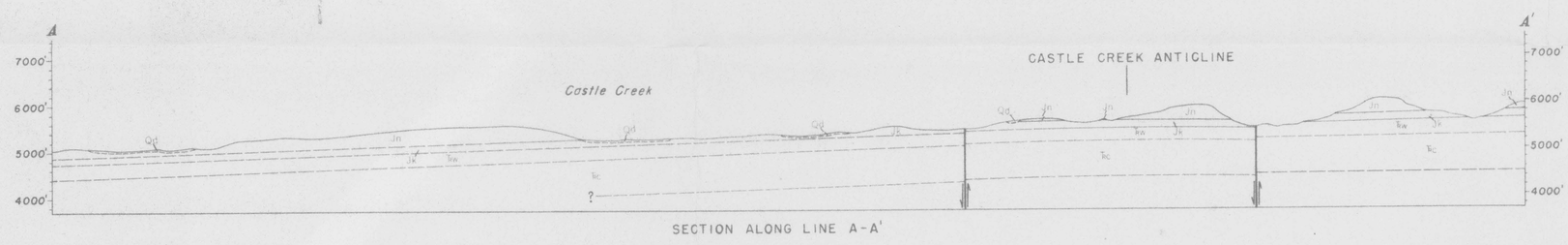
Geology by Thomas E. Mullens
and James N. Taggert, 1953

15°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN
DECLINATION, 1948

SCALE 1:24000

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL



SECTION ALONG LINE A-A'

PRELIMINARY GEOLOGIC MAP OF THE CLAY HILLS 2 NW QUADRANGLE, SAN JUAN COUNTY, UTAH

BY

THOMAS E. MULLENS