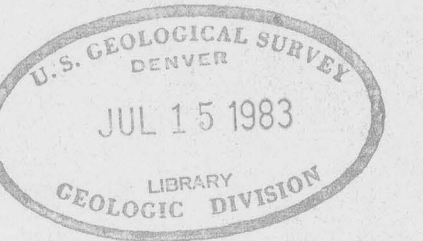


(200)
To 7mm
no. 922



EXPLANATION

Qal
Alluvium
stream deposited silt, sand, and gravel; locally with carbonaceous material and charcoal. Recent erosion has cut arroyos into most of the alluvium.

Rcm
Rcl
Chinle formation
Moss Back member, Rcm, massive tan to light-gray conglomeratic sandstone; lower Chinle, Rcl, blue, gray, and red mudstone, locally contains interbedded thin gray flaggy sandstone lenses. Contains uranium deposits in the Elk Ridge area.

UNCONFORMITY

Ra
Lower and Middle(?) Triassic
Moenkopi formation
Red, buff, and brown shale and sandstone. Shale, dominant near the top and base of the formation, is interbedded with thin flaggy sandstone beds. Some thick sandstone beds occur near the middle of the formation. Individual sandstone beds are discontinuous and generally grade laterally into shale within half a mile.

Pch
Pcc
Pcc
Permian
Cutler formation
Hoakinnini tongue, Pch, reddish to buff silty sandstone and a few interbeds of siltstone; characterized by scattered very coarse frosted quartz grains. Organ Rock tongue, Pcc, massive red sandy siltstone; Cedar Mesa sandstone member, Pcc, massive festoon crossbedded light-gray sandstone.

Pph
Pennsylvanian and Permian(?)
Rico formation
Interbedded thin impure sandy limestone, limy sandstone, festoon crossbedded sandstone, and shale; contains some marine fossils. The contact with the overlying Cedar Mesa sandstone member of the Cutler formation is drawn at the top of the uppermost fossiliferous limestone.

Ph
Pennsylvanian
Mermosa formation
Interbedded limestone, sandstone, and silty shale; marine fossils generally abundant. The contact with the overlying Rico is drawn at the top of the highest fusulinid-bearing limestone. Limestone, much more abundant than in the overlying Rico, commonly contains less clastic material and more fossils.

Contact
(Dashed where approximately located; short dashes where concealed)

High angle fault
(Dashed where approximately located, dotted where concealed; U, upthrown side; D, downthrown side)

Doubtful or probable fault
(U, probable upthrown side; D, probable downthrown side)

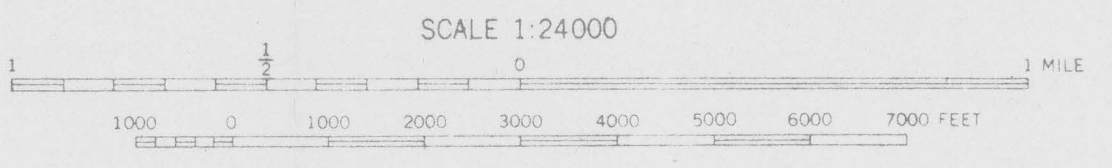
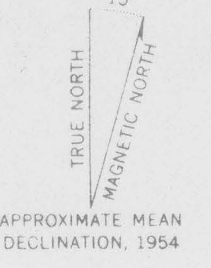
Anticline
(Showing trace of axial plane and direction of plunge of axis; dashed where approximately located)

Syncline
(Showing trace of axial plane and direction of plunge of axis; dashed where approximately located)

Strike and dip of beds

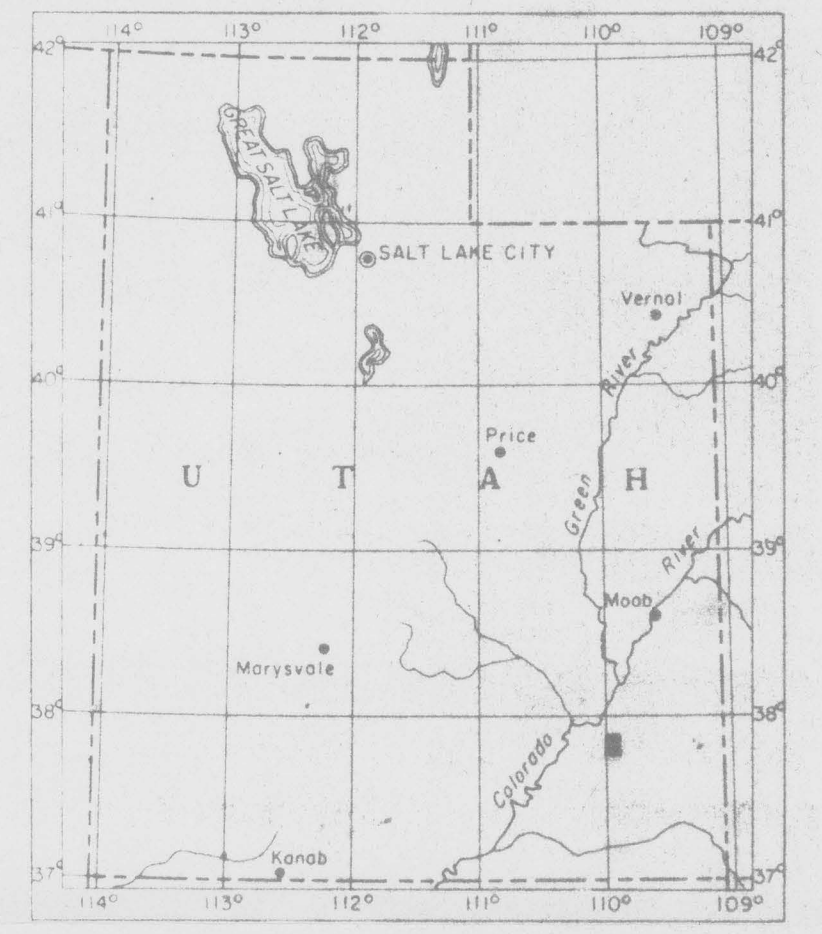
Structure contours
7000
Drawn on base of the Moss Back member of the Chinle formation and the base of the Cedar Mesa sandstone member of the Cutler formation. Dashed where approximately located; short dashes indicate projection above surface. Contour interval 100 feet. Datum is mean sea level.

Map by the Geological Survey 1954
Topography by multiplex methods from
aerial photographs taken 1952



CONTOUR INTERVAL 40 FEET
DATUM - MEAN SEA LEVEL

GEOLOGY BY R. Q. LEWIS, SR., AND R. H. CAMPBELL, ASSISTED BY P. H. REITAN AND F. A. GUSTAFSON, 1953-55



PRELIMINARY GEOLOGIC MAP OF ELK RIDGE 2SW QUADRANGLE, SAN JUAN COUNTY, UTAH

by
Richard Q. Lewis, Sr., and Russell H. Campbell