

EXPLANATION

- SEDIMENTARY ROCKS
- Quaternary: Alluvium, Qal; covering deposits, undifferentiated, Qc
 - Permian:
 - Pcc: Cutler formation
 - Pcha: Cedar Mesa sandstone member, Pcc; Halgaito tongue, Pcha
 - Permian(?) and Pennsylvanian:
 - PIPru: Rico formation Upper unit, PIPru; lower unit, PIPri
 - Ph: Hermosa formation
- IGNEOUS ROCKS
- Tertiary: TI: Dike

Contact
(Can be accurately located within 30 feet horizontally)

Contact
(Can be approximately located within 30 to 200 feet horizontally)

Contact
(Cannot be located accurately; probable error greater than 200 feet)

Fault
Dashed where approximately located
U, upthrown side; D, downthrown side

Anticline
Showing trace of axial plane and direction of plunge

Syncline
Showing trace of axial plane and direction of plunge

Strike and dip of beds
Based on field measurement

Strike and dip of beds
Computed by photogrammetric methods

Approximate strike and dip of beds
Based on photo-interpretation

Horizontal beds

Strike of approximately vertical joints
Based on photo-interpretation

Uninterpretable linear feature on photograph
May be geologically significant

Abandoned oil well
Mine or quarry

Reservation boundary

Primary road
Secondary road

Trail

BLUFF QUADRANGLE
CLAY HILLS QUADRANGLE

The contact between the Cutler and Rico formations is mapped stratigraphically lower west of the dotted line (U. S. Geol. Survey Bull. 865, 1936) than it is east of the dotted line (U. S. Geol. Survey Trace Elements Mem. Rept. 671, 1954). The stratigraphic interval between these "contacts" has been mapped as the upper part of the Rico formation east of the dotted line and has been included in the Halgaito tongue of the Cutler formation west of the dotted line.

Planimetric and geologic detail on this map, Bluff 11, does not properly join that on Bluff 14 owing to a more recent and accurate base map compilation for Bluff 11 and owing to new geologic interpretation resulting from recent field work.

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Base map modified by U.S. Geological Survey from Soil Conservation Service map, Utah-365. The aerial photographs used for photogeologic interpretation were taken in October 1962.

4	3	2	1
5	6	7	8
12	10	9	
13	14	15	16

BLUFF QUADRANGLE

PHOTOGEOLOGY BY C. F. MILLER
SCALE 1:24,000
JUNE 1964

Roads as classified in this map series are as follows: Primary roads are maintained and graded, traversable by two-wheel-drive vehicles; secondary roads are traversable, possibly by two-wheel-drive vehicles; trails are not traversable by four-wheel-drive vehicles except locally. When other information is lacking, roads are classified by their appearance on aerial photographs.

Stratigraphic column for this area modified from U.S. Geol. Survey Trace Elements Memo. Rept. 671, 1954 and U.S. Geol. Survey Paper 188, 1936. Geographic and geologic field data from U.S. Geol. Survey Water Supply Paper 539, 1924.

Maps of this series have been compiled from photogeologic data that have not been checked in the field, hence they may not have the benefit of thorough evaluation with respect to mass-termined errors from field data.



Utah (Bluff 11 quad.) Geol. 1:24,000, 1964, cop. 1

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