



EXPLANATION

- Quaternary**
- Oc  
Covering deposits, undifferentiated
- Jurassic**
- Middle and upper**
- Je  
Entrada sandstone
- Jc  
Carmel formation
- Jn  
Navajo sandstone
- Jk  
Kayenta formation
- Jw  
Wingate sandstone
- Lower**
- Triassic**
- Upper**
- Rc  
Chinle formation
- Rs  
Shinarump conglomerate
- Lower**
- Permian**
- Rm  
Moenkopi formation
- Pcw  
White Rim sandstone member of Cutler formation

**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)  
? - ? - ? - ?  
Probable or doubtful contact

**Fault**, showing direction of dip (U, upthrust side; D, downthrust side)  
Dashed where approximately located

**Strike and dip of beds**  
(Based on photo-interpretation)

**Conspicuous resistant bed within a formation**  
(May be traceable only locally)

**Strike of approximately vertical joints**  
(Based on photo-interpretation)

**Strike and dip of joints**  
(Based on photo-interpretation)

Secondary road  
Trail

Planimetric base map compiled by U. S. Geological Survey from vertical aerial photographs by radial-tangent methods. Horizontal control based on U. S. Geol. Survey Bull. 951, pl. 1. Position of county line taken from Utah State Highway map, Garfield County No. 1.

4	3	2	1
8	7	6	5
12	11	10	9
15	14	13	12

ORANGE CLIFFS QUADRANGLE

PHOTO GEOLOGIC MAP  
ORANGE CLIFFS - 12  
WAYNE AND GARFIELD COUNTIES, UTAH

PHOTO GEOLOGY BY R. G. RAY  
PHOTO GEOLOGY UNIT, ALASKAN GEOLOGY BRANCH  
SCALE 1:24,000

DECEMBER 1952

Stratigraphic column for this area modified from U. S. Geol. Survey Bull. 951, 1946, and U. S. Geol. Survey, Oil and Gas Inv., Map OM 131, 1952.