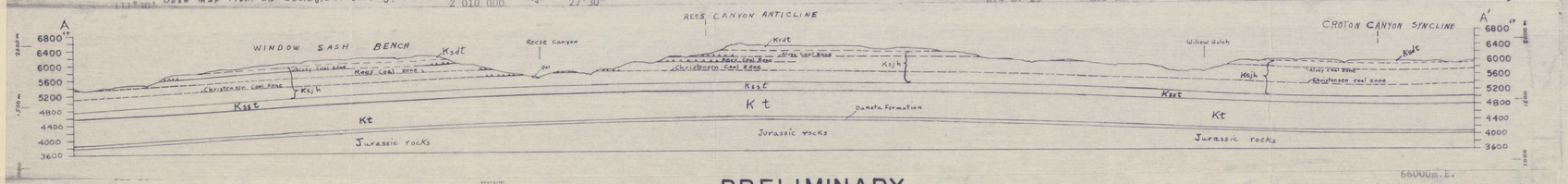
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Advance Sheet
Subject to correction
To be published at 1:24 000 scale



CORRELATION OF MAP UNITS

Qal	Holocene and Pleistocene	QUATERNARY
Qc		
Unconformity		
Kw	Upper Cretaceous	CRETACEOUS
Ksdt		
Ksjh		
Unconformity		
Ksst		
Kt		

DESCRIPTION OF MAP UNITS

Qal ALLUVIUM (HOLOCENE AND PLEISTOCENE)--Gravel, sand, and silt in stratified deposits along major drainages; includes coarse unsorted flood deposits in Reese Canyon

Qc COLLUVIUM AND LANDSLIDE DEPOSITS (HOLOCENE AND PLEISTOCENE)--Gravel, sand, and silt in unstratified deposits; includes large sandstone blocks of Straight Cliffs Formation and rubble that has moved down steep slopes partly as landslide material and talus. Thickness 20-50 ft (6-15 m)

Kw WAHWEAP FORMATION (UPPER CRETACEOUS)--Olive-gray claystone and mudstone alternating with grayish-orange, medium-grained sandstone. Only lower 50-200 ft (15-61 m) exposed in quadrangle

STRAIGHT CLIFFS FORMATION (UPPER CRETACEOUS):

Ksdt Drip Tank Member--Grayish-orange to light-gray, medium- to coarse-grained, cross-bedded sandstone. Generally of fluviatile origin, but base may be reworked marine or beach sand. Thickness 180-200 ft (55-61 m)

Ksjh John Henry Member--Pale-yellowish-orange, fine-grained, marine sandstone interbedded with nonmarine sandstone, mudstone, carbonaceous shale, and coal. Coal resources are in the Alvey, Rees, and Christensen coal zones. Thickness 830-900 ft (253-274 m)

Ksst Smoky Hollow and Tibbet Canyon Members--Shown in section only

Smoky Hollow Member--Mottled white to grayish-orange, coarse-grained to conglomeratic, massive sandstone; cross-bedded at top. Lower part is interbedded gray mudstone, carbonaceous shale, and thin lenticular coal beds. Thickness 120-130 ft (37-40 m)

Tibbet Canyon Member--Grayish-yellow, fine-grained sandstone. Marginal marine in origin; intertongues with Tropic Shale. Thickness 90-100 ft (27-30 m)

Kt TROPIC SHALE (UPPER CRETACEOUS)--Olive-gray shale; a few thin grayish-orange, fine-grained sandstone beds in upper part. Thickness about 700 ft (213 m). Shown in section only

(20) 3.2 COAL BED--Dashed where approximately located; short dashed where inferred. Thickness of coal, in feet[1], measured at triangle (several numbers indicate individual bed thicknesses). Number in circle refers to measured coal section

BURNED COAL BED--Approximately located

CONTACT--Approximately located; short dashed where inferred

FAULT--Dashed where approximately located. Bar and ball on downthrown side

ANTICLINE--Showing crestline and direction of plunge. Dashed where approximately located

SYNCLINE--Showing troughline and direction of plunge. Dashed where approximately located; dotted where concealed

STRIKE AND DIP OF BEDS

5 Inclined

Horizontal

2 COMPONENT OF DIP OF BEDS--Dot marks point of observation

6100 STRUCTURE CONTOURS--Drawn on top of the Alvey coal zone of the John Henry Member of the Straight Cliffs Formation. (Generally drawn on top of an actual coal bed 50 ft (15.2 m) above the G sandstone.) Dashed where control is less accurate; short dashed where projected above land surface. Contour interval 100 ft (30.5 m). Datum is mean sea level

COAL DRILL HOLE

DRY HOLE--Showing name of operator, lease name, and total depth (TD), in feet[1]

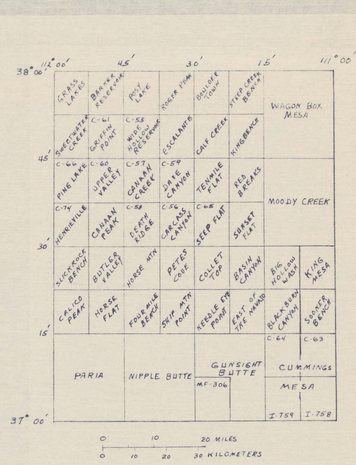
D6059 MESOZOIC FOSSIL LOCALITY--Showing USGS Denver catalog number

[1] To convert feet to meters, multiply by 0.3048.

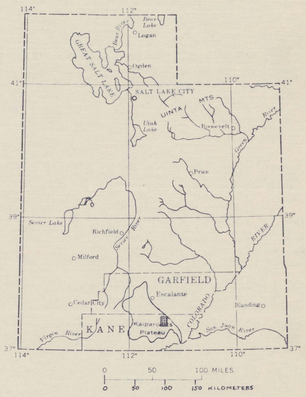
FOSSIL COLLECTIONS

[Stratigraphic location of the collections is shown on the columnar section. Mollusk identifications are by W. A. Cobban; gastropods, N. F. Sohl. Collections by Fred Peterson. Located on map in T. 38 S., R. 4 E., sec. 21, NE¼NW¼]

USGS locality No.	Fossils identified
D6058-----	Calcareous worm tube Inoceramus cf. I. mesabiensis Bergquist Corbula sp. Stenomelania? sp. Pachychiloides? sp. Ammonite fragment
D6059-----	Bryozoan (attached to oyster) Crassostrea coalvillensis (Meek) Crassostrea soleniscus (Meek) Brachidontes sp.



INDEX OF SOUTH-CENTRAL UTAH--Showing Collet Top quadrangle, quadrangle names, and numbers of recently published U.S. Geological Survey geologic maps



INDEX MAP SHOWING LOCATION OF QUADRANGLE, UTAH
COLLET TOP

U. S. GEOLOGICAL SURVEY
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OPEN-FILE REPORT
This report has not been edited for conformity with Geological Survey editorial standards or stratigraphic nomenclature.

~~Utah (Collet Top quad). Dist 1:24,000. 1977~~
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~~Cop 1~~

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Mapped by Pacific Region, Geological Survey

This is an unedited copy of an original manuscript including field additions made in 1968

PRELIMINARY

SCALE 1:24000

GEOLOGIC MAP AND COAL RESOURCES OF THE COLLET TOP QUADRANGLE, KANE COUNTY, UTAH

BY
H. D. ZELLER
1977

CONTOUR INTERVAL 40 FEET
DASHED LINES REPRESENT 20-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

UTM GRID AND 1968 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

COLLET TOP, UTAH
KANE CO.

Straight Cliffs 2 NW, Utah
Escalante South, Utah