DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
W. E. WRATHER, DIRECTOR

PREPARED IN COOPERATION WITH THE
U. S. ATOMIC ENERGY COMMISSION
COLORADO GEOLOGICAL SURVEY BOARD
AND COLORADO METAL MINING FUND

MINERAL INVESTIGATIONS
FIELD STUDIES MAP MF 18

PRELIMINARY GEOLOGIC MAP OF THE ATKINSON CREEK QUADRANGLE, COLORADO

By
E. J. McKay

Scale 1:24000

1 ½ 0 1 Mile

1954

Base map by Topographic Division
U. S. Geological Survey, 1950

Geology mapped by E. J. McKay
and F. W. Cater, Jr. in 1949

APPROXIMATE MEAN DECLINATION, 1954
15° TRUE NORTH MAGNETIC NORTH

MINERAL INVESTIGATIONS
FIELD STUDIES MAP MF 18

EXPLANATION

Qal — Alluvium (QUATERNARY, Pleistocene and Recent)
Light-red wind-deposited sand and silt on benches and mesa tops, reworked in part by water; Recent valley fill and stream deposits.

Qg — Pediment gravel (QUATERNARY, Pleistocene and Recent)
Unconsolidated gravel, consisting largely of pebbles of Pre-Cambrian rocks.

Qls — Landslide deposits (QUATERNARY, Pleistocene and Recent)

UNCONFORMITY

Kd — Dakota sandstone (CRETACEOUS, Upper and Lower Cretaceous)
Yellowish, lenticular sandstone and conglomerate with interbedded carbonaceous shale and impure coal.

UNCONFORMITY

Kbc — Burro Canyon formation (CRETACEOUS, Lower Cretaceous)
White, gray, and red sandstone and conglomerate with interbedded green and purplish shale.

Jmb / Jms — Morrison formation (JURASSIC, Upper Jurassic)
Variegated shale and mudstone; white, gray, rusty-red, and buff sandstone; rusty-red conglomerate; local thin limestone beds. At the top the Brushy Basin shale member, Jmb, consisting largely of bentonitic shale but including some sandstone and conglomerate lenses, and at the base the Salt Wash sandstone member, Jms, with more numerous and thicker sandstone beds.

Js — Summerville formation (JURASSIC, Upper and Middle Jurassic, San Rafael group)
Thin-bedded red, gray, green, and brown sandy shale and mudstone.

Jec — Entrada sandstone and Carmel formation undivided (JURASSIC, Upper and Middle Jurassic, San Rafael group)
Orange, buff, and white, fine-grained, massive and cross-bedded Entrada sandstone at the top. Red sandstone and mudstone of the Carmel formation at the base.

UNCONFORMITY

Jn — Navajo sandstone (JURASSIC(?), Glen Canyon group)
Buff and gray crossbedded, fine-grained sandstone.

Jk — Kayenta formation (JURASSIC(?), Glen Canyon group)
Irregularly bedded, red, buff, gray, and lavender shale, siltstone, and fine- to coarse-grained sandstone.

Jw — Wingate sandstone (JURASSIC(?), Glen Canyon group)
Fine-grained reddish-brown, cliff-forming sandstone, thick-bedded, massive and crossbedded.

Trc — Chinle formation (TRIASSIC, Upper Triassic)
Red to orange-red siltstone, with interbedded lenses of red sandstone, shale, and limestone-pebble and clay-pellet conglomerate. Lenses of quartz-pebble conglomerate and grit at base.

UNCONFORMITY

pC — Gneiss, schist, granite, and pegmatite. (PRE-CAMBRIAN)

Contact
Dashed where approximately located.

Indefinite contact
Includes inferred contacts and indefinite boundaries of surficial deposits.

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

Inferred fault
U, upthrown side; D, downthrown side.

Strike and dip of beds

Strike of vertical beds

Horizontal beds

Structure contour
Drawn on top of Entrada sandstone; dashed where approximately located; short dashes indicate projection above surface. Contour interval 100 feet. Datum is mean sea level.

x Prospect

Outline of claim
Located only approximately.

LIST OF PATENTED CLAIMS

1. Star No. 1
2. All Stars
3. Star No. 3
4. Star No. 4
5. Star No. 5
6. Star No. 6
7. Thursday
8. Friday
9. Star No. 9
10. Star No. 10
11. Wright
12. Star No. 12
13. Little Basin
14. Raymond

SECTION ALONG LINE A-A'

Moenkopi formation — Cutler formation

Since the preparation of this map the age designation of the Glen Canyon group has been changed in U. S. Geological Survey usage to Triassic and Jurassic; the age designation of the Wingate sandstone has been changed to Triassic; and the age designation of the Navajo sandstone has been changed to Jurassic.

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