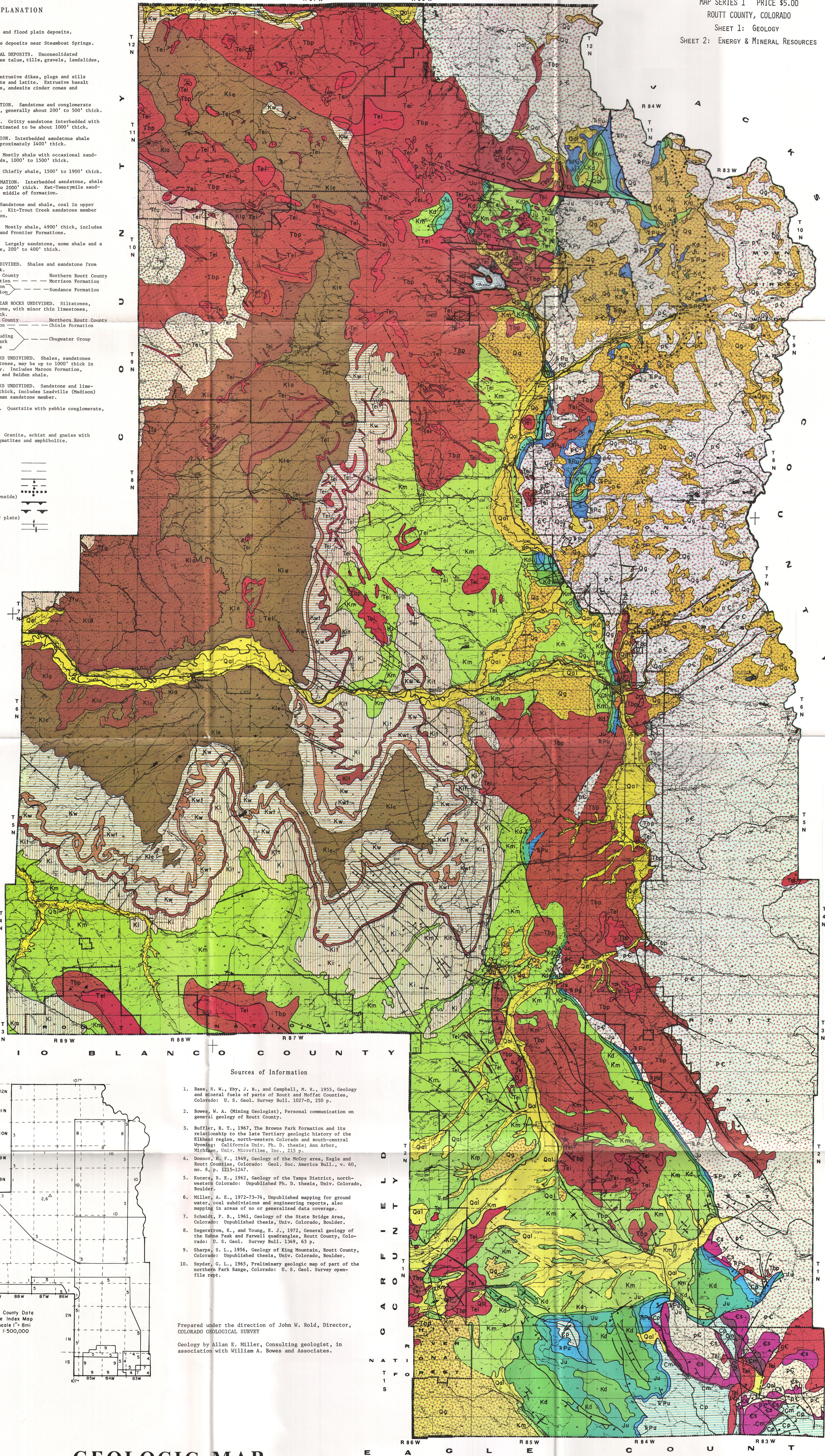


DEPARTMENT OF NATURAL RESOURCES  
COLORADO GEOLOGICAL SURVEY  
JOHN W. ROLD, DIRECTOR

COLORADO GEOLOGICAL SURVEY  
MAP SERIES 1 PRICE \$5.00  
ROUTT COUNTY, COLORADO  
SHEET 1: GEOLOGY  
SHEET 2: ENERGY & MINERAL RESOURCES

EXPLANATION

- QUATERNARY**
    - Qal ALLUVIUM. Stream and flood plain deposits.
    - Qf TUFFS. Hot springs deposits near Steamboat Springs.
    - Qq ALL OTHER SURFICIAL DEPOSITS. Unconsolidated colluvium; includes talus, till, gravels, landslides, etc.
  - TERTIARY**
    - Tel IGBRONS ROCKS. Intrusive dikes, plugs and sills of andesite, dacite and latite. Extrusive basalt flows and breccias, andesite cinder cones and scoriae.
    - Tbp BROWNS PARK FORMATION. Sandstone and conglomerate up to 2000' thick, generally about 200' to 300' thick.
    - Tfw HASKIN FORMATION. Gritty sandstone interbedded with clay-shale and estimated to be about 1000' thick.
    - Tfu FORT UNION FORMATION. Interbedded sandstone shale and coal beds, approximately 1400' thick.
    - Kle LANCE FORMATION. Mostly shale with occasional sandstone and coal beds, 1000' to 1500' thick.
    - Kie LEMIS FORMATION. Chiefly shale, 1500' to 1900' thick.
    - Kw WILLIAMS FORK FORMATION. Interbedded sandstone, shale and coal, 1100' to 2000' thick. Kut-Twenty-mile sandstone member near middle of formation.
    - Ki ILES FORMATION. Sandstone and shale, coal in upper part, 1500' thick. Kit-Fruit Creek sandstone member at top of formation.
    - Km MANCOS FORMATION. Mostly shale, 4900' thick, includes Benton, Niobrara and Frontier Formations.
    - Kd DAKOTA FORMATION. Largely sandstone, some shale and a basal conglomerate, 200' to 400' thick.
  - CRETACEOUS**
    - Ju JURASSIC ROCKS UNDIVIDED. Shales and sandstone from 100' to 600' thick.
  - JURASSIC**
    - Triassic and Permian rocks undivided. Siltstones, shales and sandstone, with minor thin limestones, 700' to 1000' thick.
    - Southern Routt County --- Morrison Formation
    - Northern Routt County --- Curtis Formation
    - Entrada Formation --- Sandstone member
  - PERMO-TRIASSIC**
    - Triassic and Permian rocks undivided. Siltstones, shales and sandstone, with minor thin limestones, 700' to 1000' thick.
    - Southern Routt County --- Morrison Formation
    - Northern Routt County --- Curtis Formation
    - State Bridge Formation including --- Chugwater Group
    - Hooskopi and Park City Formations
  - PENNSYLVANIAN**
    - Cp PENNSYLVANIAN ROCKS UNDIVIDED. Shales, sandstones and arkosic sandstones, may be up to 1000' thick in South Routt County. Includes Maroon Formation, Mixture Formation and hielden shale.
  - MISSISSIPPIAN**
    - Km MISSISSIPPIAN ROCKS UNDIVIDED. Sandstone and limestone up to 150' thick, includes Leadville (Madison) limestone and Gilman sandstone member.
  - SAMATCHI**
    - cs SAMATCHI QUARTZITE. Quartzite with pebble conglomerate, up to 270' thick.
  - PRE-CAMBRIAN**
    - pc BASEMENT COMPLEX. Granite, schist and gneiss with metasediments, pegmatites and amphibolite.
- Contact  
 Inferred or concealed  
 High angle fault  
 Inferred concealed  
 (barbell on downside)  
 Thrust fault  
 Inferred or concealed  
 (teeth on upper plate)  
 Anticline  
 Syncline



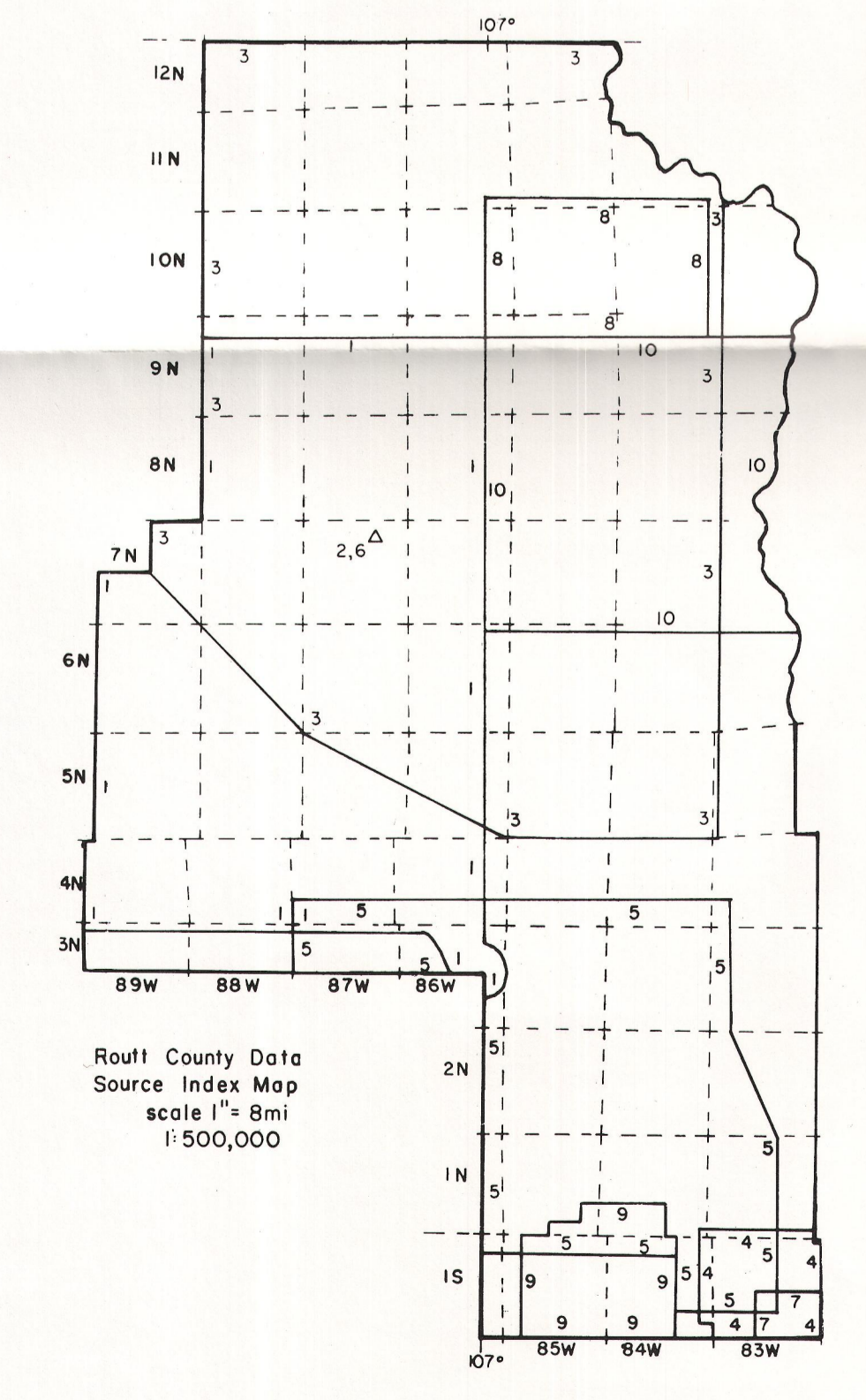
RIO BLANCO COUNTY

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COLORADO GEOLOGICAL SURVEY

Geology by Allan E. Miller, Consulting geologist, in  
association with William A. Bowers and Associates.



**GEOLOGIC MAP  
ROUTT COUNTY,  
COLORADO**

UNIVERSITY OF UTAH  
RESEARCH INSTITUTE  
EARTH SCIENCE LAB.

