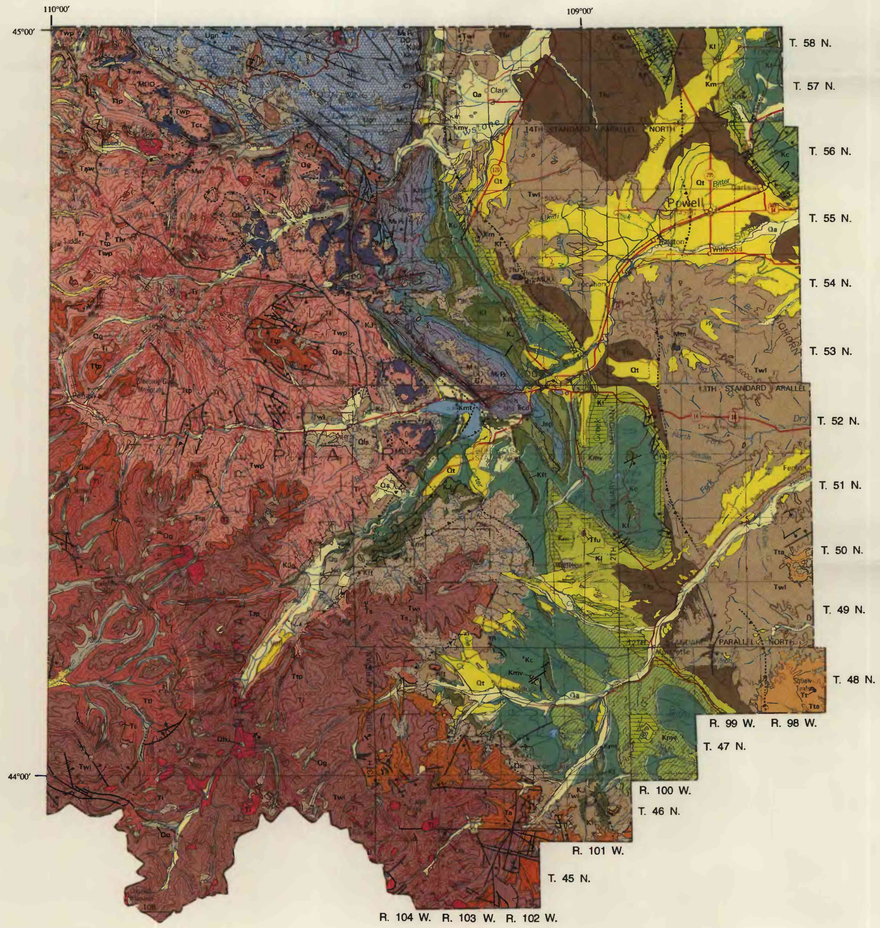
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
WYOMING STATE ENGINEER

WATER-RESOURCES INVESTIGATIONS REPORT 93-4183
Geologic map - PLATE 1
Lowry, M.E., Smalley, M.L., and others, 1993, Hydrology of Park County, Wyoming, exclusive of Yellowstone National Park



Base from U.S. Geological Survey
Wyoming State base map, 1:500,000, 1980

0 10 20 MILES
0 10 20 KILOMETERS

CONTOUR INTERVAL 500 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Geology from J.D. Love and A.C. Christiansen, 1985

CORRELATION OF MAP UNITS

- Holocene
- Pleistocene
- Pliocene and Miocene
- Eocene
- Paleocene
- Upper Cretaceous
- Lower Cretaceous
- Upper Jurassic
- Middle Jurassic
- Lower Triassic
- Permian and Pennsylvanian
- Lower Mississippian
- Upper Devonian
- Lower Devonian
- Upper Ordovician
- Upper Cambrian
- Middle Cambrian
- Metasedimentary and Metavolcanic Rocks

QUATERNARY
TERTIARY
CRETACEOUS
JURASSIC
TRIASSIC
PERMIAN AND PENNSYLVANIAN
MISSISSIPPIAN
DEVONIAN
ORDOVICIAN
CAMBRIAN
EARLY ARCHIAN

LIST OF MAP UNITS

QUATERNARY UNCONSOLIDATED DEPOSITS

- Qa — ALLUVIUM AND COLLUVIUM
- Qt — GRAVEL, PEDIMENT, AND FAN DEPOSITS–May include some glacial deposits and Tertiary gravels
- Qg — GLACIAL DEPOSITS
- Qls — LANDSLIDE DEPOSITS
- Qu — UNDIVIDED SURFICIAL DEPOSITS

TERTIARY ROCKS

- Tts — HUCKLEBERRY RIDGE TUFF OF YELLOWSTONE GROUP
- Ttl — CALDWELL CANYON VOLCANICS–Southern Absaroka Range
- Ttu — INTRUSIVE IGNEOUS ROCKS

ABSAROKA VOLCANIC SUPERGROUP

- THOROFARE CREEK GROUP
  - Twi — Wiggins Formation
  - Ttl — Two Ocean and Langford Formations
  - Tt — Tepee Trail Formation
  - Ta — Aycross Formation
- Tts — THOROFARE CREEK AND SUNLIGHT GROUPS
- SUNLIGHT GROUP
  - Ts — Trout Peak Trachyandesite
  - Ttp — Wapiti Formation
  - Twp — Wapiti Formation
  - Taw — WASHBURN GROUP–Includes Sepulcher, Lamar River, and Cathedral Cliffs Formations
- Tta — TATMAN FORMATION
- Twl — WILLWOOD FORMATION
- Tcr — CRANDALL CONGLOMERATE
- Ttu — FORT UNION FORMATION

MESOZOIC AND PALEOZOIC ROCKS

- Kf — INTRUSIVE IGNEOUS ROCKS
- Kl — LANCE FORMATION
- Kim — LANCE AND MEETEETSE FORMATIONS
- Km — MEETEETSE FORMATION
- Kmv — MESAVERDE FORMATION
- Kc — CODY SHALE
- Kf — FRONTIER FORMATION
- Kmd — FRONTIER FORMATION AND MOWRY AND THERMOPOLIS SHALES
- Kmt — MOWRY AND THERMOPOLIS SHALES
- KJ — CLOVERLY AND MORRISON FORMATIONS
- KJg — CLOVERLY, MORRISON, SUNDANCE, AND GYPSUM SPRING FORMATIONS
- Jsg — SUNDANCE AND GYPSUM SPRING FORMATIONS
- Ttcd — CHUGWATER AND DINWOODY FORMATIONS
- MzPz — MESOZOIC AND PALEOZOIC ROCKS–Shown in small areas of complex structure East flank of Absaroka Range–Dinwoody Formation, Phosphoria Formation and related rocks, Tensleep Sandstone, and Amsden Formation (Lower Triassic through Upper Mississippian)
- Mm — MADISON LIMESTONE OR GROUP
- MD — MADISON LIMESTONE AND DARBY FORMATION
- MDO — MADISON LIMESTONE, DARBY OR THREE FORKS, JEFFERSON, AND BEARTOOTH BUTTE FORMATIONS, AND BIGHORN DOLOMITE
- DO — THREE FORKS, JEFFERSON, AND BEARTOOTH BUTTE FORMATIONS, AND BIGHORN DOLOMITE
- OC — BIGHORN DOLOMITE, GALLATIN LIMESTONE, GROS VENTRE FORMATION, AND FLATHEAD SANDSTONE
- Cr — GALLATIN LIMESTONE, GROS VENTRE FORMATION AND EQUIVALENTS, AND FLATHEAD SANDSTONE

PRECAMBRIAN ROCKS

METASEDIMENTARY AND METAVOLCANIC ROCKS

- Ugn — OLDEST GNEISS COMPLEX

CONTACT

FAULT–Dotted where concealed. Bar and ball on downthrown side.

THRUST FAULT–Dotted where concealed. In some places the dotted line indicates where the fault intersects an unconformity between faulted strata below and unfaulted strata above; in other places it indicates where the shallower part of the fault disappears into bedding planes. Sawteeth on upper plate. Some thrust faults are deeply buried and are approximately located on the basis of seismic data and drilling

Correlation and list of map units modified from Love and Christiansen (1985) and Love, Christiansen, and Ver Ploeg (1987)

National Geodetic Vertical Datum of 1929: A geodetic datum derived from an adjustment of the first order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

GEOLOGIC MAP OF PARK COUNTY, WYOMING