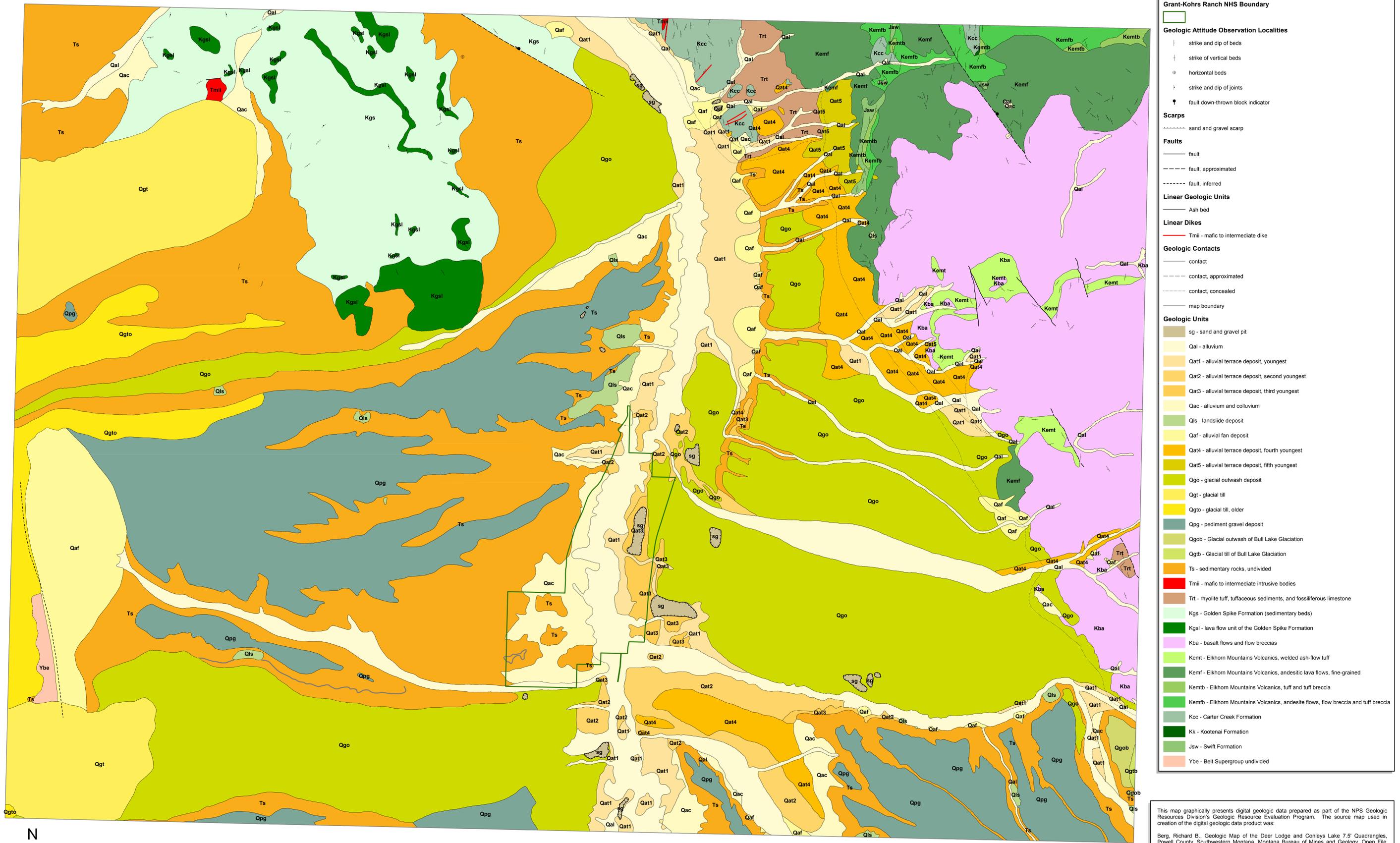




Geologic Map of Grant- Kohrs Ranch NHS



Grant-Kohrs Ranch NHS Boundary

Geologic Attitude Observation Localities

- strike and dip of beds
- strike of vertical beds
- horizontal beds
- strike and dip of joints
- fault down-thrown block indicator

Scarps

- sand and gravel scarp

Faults

- fault
- fault, approximated
- fault, inferred

Linear Geologic Units

- Ash bed

Linear Dikes

- Tmii - mafic to intermediate dike

Geologic Contacts

- contact
- contact, approximated
- contact, concealed
- map boundary

Geologic Units

- sg - sand and gravel pit
- Qal - alluvium
- Qat1 - alluvial terrace deposit, youngest
- Qat2 - alluvial terrace deposit, second youngest
- Qat3 - alluvial terrace deposit, third youngest
- Qac - alluvium and colluvium
- Qls - landslide deposit
- Qaf - alluvial fan deposit
- Qat4 - alluvial terrace deposit, fourth youngest
- Qat5 - alluvial terrace deposit, fifth youngest
- Qgo - glacial outwash deposit
- Qgt - glacial till
- Qgto - glacial till, older
- Qpg - pediment gravel deposit
- Qgob - Glacial outwash of Bull Lake Glaciation
- Qgtb - Glacial till of Bull Lake Glaciation
- Ts - sedimentary rocks, undivided
- Tmii - mafic to intermediate intrusive bodies
- Trt - rhyolite tuff, tuffaceous sediments, and fossiliferous limestone
- Kgs - Golden Spike Formation (sedimentary beds)
- Kgsi - lava flow unit of the Golden Spike Formation
- Kba - basalt flows and flow breccias
- Kemf - Elkhorn Mountains Volcanics, welded ash-flow tuff
- Kemf - Elkhorn Mountains Volcanics, andesitic lava flows, fine-grained
- Kemb - Elkhorn Mountains Volcanics, tuff and tuff breccia
- Kemb - Elkhorn Mountains Volcanics, andesite flows, flow breccia and tuff breccia
- Kcc - Carter Creek Formation
- Kk - Kootenai Formation
- Jsw - Swift Formation
- Ybe - Belt Supergroup undivided



This map graphically presents digital geologic data prepared as part of the NPS Geologic Resources Division's Geologic Resource Evaluation Program. The source map used in creation of the digital geologic data product was:

Berg, Richard B., Geologic Map of the Deer Lodge and Conleys Lake 7.5' Quadrangles, Powell County, Southwestern Montana, Montana Bureau of Mines and Geology, Open File Report 509, scale 1:24,000

Digital geologic data and cross sections for Carlsbad Caverns National Park, and all other digital geologic data prepared as part of the Geologic Resource Evaluation Program, are available online at the NPS Data Store: <http://science.nature.nps.gov/nrdata/>