OPEN-FILE REPORT 2024-01
GEOLOGIC MAP OF THE RED LEDGES QUADRANGLE, WHITE PINE AND LINCOLN COUNTIES, NEVADA
*Text accompanies map*

# GEOLOGIC MAP OF THE RED LEDGES QUADRANGLE, WHITE PINE AND LINCOLN COUNTIES, NEVADA

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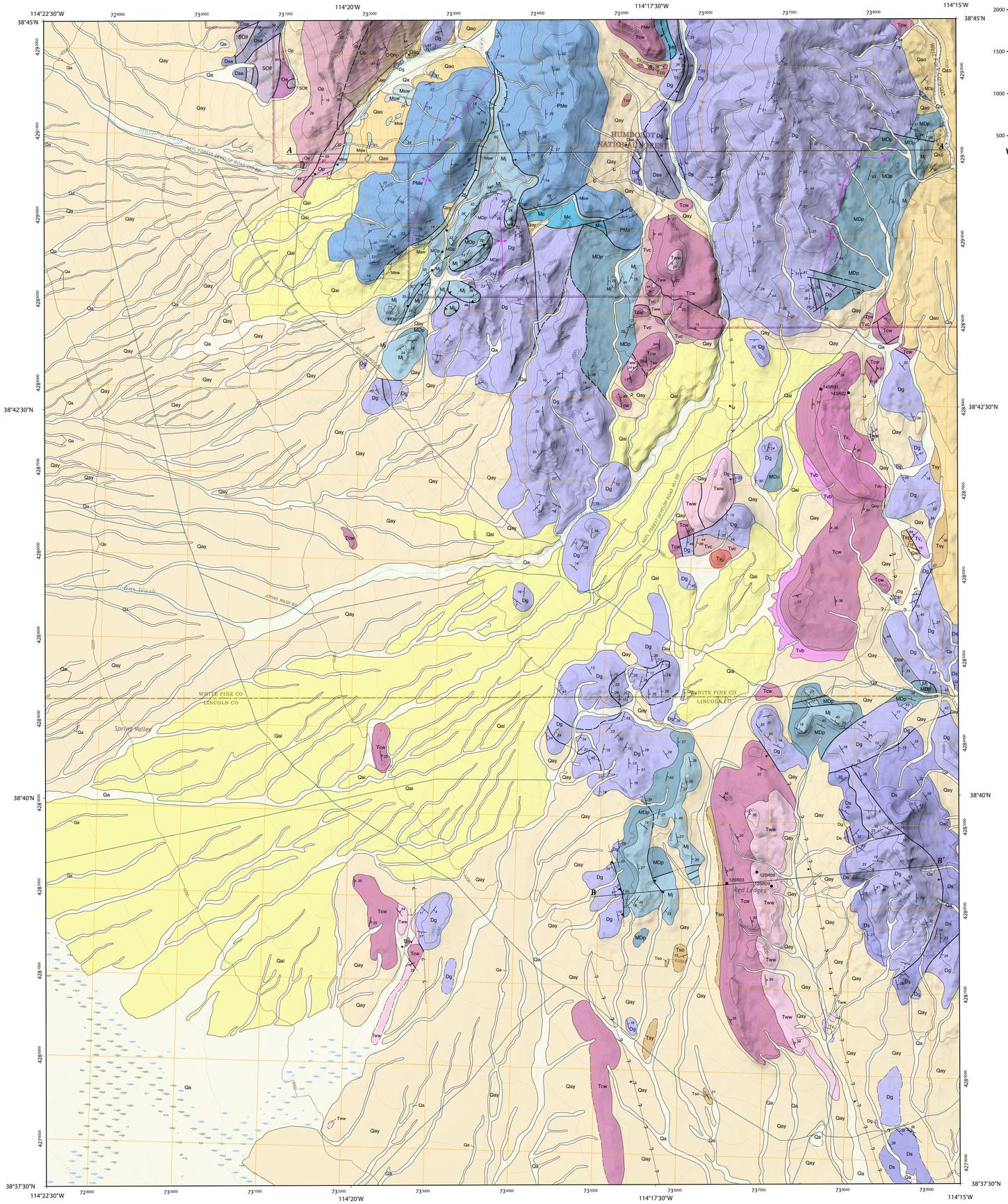
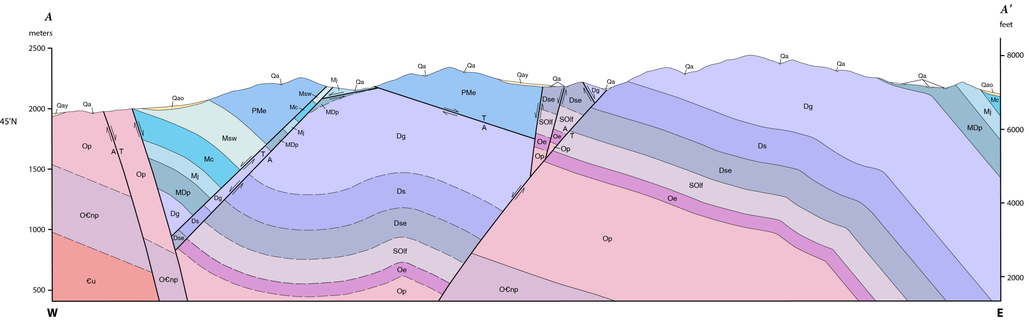
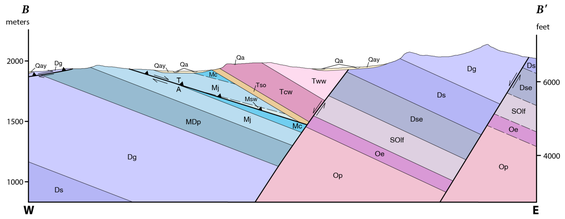
## 2024




## GEOLOGIC UNITS

See accompanying text for full unit descriptions and references for this map.

**QUATERNARY DEPOSITS AND SURFACES**

- Qa — Active wash and active alluvial deposits (Holocene)
- Qay — Young alluvium (Holocene and late Pleistocene?)
- Qai — Intermediate alluvium (late to middle Pleistocene)
- Qao — Old alluvium (early Pleistocene?)

**TERTIARY VOLCANIC AND SEDIMENTARY UNITS**

- Tsy — Volcaniclastic sandstone, younger (Oligocene?)
- $Tv_x$ — Volcanic unit of unknown age (Oligocene?)
- $Tv_s$ — Volcanic unit of unknown age (Oligocene?)
- $Tv_z$ — Volcanic unit of unknown correlation (Oligocene)
- Tww — Wah Wah Springs Formation (Oligocene)
- Tcw — Cottonwood Wash Tuff (Oligocene)
- Tvb — Volcanic breccia and sandstone (Oligocene?)
- $Tv_t$ — Volcanic unit of unknown age (Oligocene)
- Tvc — Volcaniclastic sandstone and mudstones, undivided (Oligocene? to late Eocene?)
- Tso — Volcaniclastic sandstone, older (Oligocene? to late Eocene?)
- Tco — Conglomerate (Oligocene? to late Eocene?)

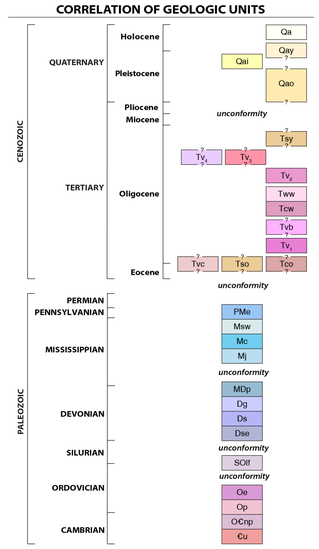
**PALEOZOIC SEDIMENTARY UNITS**

- PMe — Ely Limestone (Permian to Late Mississippian)
- Msw — Scotty Wash Quartzite (Late Mississippian)
- Mc — Chainman Shale (Mississippian)
- Mj — Joana Limestone (Mississippian)
- MDp — Pilot Shale (Late Devonian to Early Mississippian )
- Dg — Guilmette Formation (Late to Middle Devonian)
- Ds — Simonson Dolostone (Middle Devonian)
- Dse — Sevy Dolostone (Middle to Early Devonian)
- SOlf — Laketown and Fish Haven Dolostone, undivided (Silurian to Late Ordovician)
- Oe — Eureka Quartzite (Middle Ordovician)
- Op — Pogonip Group, undivided (Middle to Early Ordovician)
- OCnp — Notch Peak Formation (Late Cambrian)
- Cu — Cambrian, undivided (cross section only)

## MAP SYMBOLS

- **Contact** Solid where certain, dashed where approximately located.
- **Fault** Solid where certain, dashed where approximately located, dotted where concealed; queried if identity or existence uncertain.
- **Normal fault** Solid where certain, dashed where approximately located, dotted where concealed; queried if identity or existence uncertain. Showing dip and direction; ball on downthrown side. *In cross section, arrows show relative motion. A—away from observer, T—toward observer.*
- **Thrust fault** Solid where certain and location accurate, dotted where concealed; queried if identity or existence uncertain. *Sawteeth on upper (tectonically higher) plate. In cross sections, A —away from observer, T —toward observer.*
- **Anticline** Solid where certain and location accurate, dashed where approximately located, dotted where concealed.
- **Line of cross section**
- **Strike and dip of bedding**
  - 41 Inclined
  - 30 Overturned
- **Strike and dip of foliation in volcanic rock**
  - 67 Inclined
- **Geochronology sample** Label shows sample name.
  - 12SR03 $^{40}Ar/^{39}Ar$ date
- **Wetland: Freshwater and Shrub**

## CORRELATION OF GEOLOGIC UNITS




**Scale 1:24,000**

0 0.5 1 KILOMETER

0 0.5 1 MILE

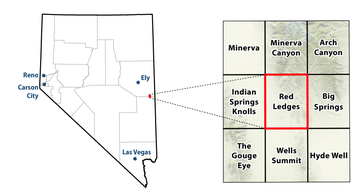
0 1,000 2,000 3,000 4,000 5,000 FEET

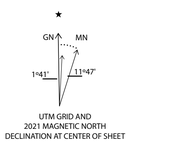
**CONTOUR INTERVAL 40 FEET**

Projection: Universal Transverse Mercator, Zone 11, North American Datum 1983 (m)

Base map: U.S. Geological Survey Red Ledges 7.5' quadrangle (2021)

Hillshade: Derived from 1/3 arc second data from The National Map.

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2021 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

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