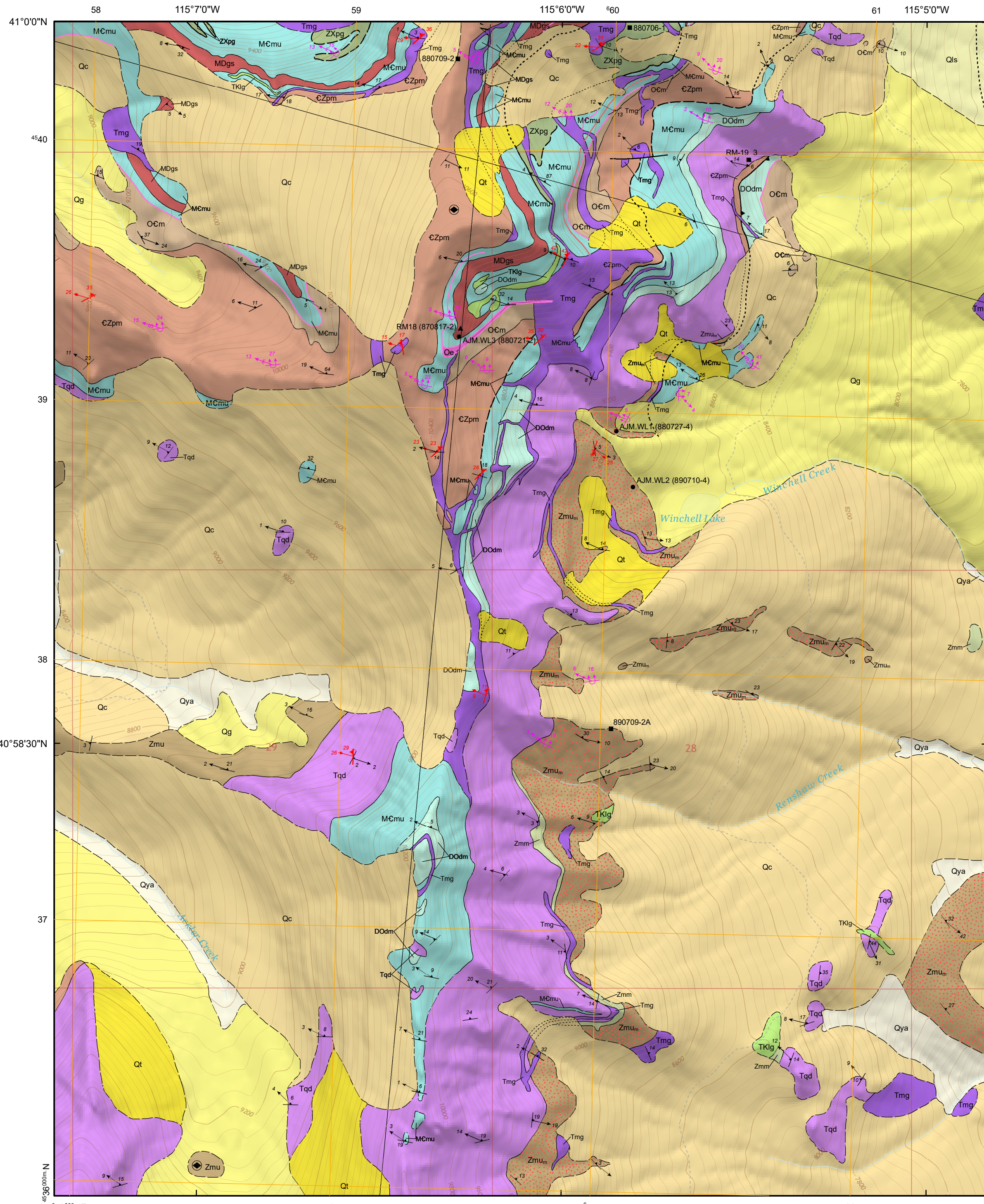
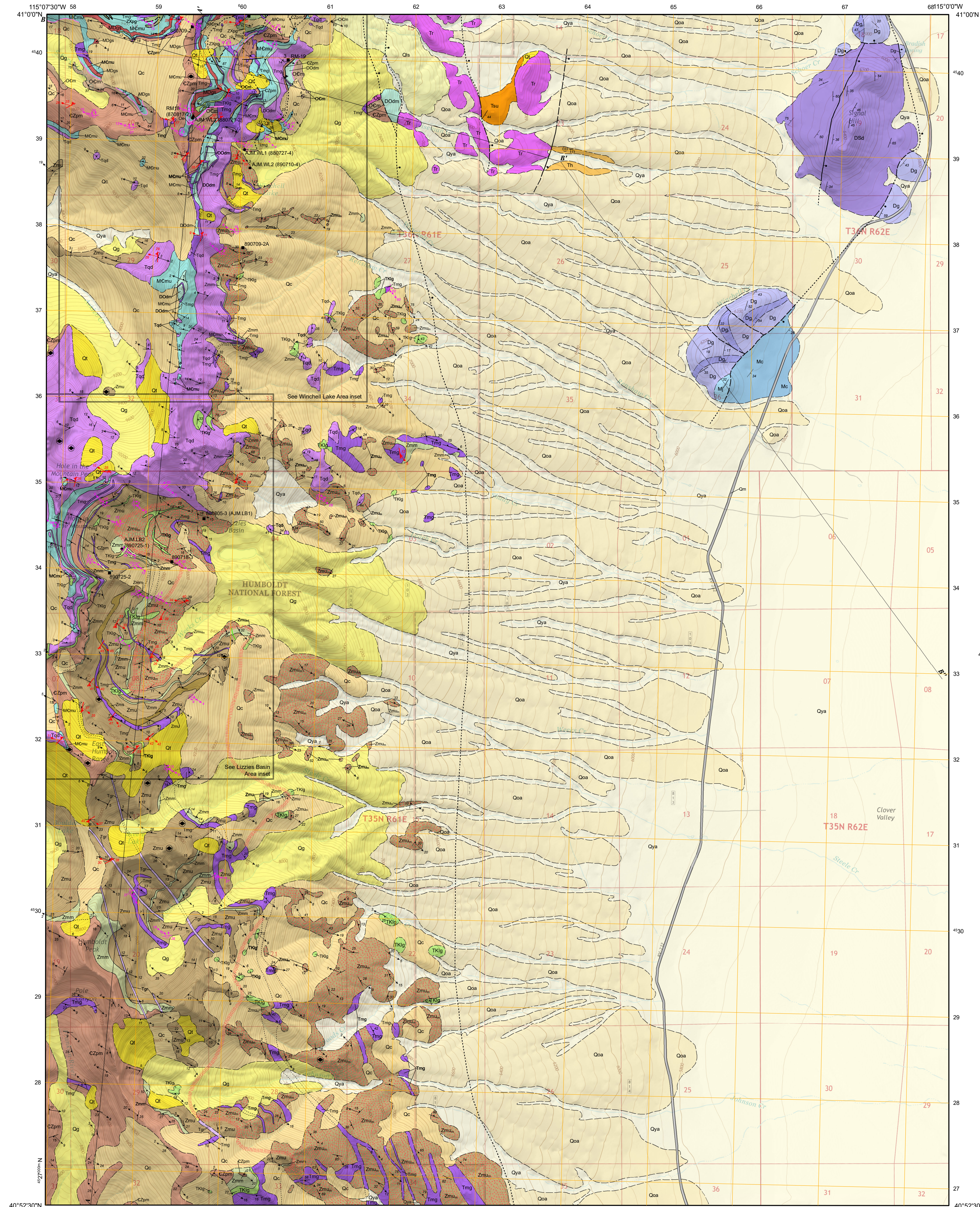


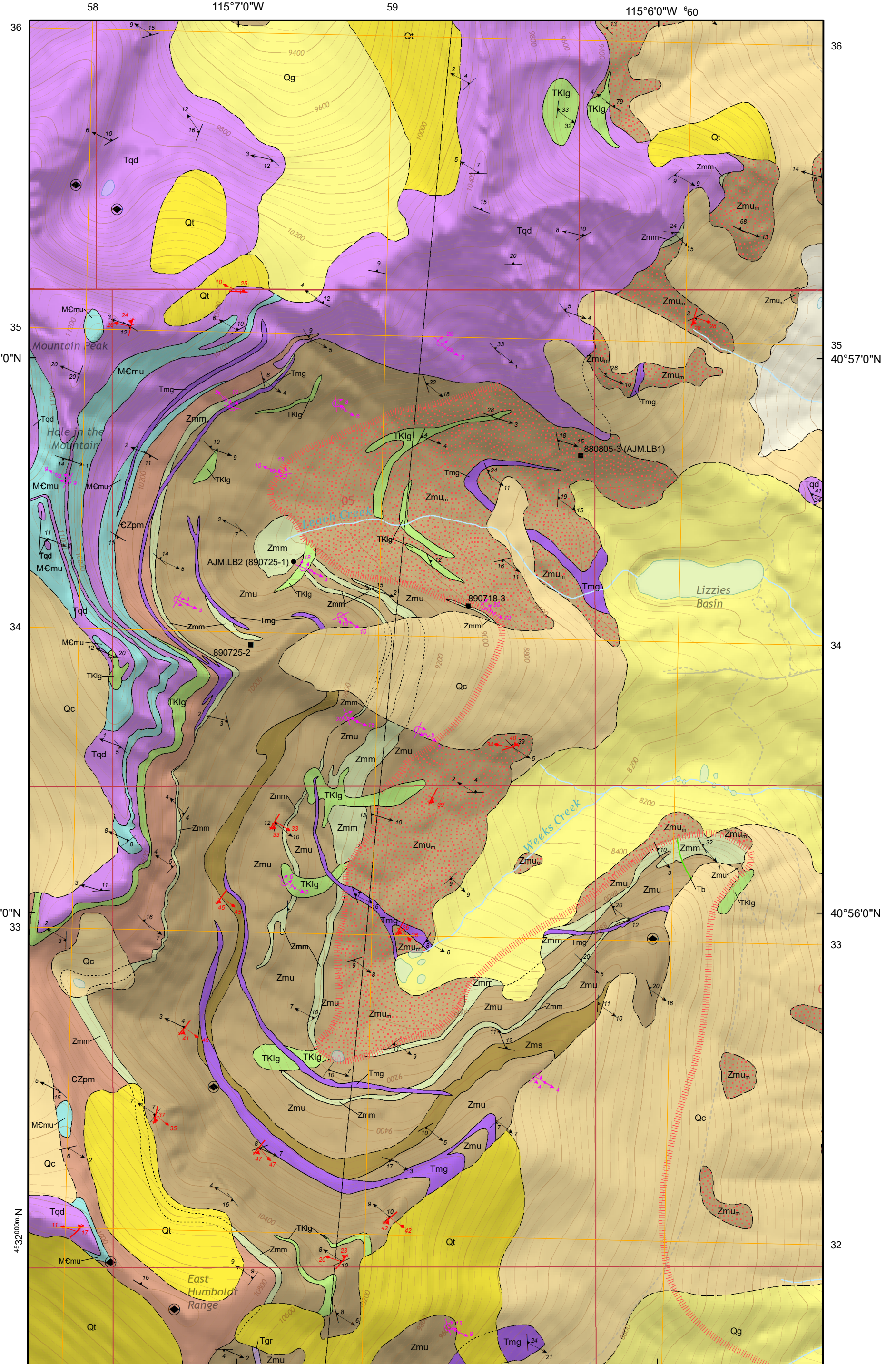
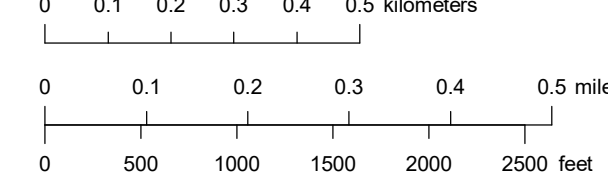
# GEOLOGIC MAP OF THE HUMBOLDT PEAK QUADRANGLE, ELKO COUNTY, NEVADA

Allen J. McGrew  
University of Dayton  
2018



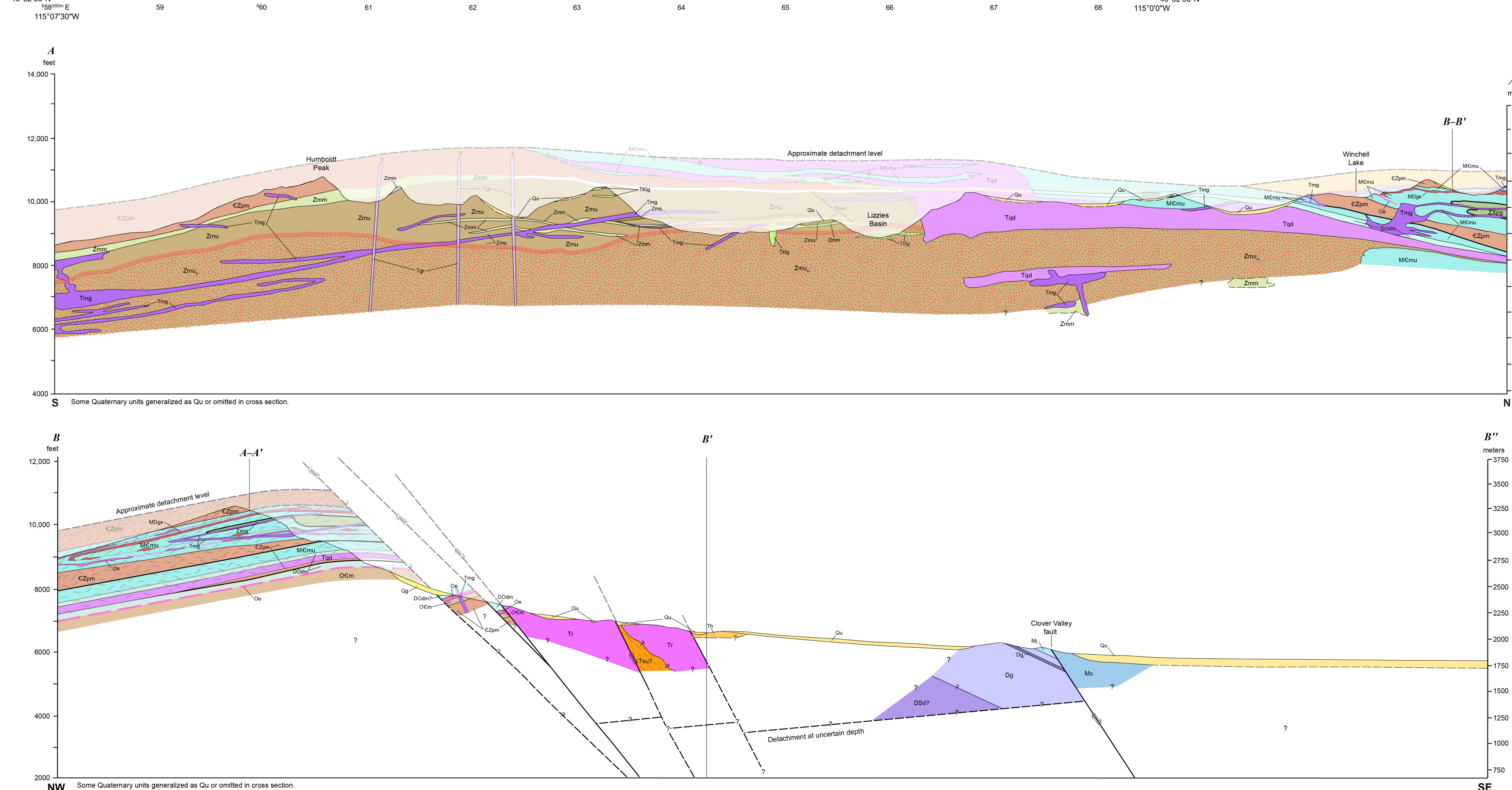
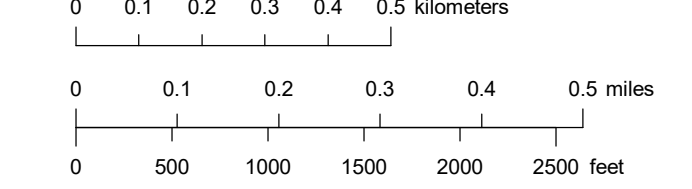
Winchell Lake Area

Scale 1:12,000



Lizzies Basin Area

Scale 1:12,000



- Contact:** Solid where certain and location accurate, dashed where approximately located, dotted where concealed.
- Gradational contact:** Solid where certain and location accurate, dashed where approximately located, dotted where concealed.
- Fault:** Solid where certain and location accurate, dashed where approximately located, dotted where concealed.
- Normal fault:** Solid where certain and location accurate, dashed where approximately located, dotted where concealed. Ball on downthrown side. In cross section arrows show relative motion.
- Thrust fault:** Solid where certain and location accurate, dashed where approximately located, dotted where concealed. Seawarth on upper plate.
- Dike:** Solid where certain and location accurate.
- Marker horizon:** Less than 4m thick. Solid where certain and location accurate, dotted where concealed.

Line of cross section A-A' B-B'

Mylonitic shear zone in cross section B-B' only. Density of pattern indicates intensity of shear. Inclination of symbols represents shear direction.

Strike and dip of bedding: Inclined (Horizontal) Vertical

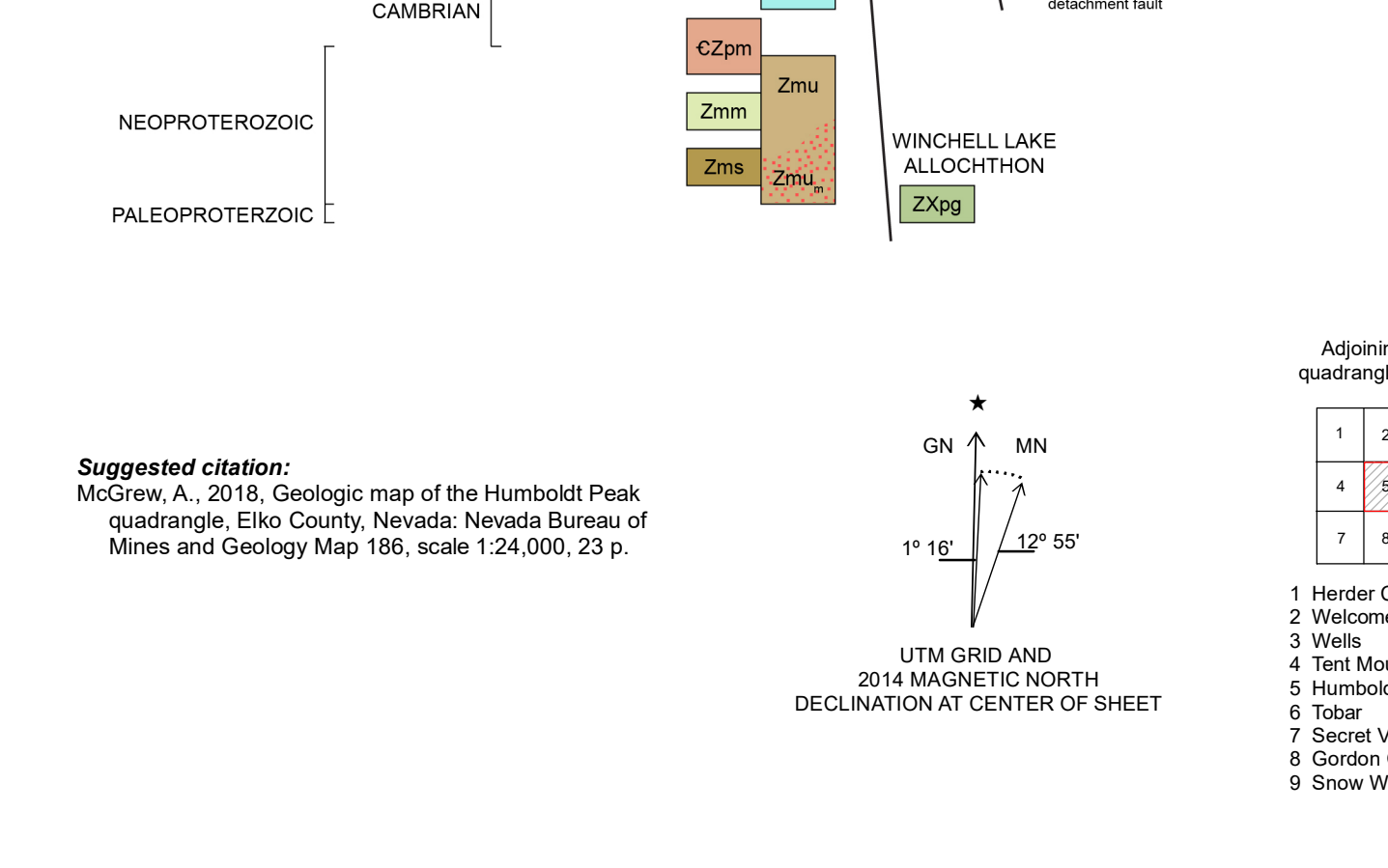
Strike and dip of foliation in metamorphic rocks: Inclined (Horizontal)

Strike and dip of inclined, dispersive, spaced shear band foliation in protomylonitic orthogneiss (for multiple observations in one locality): Inclined

Lineations: Inclined lineation, Inclined slickenite

Strike and dip of axial surface of small-scale fold with bearing and plunge of hinge line and vergence indicated where known: Symmetrical, Dextral, Sinistral, Unknown

Sample localities: Showing sample number, Thermobarometric, U-Pb

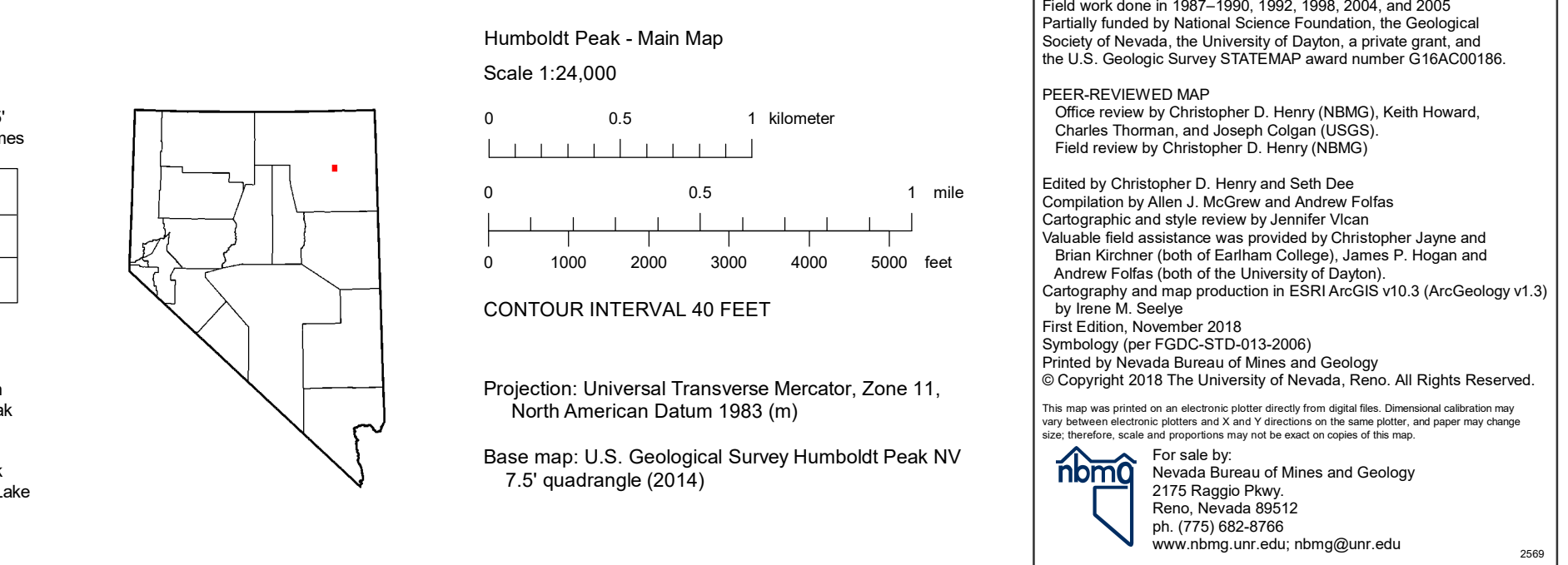
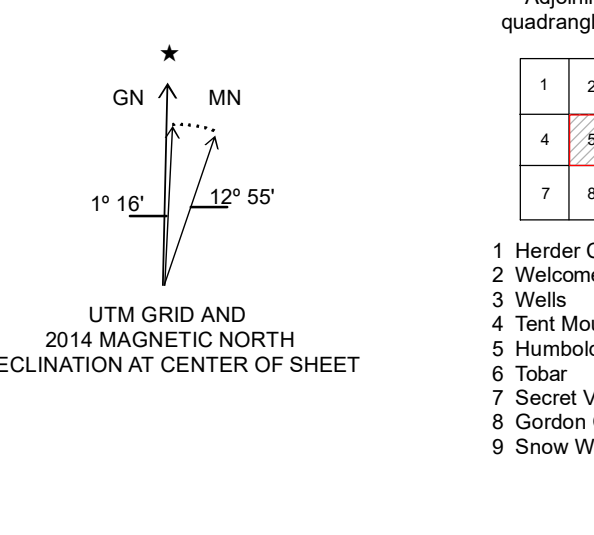


- Sedimentary and Volcanic Units:**
  - Quaternary (Anthropocene): Quaternary units, undivided (Holocene to Pleistocene) (in cross section only)
  - Younger alluvium (Upper Holocene)
  - Landslide deposit (Holocene)
  - Talus deposit (Holocene)
  - Colluvium (Holocene)
  - Older alluvium (Pleistocene)
  - Glacial deposits (Pleistocene)
- Inferred Discontinuity:**
  - Humboldt Formation (Miocene)
  - Quartz porphyry rhyolite (middle Miocene)
  - Tertiary sedimentary rocks, undivided (middle to lower Miocene?)
- Unmetamorphosed Paleozoic Sedimentary Rocks:**
  - Chatham Formation (Mississippian)
  - Joana Limestone (Mississippian)
  - Gulmette Formation (Upper Devonian)

- Metamorphosed Sedimentary and Igneous Rocks:**
  - Dolomite (Devonian to Silurian, undivided)
  - Metamorphosed sedimentary and igneous rocks
  - Caliche and dolomite marble with calc-silicate paragneiss and metagranite (Mississippian to Cambrian, undivided)
  - Graphitic schist and calcareous paragneiss (Mississippian to Upper Devonian?)
  - Dolomitic marble (Devonian to Ordovician, undivided)
  - Metamorphosed Eureka Quartzite (Ordovician)
  - Marble of Verdi Peak (Ordovician to Cambrian, undivided)
  - Metamorphosed Prospect Mountain Quartzite (Cambrian to Neoproterozoic protolith age) and McCoy Creek Group (Neoproterozoic protolith age), undivided
  - McCoy Creek Group paragneiss, undivided (Neoproterozoic)
  - McCoy Creek Group marble (Neoproterozoic)
  - McCoy Creek Group pelitic schist (Neoproterozoic)
  - Paragneiss of Greys Peak (Neoproterozoic to Paleoproterozoic)
- Intrusive Rocks:**
  - Basaltic dike (middle Miocene)
  - Biotite granite (lower Miocene to Oligocene?)
  - Biotite monzonite orthogneiss (lower Oligocene to upper Eocene)
  - Hornblende-biotite quartz dioritic orthogneiss (middle Eocene)
  - Leucogranite and leucocratic orthogneiss (Oligocene to Cretaceous)

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

Suggested citation: McGrew, A., 2018, Geologic map of the Humboldt Peak quadrangle, Elko County, Nevada, Nevada Bureau of Mines and Geology Map 186, scale 1:24,000, 23 p.



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