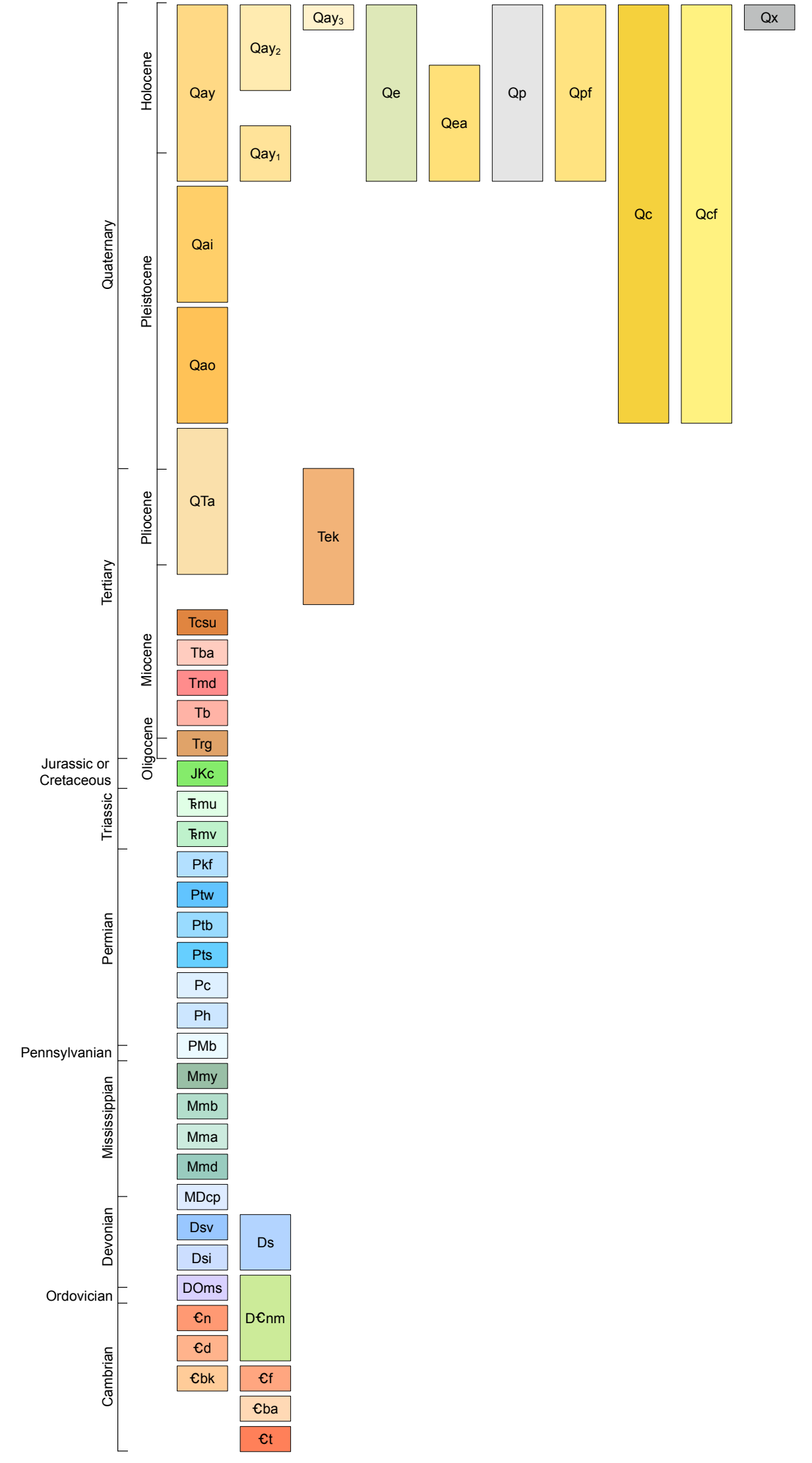
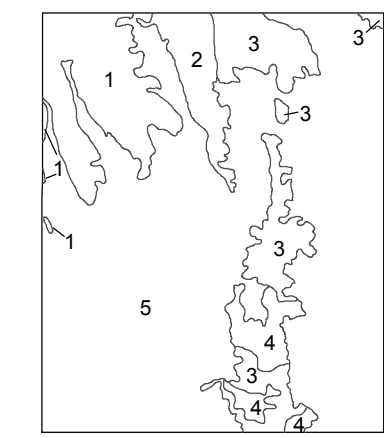


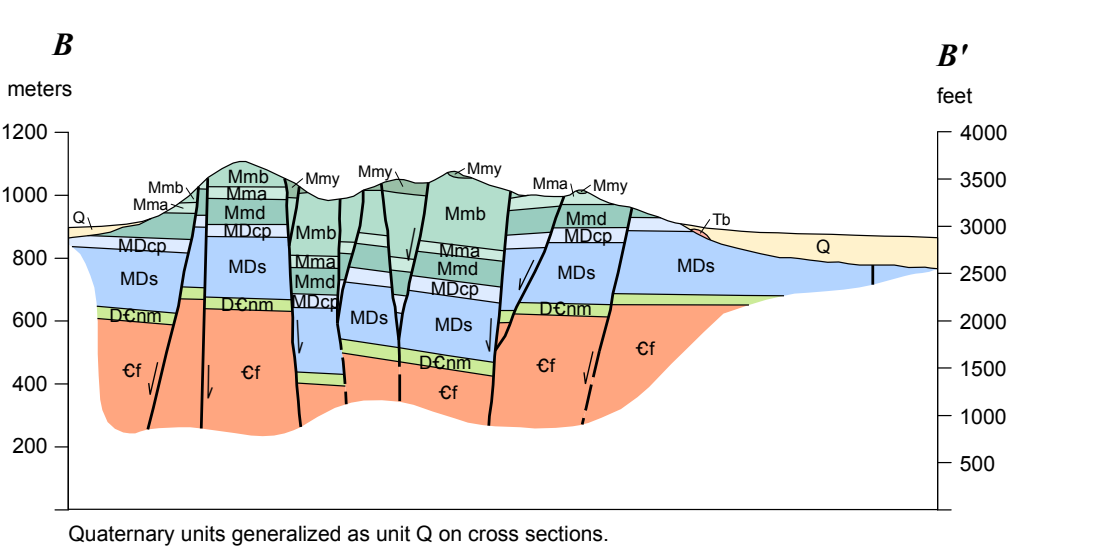
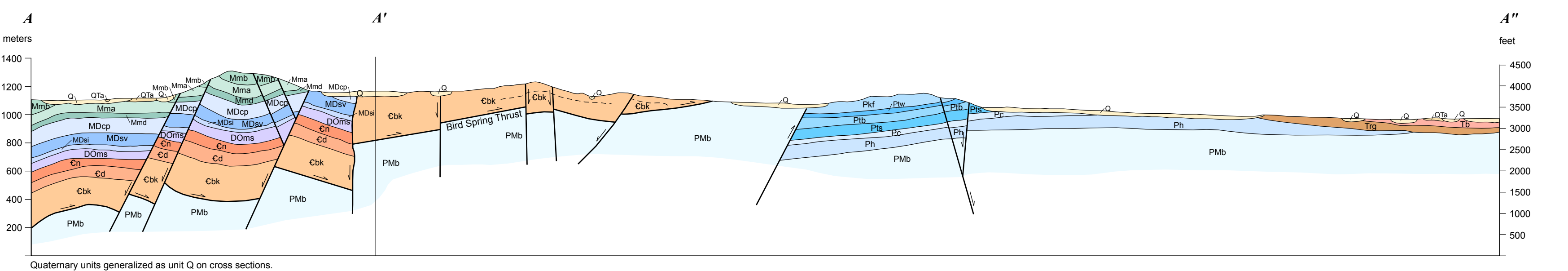
- Anthropogenic Features and Deposits**
 - Gx Disturbed and modified areas
- Playa and Related Deposits**
 - Qp Playa deposits (latest Holocene to late Pleistocene(?))
 - Qpf Playa fringe deposits (Holocene to late Pleistocene)
- Eolian Deposits**
 - Qe Eolian sand (Holocene to late Pleistocene)
 - Qea Mixed eolian sand and alluvium (early Holocene to late Pleistocene)
- Hillslope Deposits**
 - Qc Colluvium (Holocene to Pleistocene)
 - Qcf Colluvium and debris fans (Holocene to Pleistocene)
- Alluvial Deposits**
 - Qay Young alluvium, undivided (Holocene to late Pleistocene)
 - Qay1 Young active alluvium (late Holocene)
 - Qay2 Young active alluvium and recently abandoned active alluvial surfaces (Holocene)
 - Qay3 Young inactive alluvium (early Holocene to late Pleistocene)
 - Qai Intermediate alluvium, undivided (late to middle Pleistocene)
 - Qao Old alluvium (middle to early Pleistocene)
- Ancient Surficial Deposits, Early Pleistocene (?) to Late Miocene**
 - QTa Ancient alluvium (early Pleistocene to late Miocene)
 - Tek Ancient petrocalcic soil remnants (Pliocene to late Miocene)
- Pliocene to Miocene Rocks**
 - Tcu Younger sedimentary rocks (Pliocene or Miocene)
 - Tba Basalt (Miocene)
 - Tmd Tuff of Mount Davis (middle Miocene, 15.0 Ma)
 - Tb Tuff of Bridge Spring (middle Miocene, 15.2 Ma)
 - Trg Roundstone gravels (Miocene)
- Cretaceous to Triassic Rocks**
 - JKc Conglomerate (Cretaceous or Jurassic)
 - Moenkopi Formation (Triassic)
 - Tmu Upper red member
 - Tmv Virgin Limestone Member
- Permian to Cambrian Rocks**
 - Kalibab Formation (Permian)
 - Pkf Fossil Mountain Member
 - Ptw Woods Ranch Member
 - Ptb Brady Canyon Member
 - Pts Seilman Member
 - Pc Coconino Sandstone (Permian)
 - Ph Hermit Formation (Permian)
 - PMB Bird Spring Formation (Early Permian to Late Mississippian)
 - Monte Cristo Group (Late to Early Mississippian)
 - Mmy Yellowpine Limestone
 - Mmb Bullion Limestone
 - Mma Anchor Limestone
 - Mmd Dawn Limestone
 - MDcp Crystal Pass Limestone (Early Mississippian to Late Devonian)
 - Sultan Limestone (Middle and Early Devonian)
 - Ds Sultan Limestone, undivided on Sheep Mountain
 - Dsv Valentine Member
 - Dsi Ironside Member
 - DCnm Mountain Springs Formation, Nopah Formation, and Dunderberg Shale, undivided (Middle Devonian; Ordovician; and Furongian, formerly Late Cambrian), Sheep Mountain.
 - DCms Mountain Springs Formation (Middle Devonian, Late Ordovician, and Early Ordovician)
 - Cn Nopah Formation (Furongian, formerly Late Cambrian)
 - Cd Dunderberg Shale (Furongian, formerly Late Cambrian)
 - CFm Frenchman Mountain Dolomite (Cambrian Series 3, formerly Middle Cambrian) Sheep Mountain
 - Ckx Bonanza King Formation (Furongian and Cambrian Series 3, formerly Late and Middle Cambrian)
 - Cba Bright Angel Shale (Cambrian Series 2 and 3, formerly Early (in part) and Middle Cambrian)
 - Cl Tapeats Sandstone (Cambrian Series 2, formerly Early Cambrian)



- Symbology (per FGDC-STD-013-2006)**
- Contact Solid where certain and location accurate, long-dashed where approximate, queried if identity or existence uncertain.
- Internal contact Solid where certain and location accurate.
- Fault Solid where certain and location accurate, long-dashed where approximate, short dash where inferred, dotted where concealed, queried if identity or existence uncertain. Ball on downthrown side, locally showing dip and lineation bearing.
- Low-angle normal fault Solid where certain and location accurate, dotted where concealed.
- Thrust fault Solid where certain and location accurate, long-dashed where approximate, dotted where concealed. Sawtooth on upper plate.
- Thrust fault: Solid where certain and location accurate. Sawtooth on upper plate. Has later low-angle normal movement.
- Anticline Solid where certain and location accurate, long-dashed where approximate, dotted where concealed.
- Syncline Solid where certain and location accurate, long-dashed where approximate.
- Overtured anticline Solid where certain and location accurate.
- Strike and dip of bedding
 - Inclined
 - Approximate
 - Vertical
 - Overtured
 - Horizontal
- Strike and dip of convection foliation in ash-flow ruff
 - Inclined
 - Horizontal
- Strike and dip of flow banding or flow foliation in volcanic rocks
 - Inclined
- Strike and dip of joints
 - Inclined
- Strike and dip of tectonic foliation
 - Inclined
- Plunge direction of lineation
 - Inclined
- Line of cross section



- SOURCES OF GEOLOGIC DATA**
- 1. Bedrock geology by B.C. Burchfiel, early 1980s. Digitized and simplified by L.J. Garside, 2008-2009.
- 2. Bedrock geology by B.C. Burchfiel, early 1980s, and L.J. Garside, 2008. Digitized and simplified by L.J. Garside, 2008-2009.
- 3. Bedrock geology by L.J. Garside, 2008-2009.
- 4. Bedrock geology by S.M. Rowland, 1981. Digitized and simplified by L.J. Garside, 2008.
- 5. Surficial geology by P.K. House and B.J. Buck, 2002-2006. Also includes surficial outcrops in areas of bedrock 1-4 above.

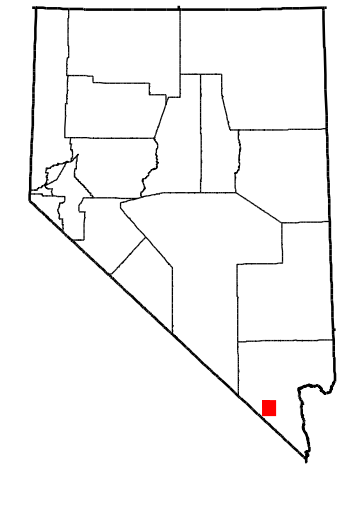
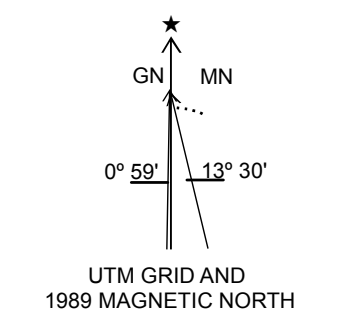


Quaternary units generated as unit Q on cross sections.

Quaternary units generated as unit Q on cross sections.

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Scale 1:24,000
0 0.5 1 kilometer
0 0.5 1 mile
0 1000 2000 3000 4000 5000 feet
CONTOUR INTERVAL 40 FEET
Supplementary Contour Interval 20 Feet
Projection: Universal Transverse Mercator, Zone 11,
North American Datum 1927 (m)
Base map: U.S. Geological Survey Jean
7.5' quadrangle (provisional edition 1989)



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GEOLOGIC MAP OF THE JEAN QUADRANGLE, CLARK COUNTY, NEVADA

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²Massachusetts Institute of Technology; ³University of Nevada, Las Vegas
2012