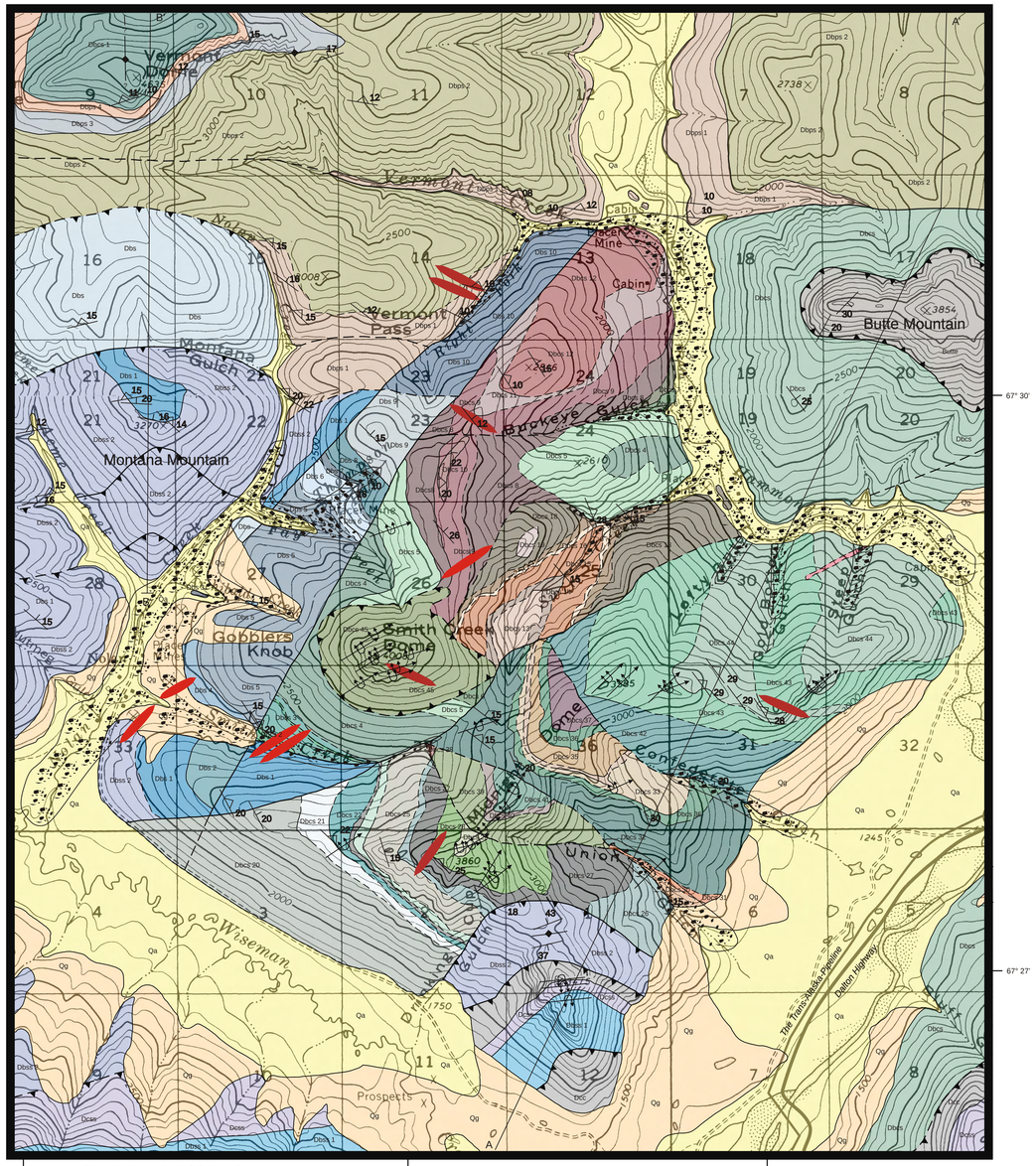
APPENDIX 1: GEOLOGIC MAP OF THE NOLAN AREA.

By Karsten Eden 1998

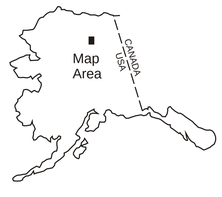


Topographic base map from U.S. Geological Survey
Wiseman B1 and C1 quadrangles

Scale 1: 21, 000

0 1 2 3 4 MILES

0 1 2 3 4 Km

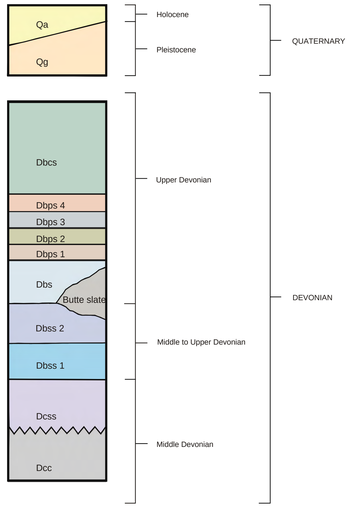


APPROXIMATE MEAN DECLINATION, 1971

GEOLOGIC MAP SYMBOLS

- Geologic contact - Solid where located; dashed where approximately located
- Fault - Solid where located; dashed where approximately located
- Thrust fault - Sawteeth on upper plate; solid where located; dashed where approximately located
- Overturned anticline - Showing direction of dip of limbs and plunge of axis
- Overturned anticline - Showing direction of dip of limbs
- Axis of antiform
- 29 Strike and dip of bedding
- 20 Strike and dip of foliation
- A A' Location of cross section

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

QUATERNARY DEPOSITS

- Qa ALLUVIAL DEPOSITS, UNDIFFERENTIATED
- Qg GLACIAL DEPOSITS, UNDIFFERENTIATED

TWICE METAMORPHOSED DEVONIAN SEDIMENTARY AND IGNEOUS ROCKS

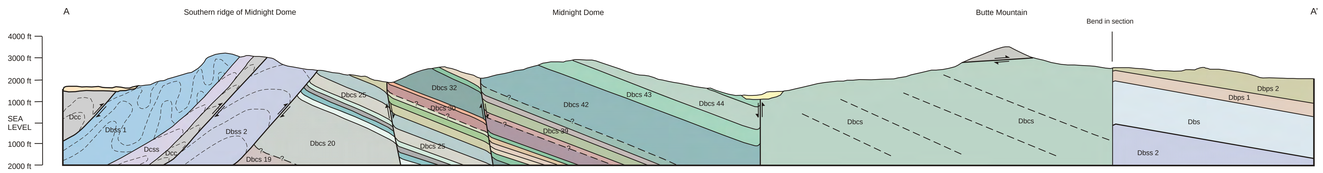
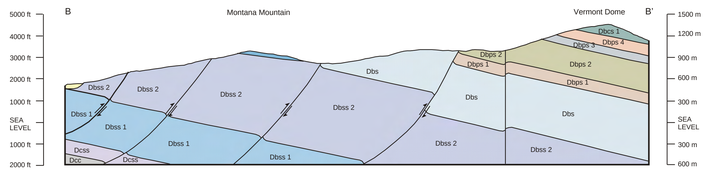
- Dbcs CHLORITIC QUARTZITE AND COARSE GRAINED QUARTZ-MICA SCHIST, INTERLAYERED WITH PHYLLITE, SCHIST; AND CHLORITIC METASILTSTONE BEAUCOUP FORMATION; UPPER DEVONIAN
- Dbps 4 BROWN-YELLOW PHYLLITE AND PELITIC MICA SCHIST, BEAUCOUP FORMATION; UPPER DEVONIAN
- Dbps 3 GRAY PHYLLITE PELITIC MICA SCHIST, BEAUCOUP FORMATION; UPPER DEVONIAN
- Dbps 2 GRAY BLACK PHYLLITE AND PELITIC MICA SCHIST, BEAUCOUP FORMATION; UPPER DEVONIAN
- Dbps 1 BROWN-YELLOW PHYLLITE AND PELITIC MICA SCHIST, BEAUCOUP FORMATION; UPPER DEVONIAN
- Dbs PHYLLITE, PELITIC SCHIST, AND BLACK SLATE, BEAUCOUP FORMATION; UPPER DEVONIAN
- Butte Mt BLACK SLATE AND BLACK METASILTSTONE, BEAUCOUP FORMATION?; MIDDLE TO UPPER DEVONIAN
- Dbss 2 BLACK METASILTSTONE AND PHYLLITE, BEAUCOUP FORMATION?; MIDDLE TO UPPER DEVONIAN
- Dbss 1 BLACK METASILTSTONE WITH INTERLAYERS OF PHYLLITE AND FINE GRAINED BLACK QUARTZITE; BEAUCOUP FORMATION?; MID. TO UP. DEVONIAN
- Dcss CHLORITIC SANDSTONE AND CONGLOMERATE; MIDDLE DEVONIAN
- Dcc CHLORITIC AND CARBONATE METASEDIMENTARY ROCKS; MIDDLE DEVONIAN
- METABASITE ("GREENSTONE"); UPPER DEVONIAN-JURASSIC?

LODE VEINS

- Au-Sb-Qtz VEIN SYSTEM
- Au-Qtz VEIN SYSTEM

GOLD - PLACER DEPOSITS

- Dbcs differentiated
- Dbs differentiated
  - Dbs 10 Gray-black phyllite with pyrite, gray-black micaceous schist, and black slate
  - Dbs 9 Gray-brown micaceous schist, phyllite, with pyrite, thinly bedded
  - Dbs 8 Brown micaceous schist, metasiltstone
  - Dbs 7 Chlorite schist
  - Dbs 6 Gray-black micaceous schist, metasiltstone
  - Dbs 5 Gray-black -green schist and phyllites, various colours
  - Dbs 4 Brown micaceous schist, phyllite, thinly bedded
  - Dbs 3 Black micaceous schist, minor pyrite
  - Dbs 2 Gray-black slate, brown slate
  - Dbs 1 Gray-black phyllite, black slate, black metasiltstone
- Midnight Dome Subunit (4)
  - Dbcs 45 Banded quartzite, interbedded with chloritic quartzite and quartz mica schist
  - Dbcs 44 Chloritic quartzite, interlayered with banded quartzite, siltstone, phyllite
  - Dbcs 43 Quartz mica schist, interlayered with chlorite schist and phyllite
  - Dbcs 42 Quartz mica schist, interlayered with chlorite schist, phyllite, and metasiltstone
  - Dbcs 41 Quartzite schist, chloritic quartzite interbedded with gray-brown schist and phyllite
  - Dbcs 40 Gray-brown micaceous schist
  - Dbcs 39 Chloritic quartzite, interbeded with phyllite and schist
  - Dbcs 38 Brown quartz mica schist
  - Dbcs 37 Brown micaceous schist
  - Dbcs 36 Chloritic quartzite, banded quartzite
  - Dbcs 35 Micaceous brown-green schist
  - Dbcs 34 Gray-black-brown schist
  - Dbcs 33 Brown schist
  - Dbcs 32 Gray-brown micaceous schist, thinly bedded
  - Dbcs 31 Gray-black phyllite, quartzite schist, in lower part of Union Gulch black pyrite schist
  - Dbcs 30 Gray phyllite, micaceous black schist
  - Dbcs 29 Chloritic quartzite
  - Dbcs 28 Banded chloritic quartzite, interbedded with chloritic schist
  - Dbcs 27 Black-green chloritic schist
  - Dbcs 26 Chloritic quartz mica schist
  - Dbcs 25 Chloritic schist, thinly bedded
  - Dbcs 24 Gray-brown quartz mica schist
  - Dbcs 23 Black schist
  - Dbcs 22 Chloritic quartz schist, gray-black schist
  - Dbcs 21 Chloritic metasiltstone
  - Dbcs 20 Gray-green quartz schist
- Swift Creek Subunit (3)
  - Dbcs 19 Gray-black quartz mica schist, black quartzite
  - Dbcs 18 Brown-gray chlorite mica schist
  - Dbcs 17 Black quartz mica schist with pyrite, interbedded with chlorite schist
  - Dbcs 16 Gray-brown phyllite
  - Dbcs 15 Gray-brown quartz mica schist
  - Dbcs 14 Black micaceous schist with pyrite
  - Dbcs 13 Gray-brown phyllite, quartz mica schist
- Nolan-Hammond Subunit (2)
  - Dbcs 12 Gray phyllite, thinly bedded
  - Dbcs 11 Gray-black micaceous schist, thinly bedded
  - Dbcs 10 Brown chloritic quartz mica schist, coarse grained, "Fortress Formation"
  - Dbcs 9 Gray-black-brown micaceous schist, phyllite, quartz mica schist
  - Dbcs 8 Phyllite and quartz mica schist
  - Dbcs 7 Biotite quartzite
  - Dbcs 6 Chloritic quartzite, at Buckeye Gulch with pyrite
  - Dbcs 5 Banded quartz mica schist, interbedded with phyllite and chlorite schist
  - Dbcs 4 Gray micaceous schist, phyllite
  - Dbcs 3 Chlorite schist, micaceous
  - Dbcs 2 Gray-black micaceous schist, phyllite
- Vermont Dome Subunit (1)
  - Dbcs 1 Chloritic quartzite, chlorite schist



(-0.7) x VERTICAL EXAGGERATION