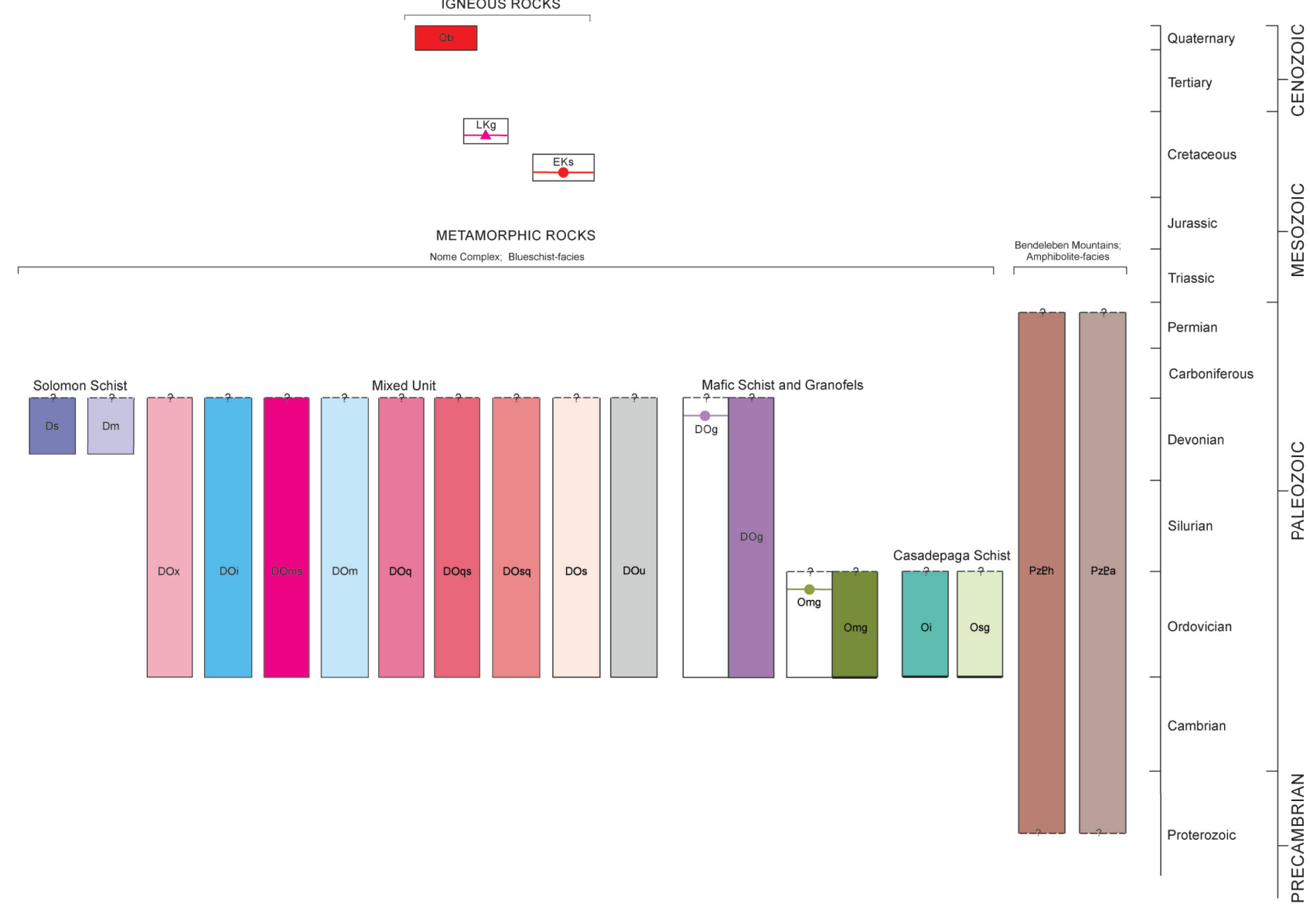


DESCRIPTION OF MAP UNITS

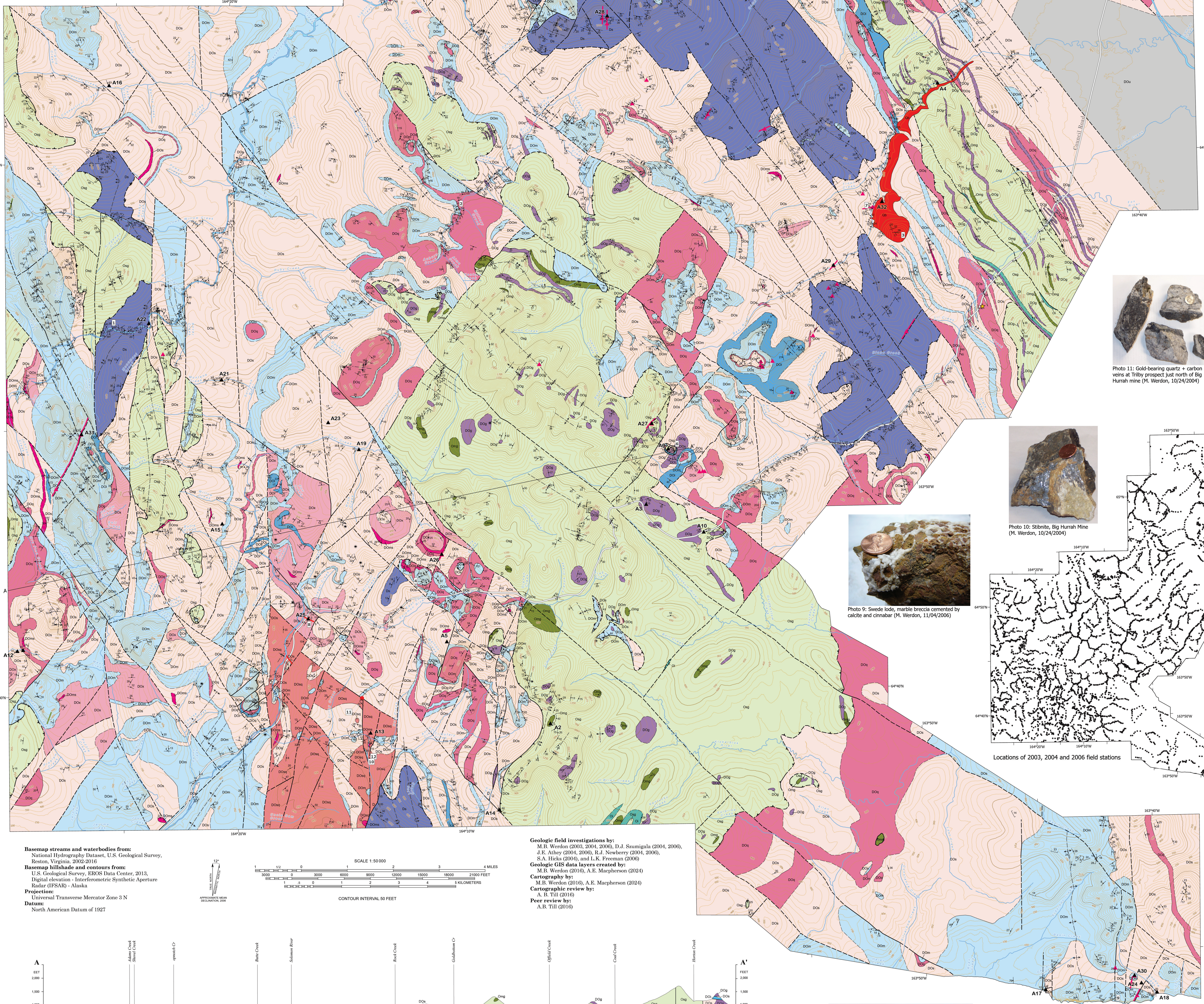
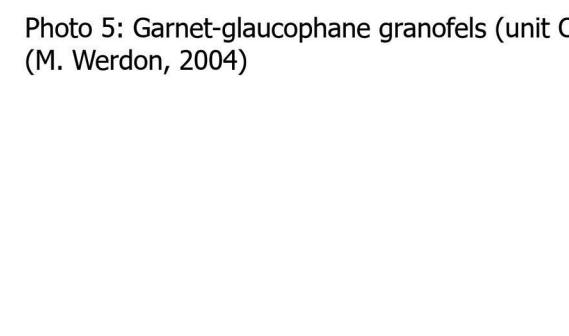
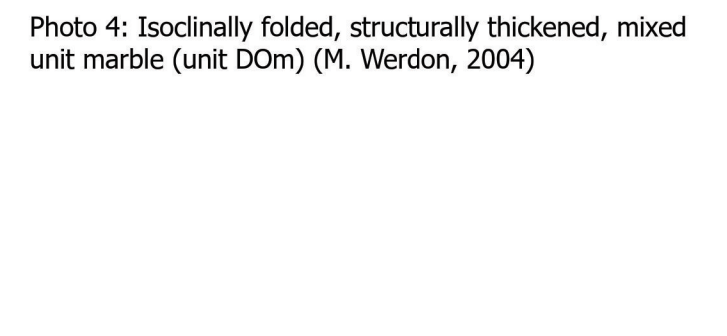
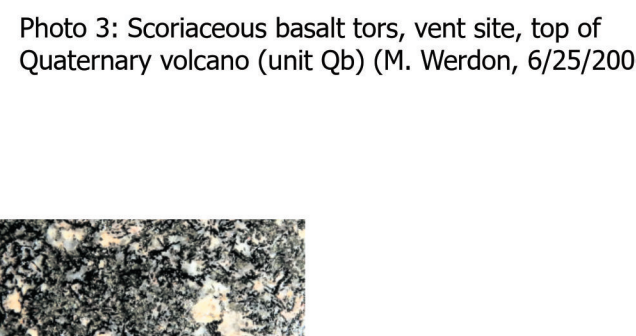
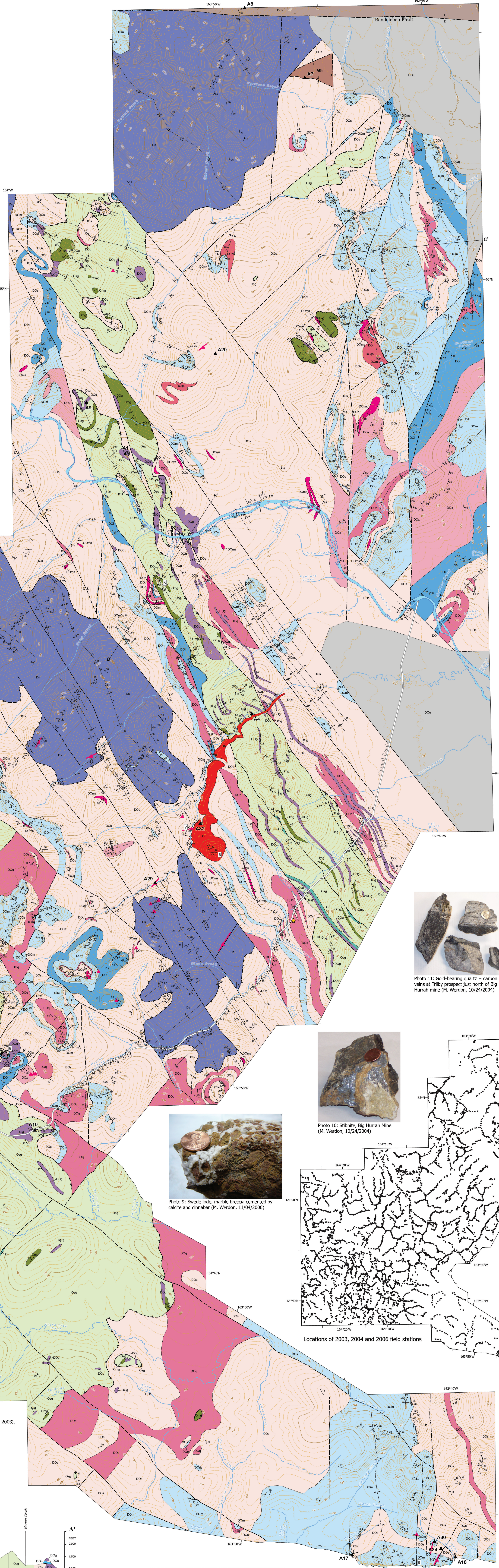
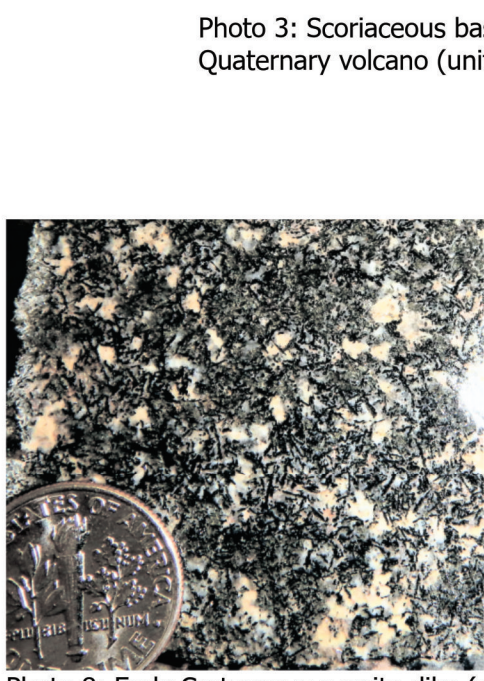
- IGNEOUS ROCKS**
- BASALT FLOWS AND VENT DEPOSITS (Quaternary)
  - GABBRO DIKES (Late Cretaceous)
  - SYENITIC DIKES (Early Cretaceous)
- METAMORPHIC ROCKS**
- SEDIMENTARY AND HONOROUS ROCKS METAMORPHOSED TO BLUESCHIST FACIES, SOME COMPLEX
- SOLOMON SCHIST
- QUARTZ-WHITE MICA SCHIST (Devonian)
  - MARBLE (Devonian)
- METAMORPHOSED MAFIC INTRUSIONS
- WITHIN-PLATE MAFIC SCHIST AND GRANOFELS (Devonian-Ondevician)
  - ISLAND-ARC-LIKE MAFIC SCHIST AND GRANOFELS (Ondevician)
- MIXED UNIT
- MIXED METASEDIMENTARY ROCKS (Devonian-Ondevician)
  - IMPURE MARBLE (Devonian-Ondevician)
  - MAFIC SCHIST (Devonian-Ondevician)
  - MARBLE (Devonian-Ondevician)
  - QUARTZITE (Devonian-Ondevician)
  - QUARTZITE AND SCHIST (Devonian-Ondevician)
  - GRAPHITIC SCHIST AND QUARTZITE (Devonian-Ondevician)
  - SCHIST (Devonian-Ondevician)
- CASCADE MOUNTAIN SCHIST
- METASEDIMENTARY ROCKS AND METAGRAYWACKE (Ondevician)
  - IMPURE MARBLE (Ondevician)
- UNDIFFERENTIATED NOME COMPLEX ROCKS
- SEDIMENTARY AND HONOROUS ROCKS METAMORPHOSED TO AMPHIBOLITE FACIES
- STAUROLITE SCHIST (Paleozoic to Proterozoic)
  - SCHIST AND AMPHIBOLITE (Paleozoic to Proterozoic)

CORRELATION OF MAP UNITS



EXPLANATION OF MAP SYMBOLS

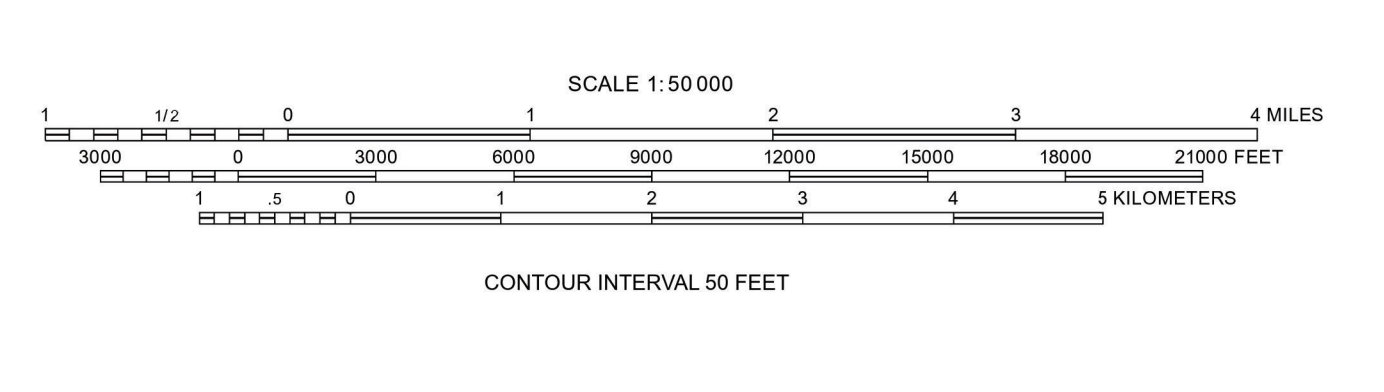
- Contacts\***
- Contacts - Identify and existence certain, location inferred
- Faults\***
- - - Fault - Dashed where approximately located or inferred. Arrows indicate apparent direction of relative movement; U, upthrown block; D, downthrown block.
  - - - Low-Angle Fault - Identify and existence certain, dashed where location inferred
- Folds**
- - - Antiform - Identify and existence certain, location inferred
  - - - Overturned antiform - Identify and existence certain, location inferred. Arrows show dip direction of limbs
  - - - Synform - Identify and existence certain, location inferred
  - - - Overturned synform - Identify and existence certain, location inferred
- \* See text for full discussion of contact and fault relationships between map units
- Foliation**
- Strike and dip of inclined foliation
  - Strike of vertical foliation
  - Horizontal foliation
- Cleavage**
- Strike and dip of inclined cleavage
- Dikes**
- Dikes - shown on map as lines where orientation recorded. Example of a dike symbol. See Description of Map Unit for explanation of compositional variations.
- Other Symbols**
- Photo locations
  - ▲ A1-A10 Localities - Numbers refer to citations in text accompanying map
  - ★ U-Pb locality - Metamorphic rock dated for zircon analysis
  - Cross section line and label



Basemap streams and waterbodies from National Hydrography Dataset, U.S. Geological Survey, Reston, Virginia, 2002-2016

Basemap hillshade and contours from U.S. Geological Survey, 3D Data Center, 2013, Digital elevation - Interferometric Synthetic Aperture Radar (IFSAR) - Alaska

Projection: Universal Transverse Mercator Zone 5 N  
Datum: North American Datum of 1987

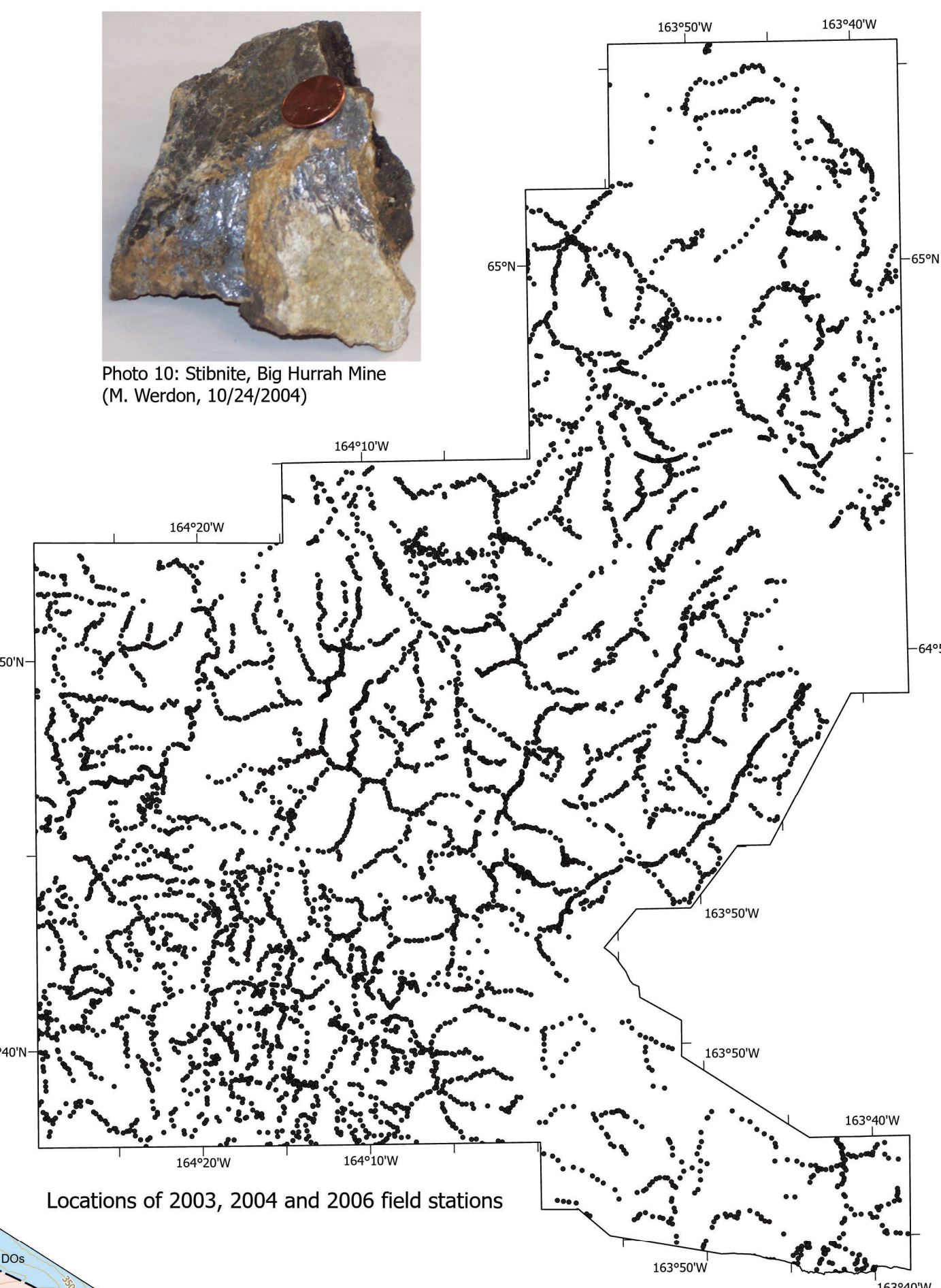
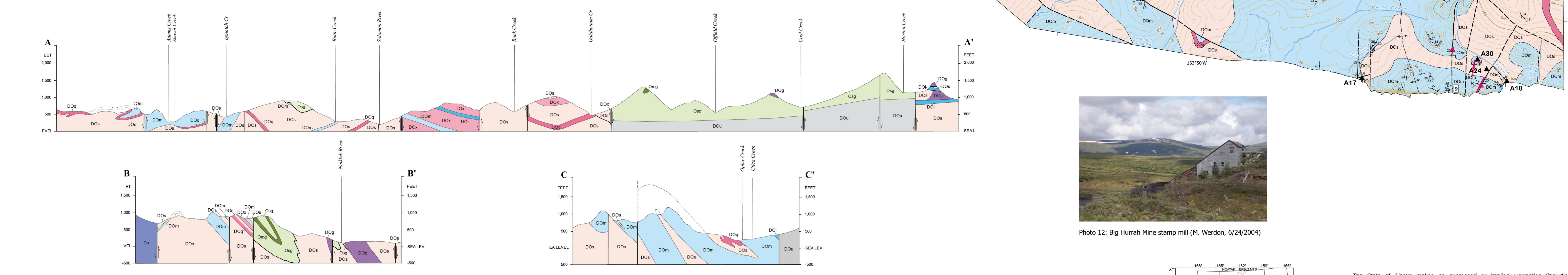


Geologic field investigations by:  
M.B. Werdon (2010, 2014, 2016), D.J. Sumgala (2004, 2006), J.E. Athey (2004, 2006), R.J. Newberry (2004, 2006), J.A. Hicks (2004), and L.K. Freeman (2009)

Geologic GIS data layers created by:  
M.B. Werdon (2010), A.E. Macpherson (2024)

Cartography by:  
A.B. Tull (2010)

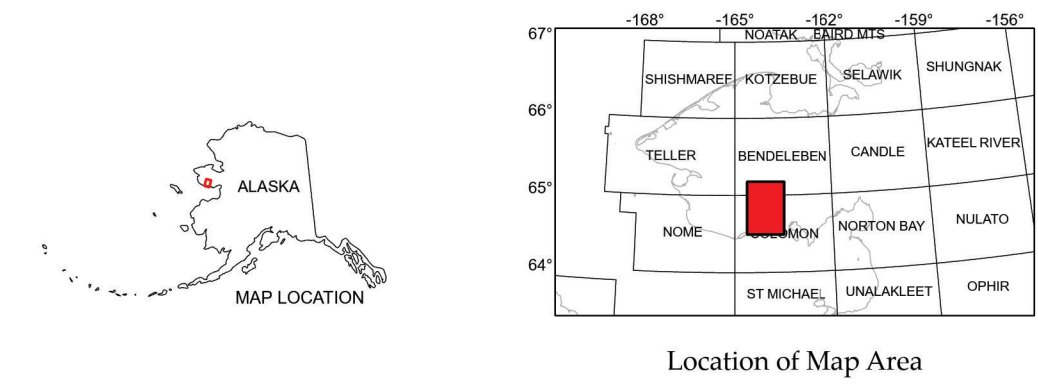
Peer review by:  
A.B. Tull (2010)



Bedrock Geologic Map of the Big Hurrah - Council-Bluff Area, Southern Seward Peninsula, Alaska

by  
M.B. Werdon<sup>1</sup>, R.J. Newberry<sup>1</sup>, J.E. Athey<sup>1</sup>, D.J. Sumgala<sup>1</sup>, L.K. Freeman<sup>1</sup>, L.E. Burns<sup>1</sup>, and S.A. Hicks<sup>2</sup>

Affiliations:  
<sup>1</sup> Alaska Division of Geological & Geophysical Surveys, 3554 College Rd., Fairbanks, AK 99709  
<sup>2</sup> University of Alaska Fairbanks, College of Natural Science and Mathematics, School of Geosciences, P.O. Box 757580, Fairbanks, Alaska 99775-5780  
<sup>3</sup> Laurel Burns and Larry Freeman now retired



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DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS  
3554 College Road • Fairbanks, Alaska 99709-3707  
Phone 907-451-5010 • Fax 907-451-5650  
email: [dgg@alaska.gov](mailto:dgg@alaska.gov) • website: [dgg.alaska.gov](http://dgg.alaska.gov)