

EXPLANATION OF MAP SYMBOLS

Linework is solid where location is accurate, long-dashed where location is approximate, and short-dashed where location is inferred. Question marks indicate the existence or identity of the feature is questionable. Localities with multiple planar feature measurements use asymmetric symbols with the tail ends joined at the measurement point.

CONTACTS AND FAULTS

- CONTACT
- FAULT — sense of movement indeterminate
- LOW-ANGLE FAULT (UNKNOWN SENSE OF SLIP) — half-circles on hanging wall
- NORMAL FAULT — ball and bar on hanging wall
- THRUST FAULT — tooth on hanging wall
- LOW-ANGLE NORMAL FAULT — half-circles on hanging wall

PLANAR FEATURES

- SMALL MINOR INCLINED DIKE — showing strike and dip
- SMALL MINOR VERTICAL DIKE — showing strike
- SMALL MINOR DIKE — showing strike, dip unknown or inconsistent
- SMALL MINOR INCLINED FAULT — showing strike and dip
- SMALL MINOR INCLINED JOINT — showing strike and dip
- SMALL MINOR VERTICAL JOINT — showing strike
- INCLINED BEDDING — showing strike and dip
- HORIZONTAL BEDDING
- INCLINED UNDULATORY BEDDING — showing strike and dip
- INCLINED CLEAVAGE — showing strike and dip
- INCLINED SLATY CLEAVAGE — showing strike and dip
- INCLINED FLOW BANDING or FOLIATION IN IGNEOUS ROCK — showing strike and dip
- HORIZONTAL METAMORPHIC or TECTONIC FOLIATION
- INCLINED METAMORPHIC or TECTONIC FOLIATION — showing strike and dip
- INCLINED BED-PARALLEL METAMORPHIC or TECTONIC FOLIATION — showing strike and dip
- INCLINED UNDULATORY METAMORPHIC or TECTONIC FOLIATION — showing strike and dip
- INCLINED DISJUNCTIVE, SYMMETRIC CRENULATION METAMORPHIC or TECTONIC FOLIATION — showing strike and dip
- INCLINED GNEISSIC LAYERING — showing strike and dip
- SMALL MINOR INCLINED VEIN — showing strike and dip

LINEAR FEATURES

- INCLINED GENERIC LINEATION — showing trend and plunge
- INCLINED ALIGNED-MINERAL LINEATION — showing trend and plunge
- INCLINED SLICKENLINE — showing trend and plunge
- INCLINED INTERSECTION LINEATION — showing trend and plunge
- INCLINED, SMALL MINOR FOLD HINGE — showing trend and plunge
- INCLINED BOUDINS — showing trend and plunge
- INCLINED SYMMETRIC MINOR FOLD HINGE — showing trend and plunge
- INCLINED CRENULATION LINEATION — showing trend and plunge

MISCELLANEOUS MAP SYMBOLS

- CROSS SECTION LINE
- ANTIFORM — showing approximate hinge trace
- SYNFORM — showing approximate hinge trace
- GEOCHRONOLOGY SAMPLE LOCALITY (Buchanan, Barrows and others, 2023 and Buchanan, Gavil and others, 2025)
- Lake George amphibolite confirmed by microprobe
- Fairbanks-Chena amphibolite confirmed by microprobe
- MAP UNIT POINT — Dikes or other localized map unit with observations too small to draw at map scale, colored and labeled the same as map units above.

DGGS geologist Travis Naibert measuring orientations within a hornblende section of the Blackshell carbonaceous unit at station 23E7203 (photograph taken 8/02/2023 by Evan Twilker).

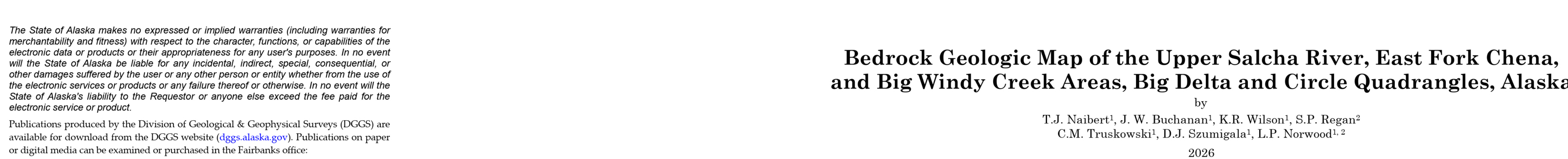
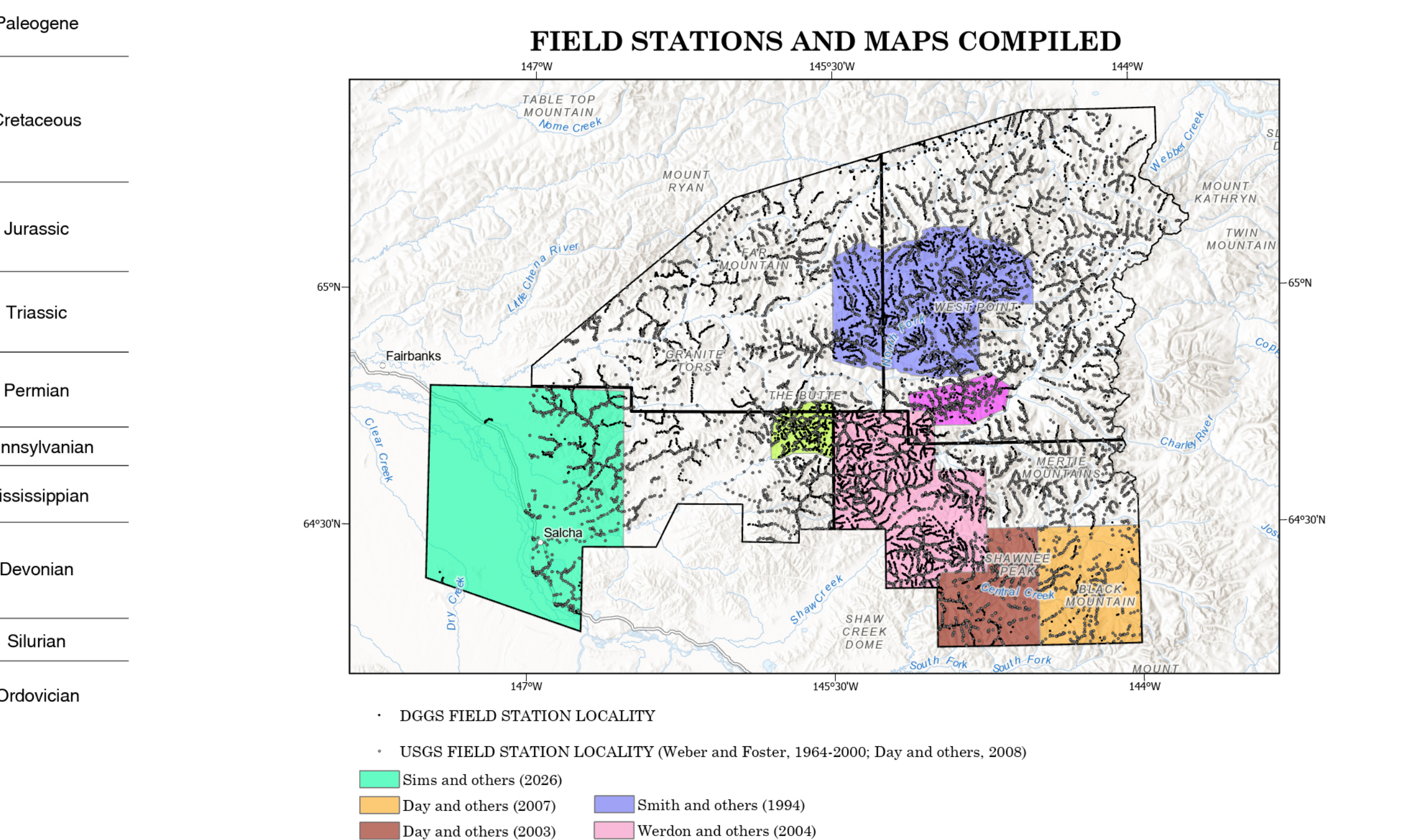
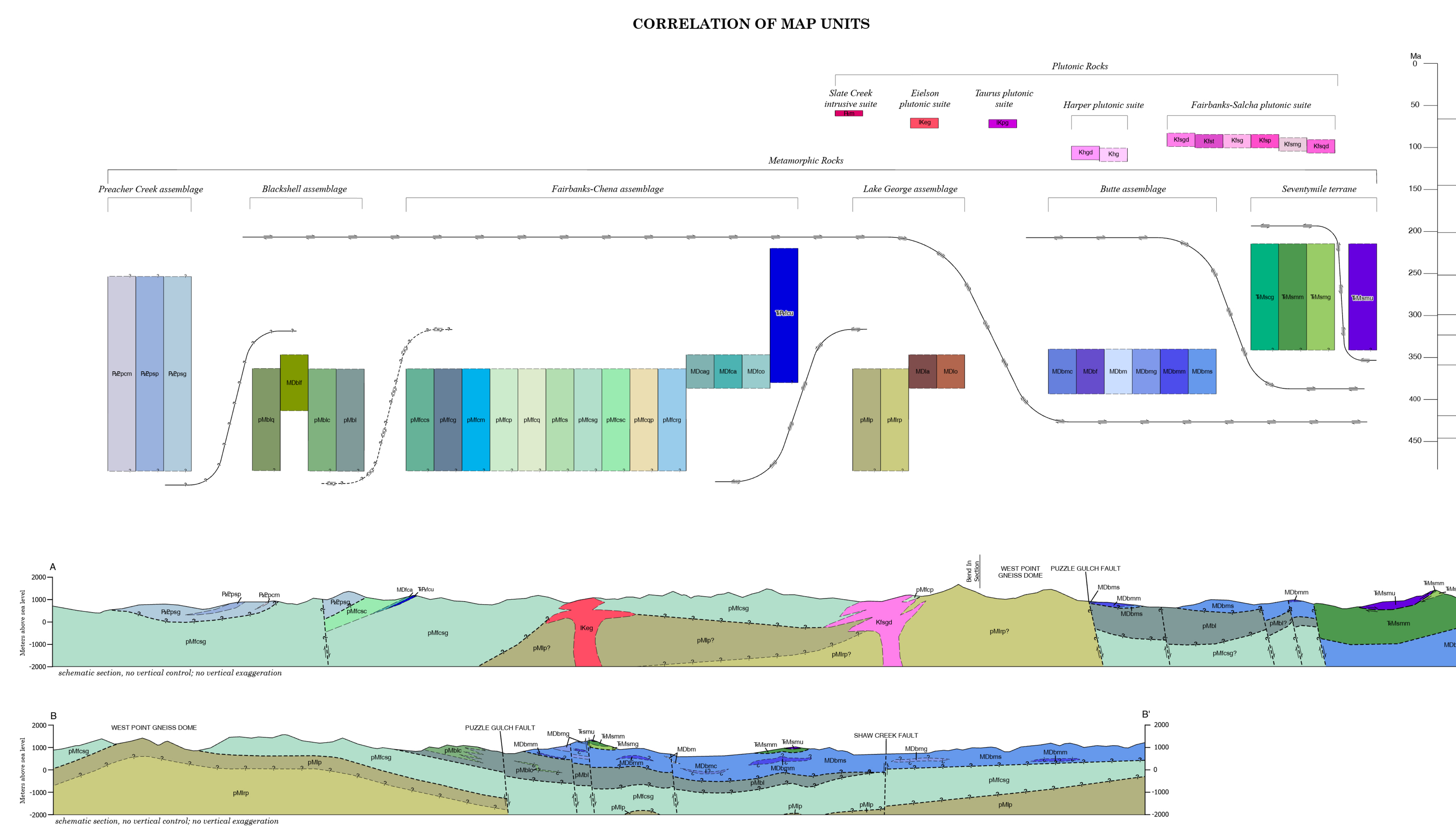
MAP LOCATION

Location of Map Area

GEOLOGIC MAP UNITS

Please see accompanying report for descriptions of the map units.

IGNEOUS ROCKS	METAMORPHIC ROCKS	FAIRBANKS-CHENA ASSEMBLAGE
SLATE CREEK INTRUSIVE SUITE	SEVENTYMILE TERRANE	METAFOLIOLETS
Mafic intrusions (Paleogene)	Metamorphic rocks (Triassic to Mississippian)	Meta-ultramafic rocks (Triassic to Paleozoic)
EIELSON INTRUSIVE SUITE	Metachert and greenstone (Triassic to Mississippian)	Central Creek augen orthogneiss (Early Mississippian to Late Devonian)
Granite (Latest Cretaceous)	Metasedimentary rocks and greenstone (Triassic to Mississippian)	Amphibolite (Mississippian to Devonian)
TAURUS PLUTONIC SUITE	Meta-ultramafic rocks (Triassic to Mississippian)	Orthogneiss (Mississippian to Devonian)
Porphyritic granite (Latest Cretaceous)	BUTTE ASSEMBLAGE	Calc-silicate gneiss (Pre-Mississippian)
FAIRBANKS-SALCHA PLUTONIC SUITE	Marble, dolostone, and calc-schist (Mississippian to Devonian)	Graphitic rocks (Pre-Mississippian)
Granite (Early Late Cretaceous)	Metasedimentary rocks (Mississippian to Devonian)	Marble (Pre-Mississippian)
Granodiorite (Early Late Cretaceous)	Metamorphic rocks (Mississippian to Devonian)	Paragneiss (Pre-Mississippian)
Porphyry (Early Late Cretaceous)	Metaconglomerate (Mississippian to Devonian)	Quartzite (Pre-Mississippian)
Quartz diorite (Early Late Cretaceous)	Metagrit (Mississippian to Devonian)	Quartzite and paragneiss (Pre-Mississippian)
White mica-bearing granite (Early Late Cretaceous)	Metasedimentary rocks (Mississippian to Devonian)	Schist (Pre-Mississippian)
Tonalite (Early Late Cretaceous)	BLACKSHELL ASSEMBLAGE	Schist and gneiss (Pre-Mississippian)
HARPER PLUTONIC SUITE	Metasedimentary rocks (Pre-Mississippian)	Schist, calc-silicate and carbonate rocks (Pre-Mississippian)
Granite (Late Early Cretaceous)	Metasedimentary rocks (Pre-Mississippian)	Recrystallized gneiss and schist (Pre-Mississippian)
Granodiorite (Late Early Cretaceous)	PREACHER CREEK ASSEMBLAGE	Amphibolite (Early Mississippian to Late Devonian)
	Calc-schist and marble (Paleozoic to Neoproterozoic)	Orthogneiss (Early Mississippian to Late Devonian)
	Schist and phyllite (Paleozoic to Neoproterozoic)	Paragneiss (Pre-Mississippian)
	Metasandstone and metagrit (Paleozoic to Neoproterozoic)	Recrystallized paragneiss (Pre-Mississippian)



REFERENCES CITED (continued)

Topographic base map from:
Shaded-relief base map and topographic lines created from: U.S. Geological Survey 3D Digital Terrain Model (2010) Hydrology from: U.S. Geological Survey National Hydrologic Dataset (2017) Projection: Universal Transverse Mercator Zone 6N
Datum: North American Datum of 1983
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