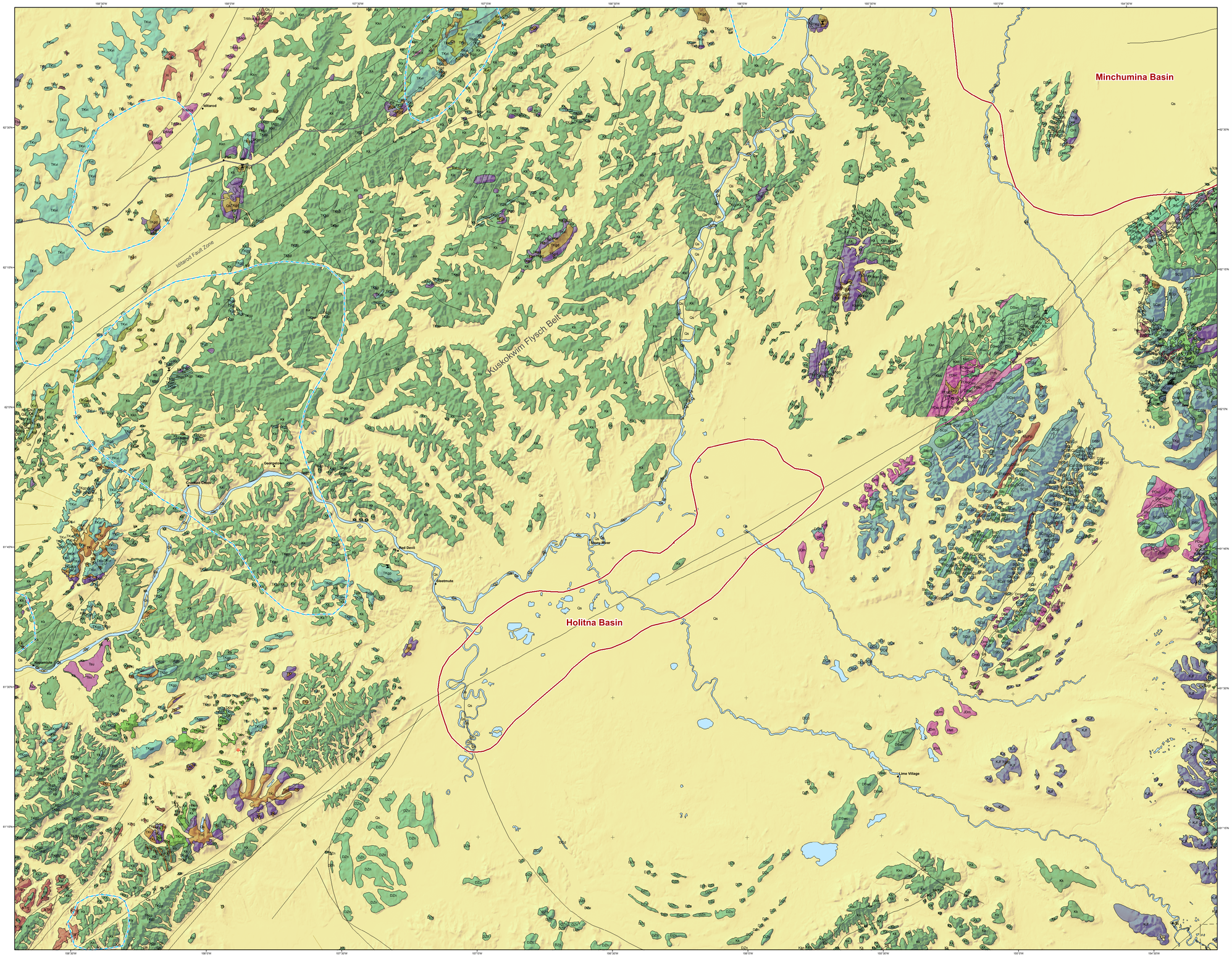

Map Unit Descriptions
(From Wilson, et.al. 1998)

GENERAL UNITS

bu	Bedrock of unknown type or age
g	Ice fields or glaciers

QUATERNARY AND LATE TERTIARY

Qs	Surficial deposits, undifferentiated

TERTIARY ROCKS

Sedimentary Rocks

Tsu	Sedimentary rocks, undivided
Tcb	Coal-bearing rocks

Igneous Rocks

Volcanic and Hypabyssal Rocks

Tb	Basalt
Thf	Hypabyssal felsic and intermediate intrusive rocks

Miocene

Tba	Basaltic andesite

Eocene

Tegr	Granite and granodiorite

Paleocene

Tpgr	Granitic rocks
Thgd	Granodiorite and other intermediate plutonic rocks
Tgl	Gabbro

Intrusive Rocks

Tgdp	Quartz Monzonite, Monzonite Breccia, and Quart Porphyry

TERTIARY AND/OR CRETACEOUS

Igneous Rocks

Volcanic and Hypabyssal Rocks

TKv	Flows, tuff, and breccia, undivided
TKvi	Younger Phase of Iditarod Volcanics
TKd	Dikes and subvolcanic rocks of intermediate composition
TKgp	Hypabyssal granite porphyry dikes and rhyolitic sills, and plugs
TKvr	Rhyolite and related rocks
TKiv	Mafic to intermediate volcano-plutonic complexes

Intrusive Rocks

TKi	Intrusive rocks, undivided
TKg	Granitic rocks
TKgd	Granodiorite, tonalite, and monzonite dikes, and stocks

UNDIVIDED MESOZOIC ROCKS

Sedimentary Rocks

KTrg	Gemuk Group

CRETACEOUS ROCKS

Sedimentary Rocks

Kuskokwim Group

Kk	Kuskokwim Group, deep marine rocks
Kkn	Kuskokwim Group, non-marine and shallow-marine rocks

Igneous rocks

Volcanic and Hypabyssal Rocks

Kvl	Volcanic rocks

CRETACEOUS AND/OR JURASSIC

Sedimentary Rocks

KJf	Kahiltna flysch sequence

TRIASSIC

Sedimentary Rocks

Trcs	Calcareous sedimentary rocks
Trcg	Conglomerate and volcanic sandstone

MESOZOIC AND PALEOZOIC

Assemblages and Sequences

Innoko Assemblage

Jium	Ultramafic and mafic rocks, undivided
TrMis	Sandstone, grit, and argillite
TrMica	Chert, argillite, and volcaniclastic rocks

Stratigraphic Sequences

Mystic Sequence

JDm	Mystic stratigraphic sequence, undivided
JTrtv	-- Tatina River Volcanics and equivalent units
PMl	-- Younger limestone
PDsc	-- Sheep Creek Formation and correlative siliciclastic units
Dsc	-- Shale and chert
Dml	-- Older limestone

Igneous Rocks

MzPzi	Intrusive and volcanic rocks, undivided

PALEOZOIC

Dillinger and Nixon Fork Sequences

Dillinger Sequence

DCd	Dillinger sequence, undivided
Dsbr	-- Barren Ridge Limestone and correlative units
Stc	-- Terra Cotta Mountains Sandstone and correlative units
SCpl	-- Post River Sandstone, Lyman Hills Formation, and correlative units

Nixon Fork Sequence

DZn	Shallow-marine carbonate units of Holitna basin area, undivided
DSwc	-- Whirlwind Creek Formation and unnamed correlative units
Spf	-- Paradise Fork Formation and unnamed correlative rocks
Ont	-- Novi Mountain and Telsitna Formations, and unnamed correlative rocks
CZds	-- Unnamed dolostone, sandstone, siltstone

PALEOZOIC AND PRECAMBRIAN

Sequences and Complexes

Ruby Metamorphic Complex

PzZrqs	Pelitic and quartzitic schist

PRECAMBRIAN

Metamorphic Rocks

Xi	Idono metamorphic complex

Disclaimer

This map was created, edited, and published by the State of Alaska, Department of Natural Resources, Division of Oil and Gas, and is for informational purposes only. Discrepancies between structural features and basin outlines are the result of merging multiple data sets from a number of different sources. An attempt has been made to reconcile discrepancies among conflicting sources of map data in this compilation, but the user is cautioned against using this product as the basis for detailed interpretations.

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Location Map

Scale: 1:250,000

0 2.5 5 10 15 20 Miles
0 5 10 20 30 40 Kilometers

Universal Transverse Mercator SN
Clark 1866 Ellipsoid
False Easting: 500,000.0
Central Meridian: -153.000000

North American Datum 1927
Scale Factor: 0.9996
False Northing: 0.0
Latitude of Origin: 0.0

Regional Surface Geology of the Holitna Basin, Alaska
(From Wilson et.al. 1998)

Compiled by
John F. Meyer Jr.
2008

Map Legend

- Population < 1000
- Population > 1000
- Metalliferous Lode Deposits
- Federal Parks
- Placer Deposits
- Fold
- Fault
- Normal Fault
- Fault - Inferred
- Thrust Fault
- Thrust Fault - Inferred
- Syncline
- Synclinorium
- Syncline - Inferred
- Anticline
- Anticlinorium
- Anticline - Inferred
- Paleo Canyon
- Basin Depocenters
- Roads

Data Sources

Basemap data including hydrologic data, village and town locations, glaciers and icefields, volcanoes, roads and boundaries are from the State of Alaska, Core GIS database. The oil and gas wells are from the Alaska Division of Oil and Gas database adapted from the Alaska Oil and Gas Conservation Commission dataset. The basin depocenters are from the Alaska Division of Oil and Gas. The regional geologic map units, faults and folds are from Wilson, F.H., et.al., 1998, the indicators of petroleum from Miller, D.J., et.al., 1959, and the placer deposits are from Nockleberg, W.J., et.al.,1987.

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