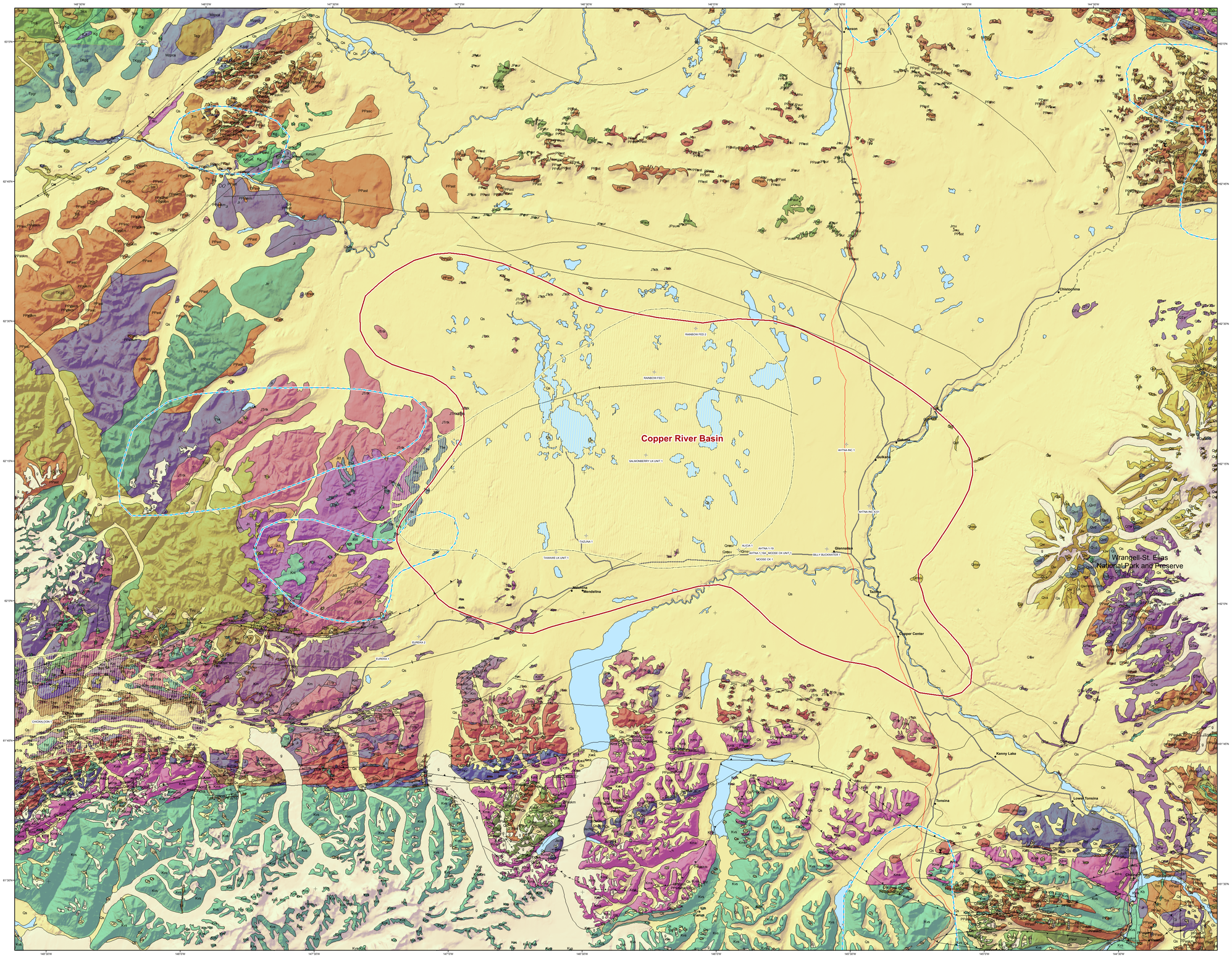

Map Unit Descriptions

(From Wilson et.al. 1998)

GENERAL UNITS

g	Ice fields or glaciers

QUATERNARY AND LATE TERTIARY

Qs	Surficial deposits, undifferentiated
Qv	Volcanic rocks, undivided

Quaternary and (or) Tertiary

Qcs	Cinder and Spatter Cones
Qdf	FLow deposits, undivided
Qds	Radial Dike Swarm and Plug
Qi	Intrusive Rocks, Undivided
Qshc	Hyaloclastite or aguAgene Tuff
QTi	Intrusive Rocks
QTv	Volcanic rocks, undifferentiated
QTw	Wrangell Lava
Qva	Volcanic Avalanche Deposits
Qvd	Dacitic to rhyolitic domes
Qw	WRangell Lava, Younger Part

TERTIARY ROCKS

Sedimentary Rocks

Tsu	Sedimentary rocks, undivided
Ttw	Tsadaka, West Foreland, and Wishbone Formations, undivided
Tw	-- Wishbone Formation
Tch	Chickaloon Formation
Tar	Arkose Ridge Formation

Igneous Rocks

Volcanic and Hypabyssal Rocks

Tvu	Volcanic rocks, undivided
Thf	Hypabyssal felsic and intermediate intrusive rocks
Thm	Hypabyssal mafic intrusive rocks

Paleocene

Tcv	Volcanic rocks of the Cantwell Formation

Plutonic Rocks

Eocene

Tegr	Granite and granodiorite
Td	Felsic intrusive rocks

Paleocene

Tpgr	Granitic rocks

TERTIARY AND/OR CRETACEOUS

Intrusive Rocks

TKg	Granitic rocks
TKgd	Granodiorite, tonalite, and monzonite dikes, and stocks

Metamorphic Rocks

TKc	Melange or cataclastite of the Orca Group
TKgg	Gneissose granitic rocks

UNDIVIDED MESOZOIC ROCKS

Igneous Rocks

Mzum	Ultramafic and associated rocks

Metamorphic Rocks

Mzpca	Phyllite, pelitic schist, calc-schist, and amphibolite of the MacLaren metamorphic belt

CRETACEOUS ROCKS

Sedimentary Rocks

Km	Matanuska Formation

Sedimentary Rocks of the Yukon-Koyukuk Region

Knl	Nelchina Limestone
Kb	Berg Creek Formation

Melange

KTrm	McHugh Complex
Kmar	Melanges of the Alaska Range

Intrusive Rocks

Kg	Granitic rocks
Kmum	Mafic and ultramafic rocks
Ktt	Leucotonalite and trondhjemite

Metamorphic Rocks

Kvs	Metasedimentary rocks of the Valdez Group
Kvv	Metavolcanic rocks of Valdez Group

CRETACEOUS AND/OR JURASSIC

Sedimentary Rocks

KJf	Kahiltna flysch sequence
KJfk	-- Flysch sequence
KJfn	-- Flysch sequence
KJfm	-- Metasedimentary rocks
KJcg	Conglomerate, sandstone, siltstone, shale, and volcanic rocks
KJvr	Vrain unit

Intrusive Rocks

KJg	Granitic rocks

JURASSIC

Sedimentary Rocks

Jn	Naknek Formation
Jct	Chinitna Formation, Tuxedni Group, and coeval sedimentary rocks
Jc	Chinitna Formation
Jkt	Kotsina Conglomerate
Jtx	Tuxedni Group

Igneous Rocks

Jmu	Mafic and ultramafic rocks
Jtr	Trondhjemite
Ji	Alaska-Aleutian Range and Chitina Valley batholiths, undifferentiated

Metamorphic Rocks

Jsch	Greenschist and blueschist
JPaur	Uranatina metaplutonic complex

JURASSIC AND TRIASSIC

Sedimentary Rocks

JTrlm	Limestone and marble
JTrmc	McCarthy Formation

Igneous Rocks

JTrtk	Talkeetna Formation

TRIASSIC

Sedimentary Rocks

Trcs	Calcareous sedimentary rocks

Igneous Rocks

Volcanic Rocks

Trn	Nikolai Greenstone and related rocks

Plutonic Rocks

Trgb	Gabbro, diabase, and metagabbro

Metamorphic Rocks

Trnm	Metavolcanic and associated metasedimentary rocks

PALEOZOIC

Assemblages and Sequences

Skolai Group

Pe	Eagle Creek Formation
PPasc	Station Creek and Slana Spur Formations, and equivalent rocks
Pat	Tetelna Volcanics
Pmi	Shallow stocks, dikes, and sills
PPagi	Ahtell pluton
PPad	Diorite complex
Pagb	Gabbro and orthogneiss
PPast	Strelna metamorphic complex
PPaskm	Marble

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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Exploration Wells

- Drill Hole
- Oil Well
- Gas Well
- Service Well (Un-differentiated)
- Suspended
- Suspended - Oil Show
- Plugged & Abandoned
- Plugged & Abandoned - Oil Show
- Plugged & Abandoned - Gas Show
- Plugged & Abandoned - Oil and Gas Show
- Plugged & Abandoned - Oil (Certified or Significant)
- Shut-in Location
- Operational Shutdown
- Permitted Location

Location Map

Scale: 1:250,000

0 2.5 5 10 15 20 Miles

0 2.5 5 10 15 20 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

Map Legend

- Population < 1000
- Population > 1000
- Roads
- Trans-Alaska Pipeline
- Fold
- Fault
- Normal Fault
- Fault - Inferred
- Thrust Fault
- Thrust Fault - Inferred
- Syncline
- Synclinorium
- Syncline - Inferred
- Anticline
- Anticlinorium
- Anticline - Inferred
- Paleo Canyon
- Basin Depocenters
- Placer Deposits
- Coalfields
- Federal Parks

Regional Surface Geology of the Copper River Basin, Alaska

(From Wilson et.al. 1998)

Compiled by
John F. Meyer Jr.
2008

Data Sources

Basemap data including hydrologic data, village and town locations, glaciers and oxfields, volcanoes, roads and boundaries are from the State of Alaska, Core GIS database. The o-il and gas wells are from the Alaska Division of Oil and Gas da tabase adapted from the Alaska Oil and Gas Conservation Commission dataset. The basin outlines are from the Alaska Division of Oil and Gas. Geologic map units, geologic map units, faults and folds are from Wilson, F.H., Hult, J.R., 1998; and the coal field boundaries are from Merritt, R.D. and Hawley, C.C., 1968.

References Cited

Kirschner, C.E., 1988, Map showing sedimentary basins of onshore and continental shelf areas, Alaska, US: Geological Survey, Miscellaneous Investigations Series I-1873, scale 1:2,500,000.
Merritt, R.D., and Hawley, C.C., 1986, Map of Alaska's coal resources: Alaska Division of Geological & Geophysical Surveys Special Report 37, 1 sheet, scale 1:2,500,000.
Wilson, F.H., Dover, J.H., Bradley, D.C., Weber, F.R., Bundtzen, T.K., and Haeussler, P.J., 1998, Geologic Map of Central (Interior) Alaska: U.S. Geological Survey Open-File Report 98-133-A.