



**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
- Tn Nenana Gravel
- Tcb Coal-bearing rocks

**Igneous Rocks**

- Tts Rhyolitic volcanic and sedimentary rocks
- Tb Basalt
- Thf Hypabyssal felsic and intermediate intrusive rocks
- Thm Hypabyssal mafic intrusive rocks
- Thd Hornblende dike, Pliocene

**Oligocene or Eocene**

- Toem Grandiorite to tonalite

**Eocene**

- Tegr Granite and granodiorite

**Paleocene**

- Tcv Volcanic rocks of the Cantwell Formation
- Tpgr Granitic rocks
- Tgdg Grandiorite and other intermediate plutonic rocks

**TERTIARY AND/OR CRETACEOUS**

**Intrusive Rocks**

- TKg Granitic rocks

**CRETACEOUS ROCKS**

**Sedimentary Rocks**

- Kcs Cantwell Formation, sedimentary rocks subunit
- Kms Minto unit
- Kwcf Wilber Creek flysch

**Igneous rocks**

- Kvi Volcanic rocks

**Intrusive Rocks**

- Kg Granitic rocks
- Knum Mafic and ultramafic rocks

**CRETACEOUS AND/OR JURASSIC**

**Sedimentary Rocks**

- KJw Wolverine quartzite
- KJwc Wilber Creek flysch and Wolverine quartzite, undivided
- KJfn Flysch sequence
- KJvr Vrain unit

**TRIASSIC**

**Sedimentary Rocks**

- Trcs Calcareous sedimentary rocks

**Igneous Rocks**

- Tm Nikolai Greenstone and related rocks
- Trc Carbonatite

**MESOZOIC AND PALEOZOIC Assemblages and Sequences**

**Seventymile Assemblage**

- JPsu Ultramafic rocks
- Tozta Tozta Assemblage

**Sedimentary Rocks**

- JTtrm Mafic and ultramafic rocks

**Igneous Rocks**

- TRPs Sedimentary rocks, undivided

**Ultramafic and mafic rocks, undivided**

- MzUm Ultramafic and mafic rocks, undivided

**PALEOZOIC**

**Sedimentary Rocks**

- Mgq Globe quartzite
- Dps Phyllite, slate, siliceous siltstone, and argillite
- DSt Tolovana Limestone
- SZA Amy Creek unit
- Oc Chert
- Ocl Limestone

**Igneous Rocks**

- Olc Fossil Creek Volcanics

**Metamorphic Rocks**

- Dy Yanert Fork sequence and correlative rocks
- Dys Fine-grained schistose sedimentary rocks
- Dyv Fine-grained schistose volcanic rocks

**PALEOZOIC AND PRECAMBRIAN Sequences and Complexes**

**Yukon-Tanana and Northern Alaska Range Metamorphic Complex**

- Pze Eclogite-bearing schist
- MDyao Augen orthogneiss
- MDt Totatlanika Schist
- MDm Mylonitic Totatlanika Schist
- Pzk Keevy Peak Formation
- Pzkc Calcareous and phylitic rocks
- PzZqs Quartz- and pelitic schist of the Yukon-Tanana Upland
- PzZas Pelitic and quartzose schist of the Alaska Range
- PzZya Schist and amphibolite
- PzZyg Gneiss
- PzZys Gneiss, schist, and quartzite
- Rb Ruby Metamorphic Complex
- Dm Marble
- PzZrs Pelitic and quartzitic schist

**Sedimentary Rocks**

- CZw Wickhamer grit, undivided
- CZwa Argillaceous upper unit
- Zwg Gritty lower unit

**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 was 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**

- Plugged & Abandoned - Oil Show
- Plugged & Abandoned - Gas Show
- Plugged & Abandoned - Oil and Gas Show
- Plugged & Abandoned - Oil (Certified or Significant)
- Suspended
- Suspended - Oil Show
- Operational Shutdown
- Plugged & Abandoned
- Permitted Location

**Location Map**

**Scale: 1:250,000**

Universal Transverse Mercator 5M  
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 Nenana Basin, Alaska**  
(From Wilson et al. 1998)

Compiled by  
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**Map Legend**

- Roads
- Trans-Alaska Pipeline
- Basin Depocenters
- Fold
- Normal Fault
- Fault - Inferred
- Thrust Fault
- Thrust Fault - Inferred
- Syncline
- Syncline - Inferred
- Anticline
- Anticlinorium
- Anticline - Inferred
- Paleo Canyon

**Indicators of Petroleum**

- Gas Seep
- Oil Seep
- Oil Bearing Outcrop
- Reported indication not examined by the Geological Survey
- Reported indication regarded as doubtful or disproved on basis of field examination by the Geological Survey
- Reported indication regarded as doubtful because location is in unfavorable geologic setting
- Inflammable gas associated with nonmarine coal-bearing rocks
- Inflammable gas associated with unconsolidated surficial deposits, probably marsh gas
- Approximate location of reported indication

**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, 1:250,000.

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