DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

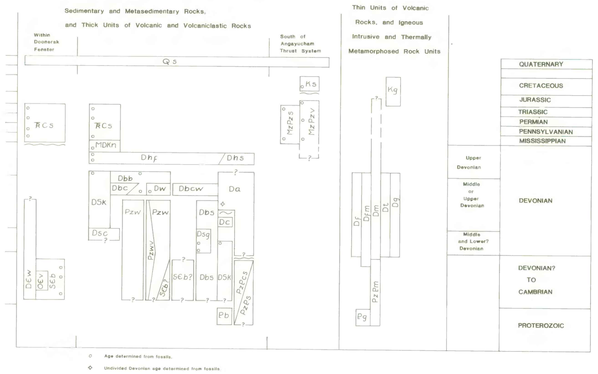
OPEN-FILE REPORT
88-533
PLATE 2 OF 3

Base from Wiseman 1956, U.S. Geological Survey, unrevised.

Geology from Dillon and others, 1986.

Scale 1:250,000

CORRELATION OF MAP UNITS



GEOLOGIC SYMBOLS

- Thrust Fault--Sawteeth on upper plate; dotted where concealed.
- Fault--Dashed where approximately located; dotted where concealed. Arrows show relative movement.
- Geologic contact.
- 20 — Dip and strike of beds.
- 30 — Dip and strike of Foliation.
- Strike of vertical Foliation.
- Horizontal beds.
- Axis of syncline.
- Axis of anticline.
- Overturned anticline.
- Overturned syncline.
- A — A' Location of cross section.

OTHER SYMBOLS

- SEDX-I — Mineral resource assessment tract (see text for tract description attached to each tract identifier).

The following description of a map units is an abbreviated version of one prepared by Dillon and others (1986):

QUATERNARY UNCONSOLIDATED DEPOSITS.

- Qs — SURFICAL--glacial, alluvial, colluvial, and landslide.

CRETACEOUS SEDIMENTARY ROCKS.

- Ks — NONMARINE AND MARINE SEDIMENTS--includes conglomerates,sandstones, shale, siltstone, and coal.

MESOZOIC GRANITIC PLUTONIC ROCKS OF THE HODZANA HIGHLANDS.

- Kg — QUARTZ MONZONITE.

ROCKS WITH AT LEAST ONE REGIONAL METAMORPHIC FABRIC.

- MzPzs — METAGRAYWACKE AND PHYLLITE (Mississippian to Triassic)--also includes cherts and metagrabbro.
- MzPzv — MAFIC VOLCANIC ROCKS (Devonian to Lower Jurassic)--includes pillow basalt, diabase, chert, and minor limestone.

SLIGHTY METAMORPHOSED SEDIMENTARY AND VOLCANIC ROCKS WITH TWO REGIONAL METAMORPHIC FABRICS.

- TrCs — SEDIMENTARY ROCKS (Carboniferous through Upper Triassic)--includes black, red, and green shale and siltstone, calcareous siltstone, cherty and fossiliferous limestone, quartzite and minor conglomerate. Local felsic volcaniclastics. (Includes the following Formations or Groups: Shublik, Otuk, Sadlerochit, Siksikpuk, Lisburne, Kayak Shale, Kekiktuk Conglomerate.)
- MDkn — KANAYUT CONGLOMERATE AND NOATAK SANDSTONE (Upper Devonian and Lower Mississippian ?)--Marine and nonmarine, also includes some shale.

TWICE METAMORPHOSED SEDIMENTARY AND VOLCANIC ROCKS, MIDDLE TO UPPER GREENSCHIST FACIES.

- Dhf — HUNT FORK SHALE (Upper Devonian)--also includes phyllite, lithic wacke, conglomerate, sandstone, and minor fossiliferous limestone.
- Dhs — HUNT FORK SCHIST (Upper Devonian)--also includes biotite garnet quartz schist.

BEAUCOUP FORMATION.

- Dbb — BLACK ROCKS (Middle or Upper Devonian and Upper Devonian)--black calcareous phyllite and thin, dark limestone.
- Dbcw — CALCAREOUS CHLORITIC WACKE (Middle or Upper Devonian?)--also includes sandstone, conglomerate, limestone, and phyllite (Correlates with Dw).
- Dbc — CONGLOMERATE (Middle or Upper Devonian).
- Dbs — BLACK SLATE, PHYLLITE, AND LIMESTONE (Middle or Upper Devonian ?, or older?)--also includes quartzite and lenses of brown dolomite.
- Dw — WACKE (Middle or Upper Devonian?)--also includes some conglomerate and thin fossiliferous limestone.
- Pzw — WACKE AND LIMESTONE (Devonian or older)--also includes conglomerate, schist, phyllite, sandstone, and felsic flows, plugs, and tuff.
- Pzwv — VOLCANIC CONGLOMERATE (Middle or Upper Devonian?, or older?).
- Da — AMBLER METAVOLCANIC ROCKS (Lower ?, Middle and Upper Devonian)--mafic and felsic volcanics interbedded with schist, quartzite, and marble.
- Df — FELSIC METAVOLCANIC ROCKS (Devonian)--extrusive and intrusive; interbedded with metasediments.
- Dm — METABASITE (Devonian and Devonian?, and Jurassic?)--locally are parts of Ambler Metavolcanics, includes both intrusive and extrusive rocks.
- Dfm — METAMORPHOSED BIMODAL IGNEOUS ROCKS (Devonian and Devonian?)--interlayered felsic and mafic extrusive and intrusive rocks locally mixed with clastic rocks.
- Dg — GRANITE GNEISS (Devonian and Devonian?).
- Dt — TACTITE (Devonian?).
- Dc — CHLORITIC AND CARBONATE ROCKS (Middle or Upper Devonian?)--phyllite and dolomite; also includes metasandstone, marble, and conglomerate.
- DSk — SKAJIT LIMESTONE (Devonian and older?)--marble, dolomite, and carbonate conglomerate, locally schist.
- Dsc — SILICEOUS CLASTIC ROCKS (Middle Devonian?)--includes metasiltstone, sandstone, phyllite, grit, and conglomerate (correlates with Dsg and upper part of Pzw).
- Dsg — GRAYWACKE OF SILLYASHEEN MOUNTAIN (Middle Devonian).

BANDED SCHIST, PARAGNEISS, AND ORTHOGNEISS THAT MAY HAVE BEEN REGIONALLY METAMORPHOSED THREE TIMES.

- PzPm — METABASITE (Proterozoic or Lower Paleozoic?)--diabase and gabbro dikes and greenschist.
- PzPs — SCHIST (Proterozoic or Lower Paleozoic?)--various types, local marble.
- PzPcs — CALCAREOUS SCHIST (Proterozoic or Lower Paleozoic?)--local marble.
- Pg — GRANITE GNEISS (Proterozoic?).
- Pb — BANDED SCHIST (Proterozoic?)--also includes quartzite, marble, and metabasite.

BASEMENT ROCKS OF THE DOONERAK FENSTER.

- DGw — WACKE (Paleozoic)--also includes meta-tuff.
- SGb — BLACK SILTSTONE AND PHYLLITE (Cambrian to Silurian)--also includes minor quartzite, graywacke, metatuff, dolomite, and limestone; numerous unmapped mafic sills.
- OGv — VOLCANIC ROCKS (Cambrian? and Ordovician)--andesitic to basaltic volcaniclastics with local phyllite, gabbro, diabase, and phyllite.

TRACTS IN THE WISEMAN QUADRANGLE, ALASKA PERMISSIBLE FOR SEDIMENTARY HOSTED ZN-PB (SEDX), SEDIMENTARY HOSTED CU (SHB), CARBONATE HOSTED PB (ZN) (CHB), OR COMBINATIONS THEREOF (M)

by

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This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.