

CORRELATION OF MAP UNITS

Sedimentary rocks		Unconsolidated deposits		Igneous rocks	
TK	TERTIARY	Q	QUATERNARY	Op	Oligocene and Pliocene
TKa	TERTIARY AND/OR CRETACEOUS	TKg	TERTIARY AND/OR CRETACEOUS	Ti	TERTIARY
Ma	MESOZOIC	TkMed	TERTIARY AND/OR CRETACEOUS	TkM	TERTIARY AND/OR CRETACEOUS
MaPa	MESOZOIC AND/OR PALEOZOIC	Kg	CRETACEOUS	Ki	CRETACEOUS
MaPr	MESOZOIC AND/OR PROTEROZOIC	Jtg	JURASSIC AND/OR TRIASSIC	Jk	JURASSIC AND/OR TRIASSIC
		MaMu	MESOZOIC AND/OR PALEOZOIC	MaMu	MESOZOIC AND/OR PALEOZOIC
		MaPa	MESOZOIC AND/OR PALEOZOIC	MaPa	MESOZOIC AND/OR PALEOZOIC
		MaPr	MESOZOIC AND/OR PROTEROZOIC	MaPr	MESOZOIC AND/OR PROTEROZOIC
		Pg	PALEOZOIC	Pg	PALEOZOIC

Thermally metamorphosed rocks		Greenschist-facies rocks		Amphibolite-facies rocks	
Pb	PALEOZOIC	Pp	PALEOZOIC	MaMu	MESOZOIC AND/OR PALEOZOIC
		PpPa	PALEOZOIC	PpPa	PALEOZOIC
		PpPa	PALEOZOIC	PpPa	PALEOZOIC
		PpPa	PALEOZOIC	PpPa	PALEOZOIC
		PpPa	PALEOZOIC	PpPa	PALEOZOIC

DEFINITION OF MAP UNITS

UNCONSOLIDATED DEPOSITS

Qa Surficial deposits

SEDIMENTARY ROCKS

TKa Sedimentary rocks

Ma Argillite

MaPa Sedimentary and slightly metamorphosed sedimentary rocks

MaPr Undifferentiated sedimentary and (or) slightly metamorphosed sedimentary rocks and igneous rocks

IGNEOUS ROCKS

Op Basalt of Pitkin Volcano

Ti Welded tuff and other felsic volcanic rocks

TKg Granite

TKp Granite porphyry

TkM Mafic and intermediate volcanic rocks

TkMed Diorite

TkMab Basalt and gabbro

Kg Granite and granodiorite

Ki Welded tuff and other felsic volcanic rocks

Jtg Granite and granodiorite

MaMu Gabbro, coarse associated basalt and andesite; minor diorite and diabase, and undifferentiated mafic- and intermediate-composition igneous rocks

MaPa Basalt and gabbro

MaPr Silicified tuff

Pg Gneissites with tuff and silica-carbonaceous tones

Pp Pondrite, mostly septonoidal

METAMORPHIC ROCKS

Pb Thermally metamorphosed rocks

Greenschist-facies rocks

Pp Quartz-chlorite-white mica schist

Pp Mylonitic schist and gneiss, retro-schist, and greenschist

Pp Green schist, calcareous gneiss, and quartz-chlorite-white mica schist

Pp Quartzite

Pp Quartzite, meta-argillite, phyllite, slate, and marble

Pp Quartzite and low-grade schist

Pp Calcareous phyllite, marble, and phyllite

Pp Quartzite schist and quartzite

Pp Dolomite and marble

Pp Grit and quartzite

Amphibolite-facies rocks

MaMu Metakalderite

Pp Biotite gneiss, marble, schist, quartzite, and amphibolite

Pp Gneiss and schist

Pp Auger gneiss

Pp Sillimanite gneiss

Pp Schist and quartzite

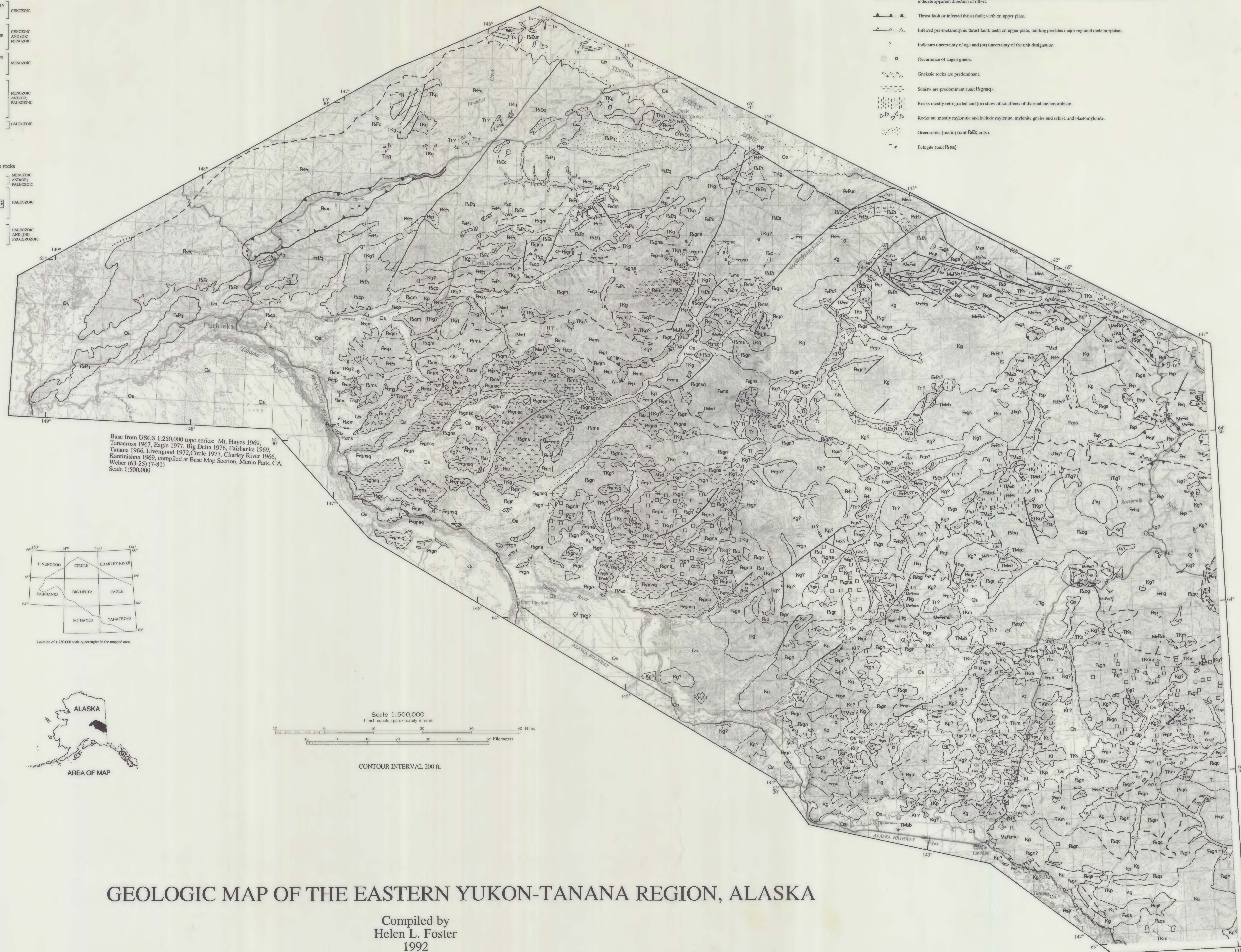
Pp Ultramafic rocks

Pp Eclogite and associated rocks

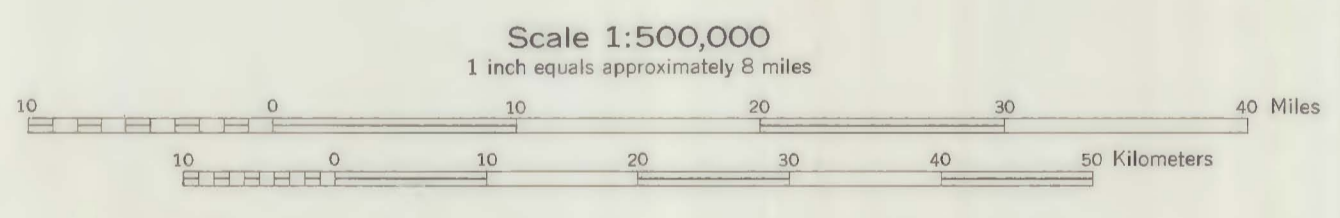
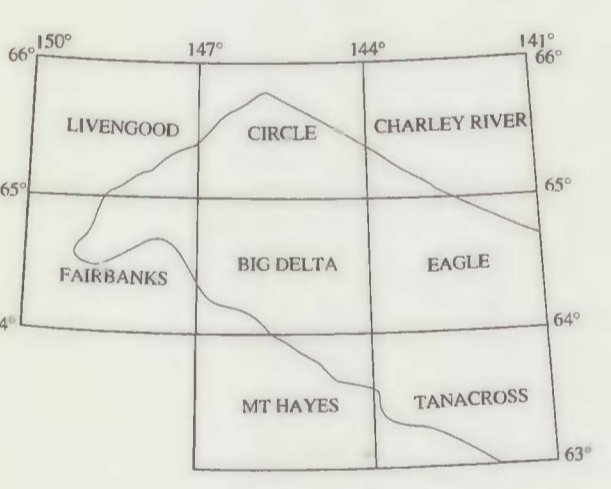
Pp Schist, quartzite, gneiss, blastomylonite, marble, and amphibolite

EXPLANATION

- Contact. Includes contacts that are well located, approximately located, inferred, and gradational.
- Fault. Dashed where existence or kind of fault uncertain or where approximately located; dotted beneath covering deposits; arrows indicate apparent direction of offset.
- Thrust fault or inferred thrust fault; teeth on upper plate.
- Inferred pre-metamorphic thrust fault; teeth on upper plate; faulting predates major regional metamorphism.
- Indicates uncertainty of age and (or) uncertainty of the unit designation.
- Occurrence of auger gneiss.
- Gneissic rocks are predominant.
- Schists are predominant (unit PpPa).
- Rocks mostly retrograded and (or) show other effects of thermal metamorphism.
- Rocks are mostly mylonitic and include mylonite, mylonite gneiss and schist, and blastomylonite.
- Greenschist (mafic) (unit PpPa only).
- Eclogite (unit PpPa).



Base from USGS 1:250,000 topo series: Mt. Hayes 1969, Tanana 1967, Eagle 1977, Big Delta 1976, Fairbanks 1969, Kantishna 1969, Livengood 1972, Circle 1973, Charley River 1966, Weber (63-25) (7-81)
Scale 1:500,000



CONTOUR INTERVAL 200 FT.

GEOLOGIC MAP OF THE EASTERN YUKON-TANANA REGION, ALASKA

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