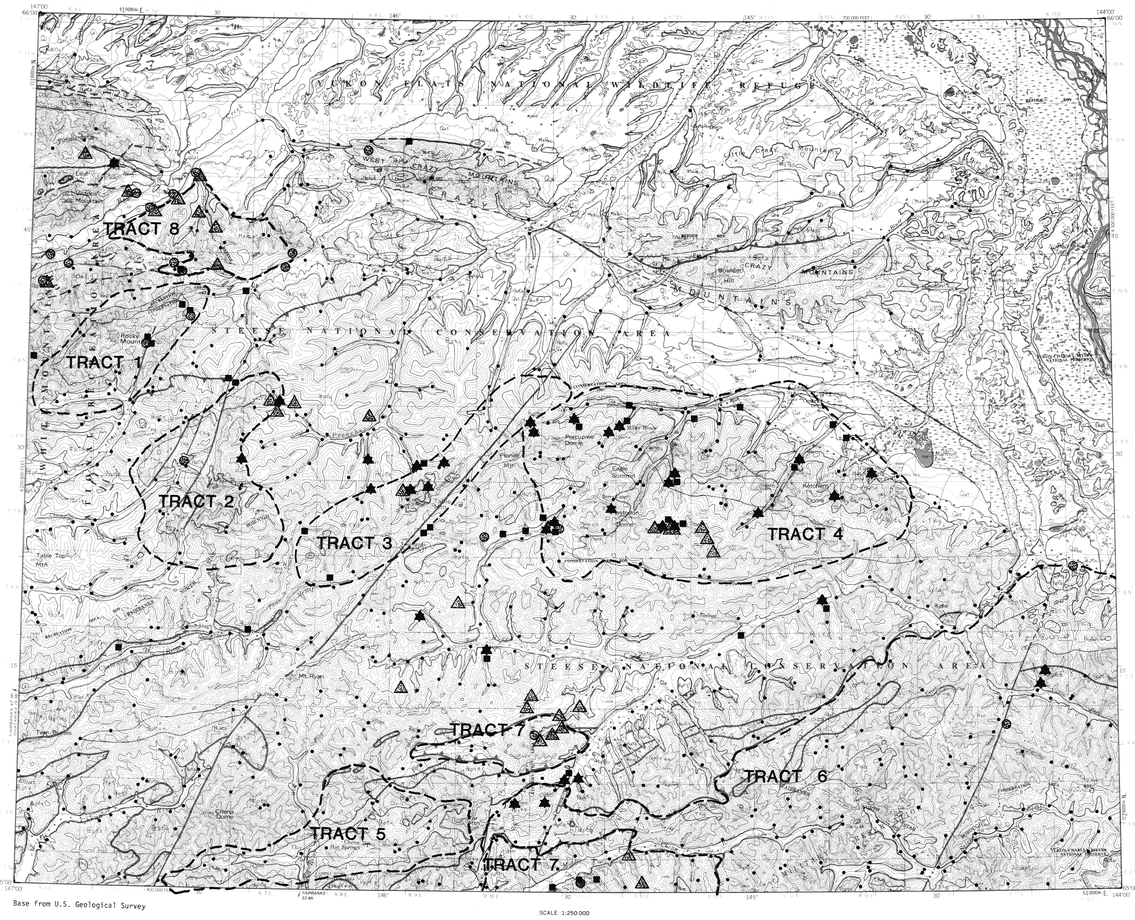
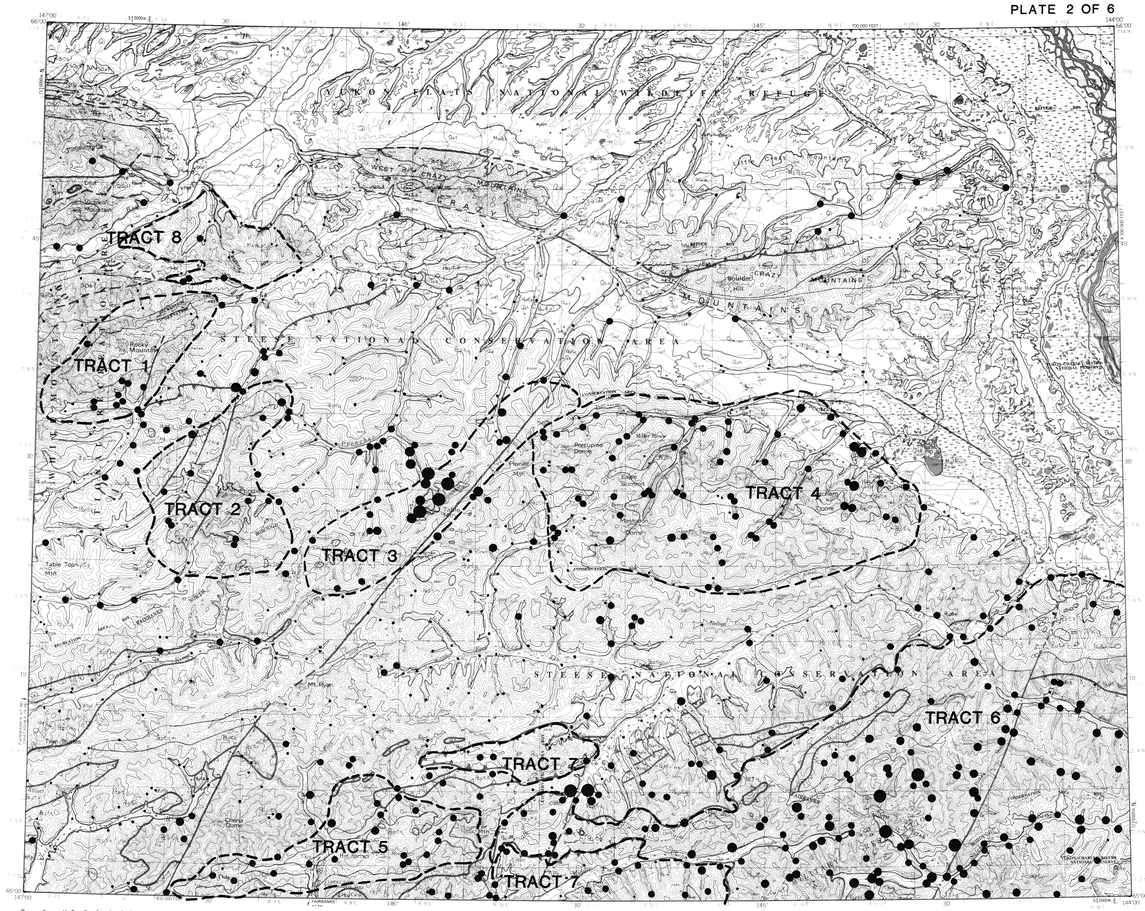


Base from U.S. Geological Survey

SCALE 1:250 000

MAP F-3 MAP SHOWING DISTRIBUTION OF ARSENOPYRITE, CHALCOPYRITE, GALENA, AND SPHALERITE



Base from U.S. Geological Survey

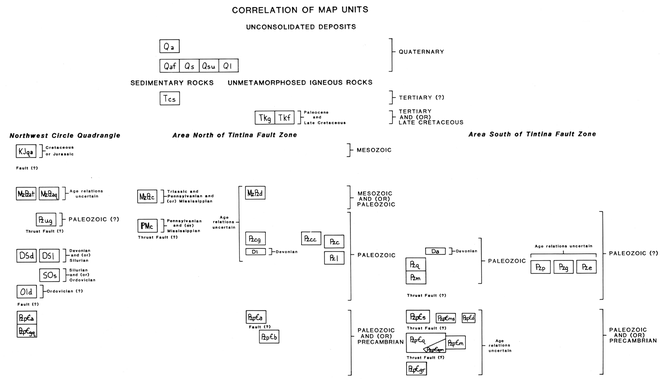
SCALE 1:250 000

MAP F-4 MAP SHOWING DISTRIBUTION OF SCHEELITE

EXPLANATION OF SYMBOLS

- arsenopyrite
- chalcopyrite
- galena
- sphalerite
- sample site (minerals not observed)

CORRELATION OF MAP UNITS



MAP SYMBOLS

- Contact--Approximately located, and inferred
- Fault--Dashed where existence or kind of fault uncertain or where approximately located; dotted beneath covering deposits; U, upthrown side; D, downthrown side
- Thrust fault--Postulated; dotted beneath covering deposits
- Prometamorphic thrust fault--Postulated; predates major regional metamorphism; dotted beneath covering deposits

Geology from Foster and others, 1983, U.S. Geological Survey Open-File Report 83-170-A

DEFINITION OF MAP UNITS

UNCONSOLIDATED DEPOSITS

- Qa — Alluvium and colluvium
- Qaf — Alluvial fan deposits
- Qs — Silt and peat
- Qsu — Silt, undifferentiated and organic material
- Qg — Gravel
- Ql — Loess

SEDIMENTARY ROCKS

- Tcs — Conglomerate and sandstone

UNMETAMORPHOSED IGNEOUS ROCKS

- Tkg — Granite
- Tkf — Felsic igneous rock

NORTHWEST CIRCLE QUADRANGLE

- Kjqa — Quartzite, argillite, conglomerate, and hornfels
- MzPzat — Argillite, tuff, quartzite, and conglomerate
- MzPzaq — Argillite and quartzite
- PMzug — Ultramafic and mafic rocks and greenstone
- DSud — Dolomite and argillite
- DSsl — Limestone, dolomite, and shale
- SOs — Siltstone, dolomite, chert, and mafic igneous rocks
- Oid — Livengood Dome(?) Chert
- PzpCga — Argillite, grit, and quartzite
- PzpCgqs — Grit, quartzite, and argillite

AREA NORTH OF TINTINA FAULT ZONE

- MzPzc — Circle Volcanics and associated rocks
- PMzc — Chert, argillite, and quartzite
- MzPzdi — Diorite
- Pzcg — Chert pebble conglomerate
- Pzcc — Chert, conglomerate, and limestone
- Pzc — Chert and argillite
- Di — Limestone
- Pzl — Limestone and chert
- PzpCza — Argillite, grit, and quartzite
- PzpCbs — Basalt and limestone

AREA SOUTH OF TINTINA FAULT ZONE

- Da — Augen gneiss
- Pzq — Quartzite, meta-argillite and phyllite
- Pzm — Phyllite, calcareous phyllite, and marble
- PzpCs — Pelitic schist
- PzpCms — Garnet-muscovite schist
- PzpCd — Dolomite and marble
- PzpCq — Quartzite and quartzitic schists (includes magnetic chlorite schist subunit (PzpCqm))
- PzpCm — Mafic schist
- PzpCgr — Grit and quartzite

Ultramafic, Mafic, and Eclogitic Rocks

- Pzp — Serpentinized peridotite
- Pzg — Greenstones
- Pze — Eclogite

EXPLANATION OF SYMBOLS

SCHEELITE

- trace to 0.9 percent
- 1.0 to 9.9 percent
- 10 to 19 percent
- 20 percent or greater
- sample site (mineral not observed)

Volume percent determined by visual estimation of nonmagnetic heavy-mineral fraction.

MINERALOGICAL MAPS SHOWING DISTRIBUTION OF ARSENOPYRITE, CHALCOPYRITE, GALENA, SPHALERITE, AND SCHEELITE IN THE NONMAGNETIC HEAVY-MINERAL FRACTION OF STREAM SEDIMENT, CIRCLE QUADRANGLE, ALASKA

By
Richard B. Tripp, William D. Crim, James D. Hoffman, Richard M. O'Leary, and Donald A. Risoli
1986

This map is preliminary and has not been edited or reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature