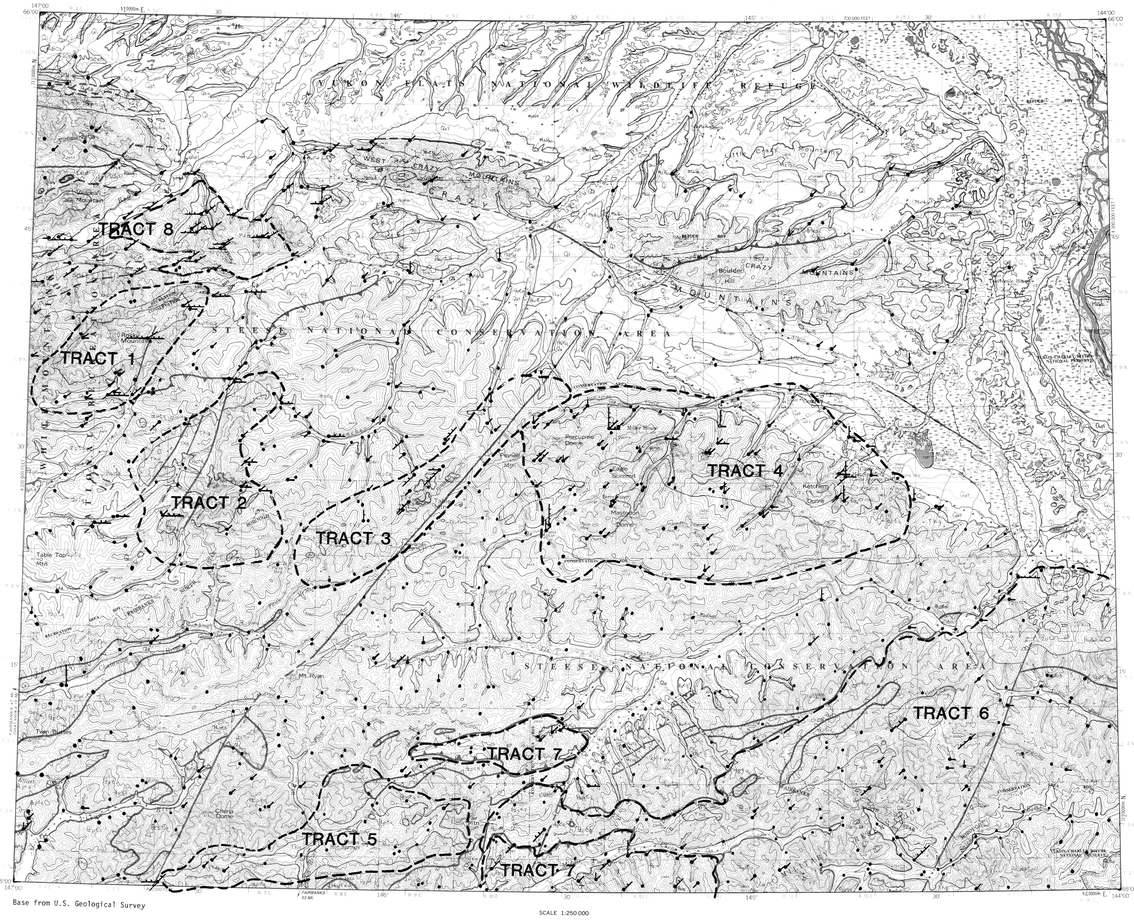
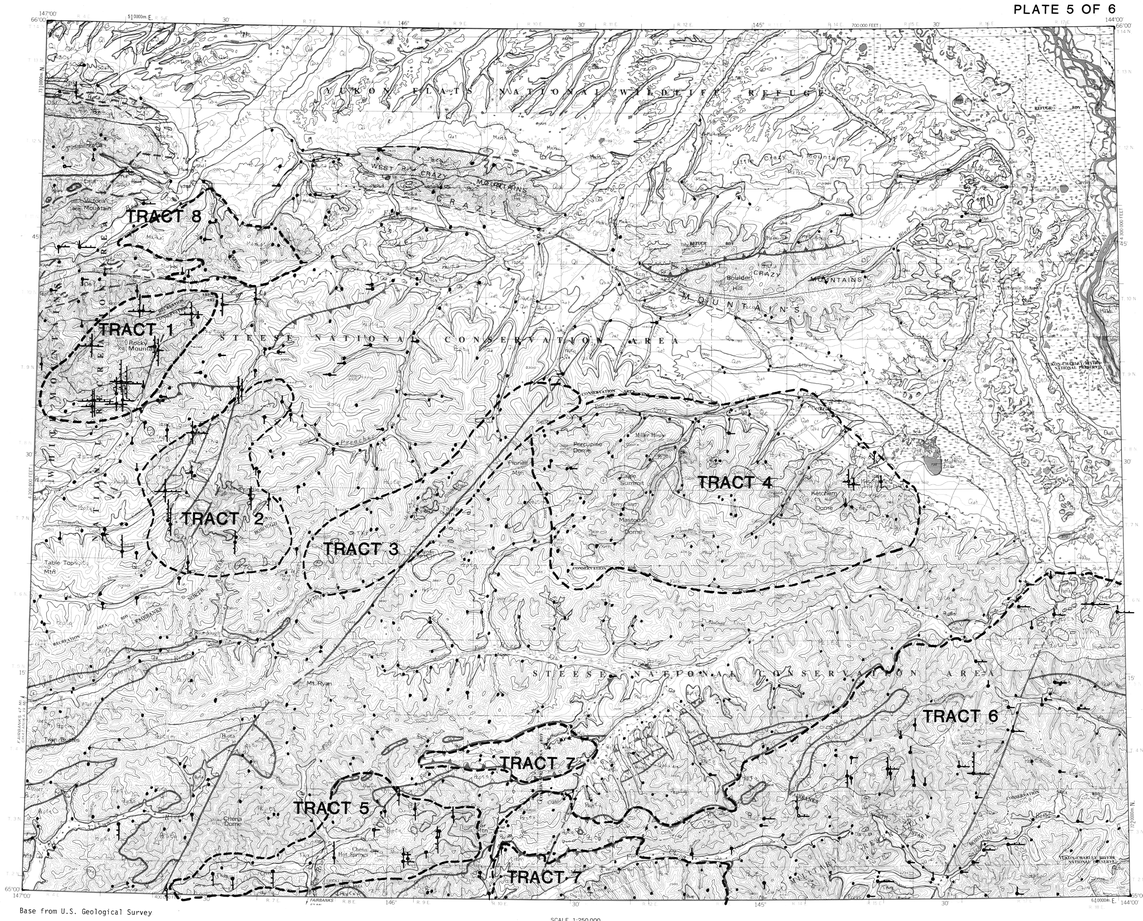
DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

FOLIO OF THE CIRCLE QUADRANGLE, ALASKA
OPEN-FILE RERORT 83-170-F-H
PLATE 5 OF 6



Base from U.S. Geological Survey

SCALE 1:250 000
5 0 5 10 MILES
5 0 5 10 KILOMETRES



Base from U.S. Geological Survey

SCALE 1:250 000
5 0 5 10 MILES
5 0 5 10 KILOMETRES

MAP H-1 MAP SHOWING DISTRIBUTION OF THE ELEMENTS Au, Ag, Sn, W, AND Mo

EXPLANATION OF SYMBOLS

Au (gold)	Ag (silver)	Sn (tin)
L(0.05)-0.25	L(0.5)-1	L(10)-15
0.26-1.0	1.5-2	20-70
1.1-2.5	3-20	100
2.6-11	30	150-200

W (tungsten)	Mo (molybdenum)
L(50)	L(5)-7
50-70	10
100-200	15
300	20

*sample site (values below lowest value shown).

1. All values in parts per million (ppm).
2. L=detected,but below limit of determination.

CORRELATION OF MAP UNITS

UNCONSOLIDATED DEPOSITS — Qa; Qaf, Qs, Qsw, Ql — QUATERNARY

SEDIMENTARY ROCKS — Tcs — TERTIARY (?)

UNMETAMORPHOSED IGNEOUS ROCKS — Tkg, Tkf — TERTIARY AND (OR) LATE CRETACEOUS

Northwest Circle Quadrangle	Area North of Tintina Fault Zone	Area South of Tintina Fault Zone	
KJqa			MESOZOIC
MzBat, MzBaq	MzBc, MzPzBd, MzPzc		MESOZOIC AND (OR) PALEOZOIC
Pzug	Pzcg, Dt, Pzcc, Pzc, Pzl	Dg, Ag, Am, Pzp, Pzg, Pzc	PALEOZOIC
DSd, DSl, SOs, Old			PALEOZOIC (?)
PzpCa, PzpCgn	PzpCa, PzpCb	PzpCa, PzpCm, PzpCs, PzpCgn	PALEOZOIC AND (OR) PRECAMBRIAN

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
- Premetamorphic 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

MAP H-2 MAP SHOWING DISTRIBUTION OF THE ELEMENTS Be, La, U, AND Th

DEFINITION OF MAP UNITS

UNCONSOLIDATED DEPOSITS

Qa	Alluvium and colluvium
Qaf	Alluvial fan deposits
Qs	Silt and peat
Qsw	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
MzPzBat	Argillite, tuff, quartzite, and conglomerate
MzPzBaq	Argillite and quartzite
Pzug	Ultramafic and mafic rocks and greenstone
DSd	Dolomite and argillite
DSl	Limestone, dolomite, and shale
SOs	Siltstone, dolomite, chert, and mafic igneous rocks
Old	Livengood Dome(?) Chert
PzpCa	Argillite, grit, and quartzite
PzpCgn	Grit, quartzite, and argillite

AREA NORTH OF TINTINA FAULT ZONE

MzPzc	Circle Volcanics and associated rocks
PzMzc	Chert, argillite, and quartzite
MzPzBd	Diorite
Pzcg	Chert pebble conglomerate
Pzcc	Chert, conglomerate, and limestone
Pzc	Chert and argillite
Dt	Limestone
Dsl	Limestone and chert
PzpCa	Argillite, grit, and quartzite
PzpCb	Basalt and limestone

AREA SOUTH OF TINTINA FAULT ZONE

Dg	Augen gneiss
Pzp	Quartzite, meta-argillite and phyllite
Pzm	Phyllite, calcareous phyllite, and marble
PzpCs	Pelitic schist
PzpCm	Garnet-muscovite schist
PzpCd	Dolomite and marble
PzpCs	Quartzite and quartzitic schists (includes magnetic chlorite schist subunit (PzpCgn))
PzpCm	Mafic schist
PzpCgr	Grit and quartzite

Ultramafic, Mafic, and Eclogitic Rocks

Dsp	Serpentinized peridotite
Pzg	Greenstones
Pze	Eclogite

EXPLANATION OF SYMBOLS

Be (beryllium)	La (lanthanum)
L(1)-3	L(20)-100
7-10	150-200
15-20	300-500
30	700

U (uranium)	Th (thorium)
L(0.05)-3.9	L(100)
4-55	100
56-104	150-200

● sample site (values below lowest value shown)

1. All values in parts per million (ppm).
2. L= detected, but below limit of determination.
3. G=greater than value shown.

GEOCHEMICAL MAPS SHOWING DISTRIBUTION OF GOLD, SILVER, TIN, TUNGSTEN, MOLYBDENUM, BERYLLIUM, LANTHANUM, URANIUM, AND THORIUM IN THE MINUS-80-MESH STREAM SEDIMENT, CIRCLE QUADRANGLE, ALASKA

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1986

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