



EXPLANATION

- GL1 Magnetic low associated with nonmagnetic granite
- GH1 Magnetic high caused by magnetic granite (known and inferred)
- S1 Magnetic high inferred to be caused by magnetic chlorite-bearing pelitic schist
- M1 Magnetic high or low inferred to be caused by contact metamorphic rocks
- G1 Magnetic high caused by gabbro (known and inferred)
- U1 Magnetic high over serpentinitized ultramafic rocks
- V1 Magnetic high caused by volcanic rocks (generally inferred)
- L1 Magnetic low over nonmagnetic rock other than granite
- Layer of magnetic rocks (wehrlite or gabbro) in East Crazy Mountains.
- 0, 60, 600 Depth below surface to magnetic source inferred from magnetic gradients

- Dip and strike symbol inferred from asymmetric magnetic gradients
- 1, 2, ..., 57 Location of magnetic rock sample tabulated in table 1
- Boundary of magnetic terrane
- Synform inferred from magnetic interpretation
- Antiform inferred from magnetic interpretation
- Outline of magnetic rock unit inferred from location of gradients. Dashed where uncertain or buried
- Axis of magnetic high not otherwise delineated
- Axis of magnetic low not otherwise delineated
- Thrust fault inferred from magnetic interpretation. Teeth on upper plate
- Alignment of ill-explained magnetic highs
- Location of magnetic profile C, measured on the ground (see figure 2)

EXPLANATION OF SYMBOLS

- Contact
- Approximately located, and inferred.
- 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
- Postulated; dotted beneath covering deposits.
- Premetamorphic thrust fault
- Postulated; predates major regional metamorphism. Dotted beneath covering deposits.
- Inclined Vertical Strike and dip of beds
- Inclined Vertical Horizontal Strike and dip of foliation
- Inclined Horizontal Bearing and plunge of axis of minor fold or mineral lamination
- Staurolite
- Garnet

- Mineral occurrences
- F Sillimanite
 - K Kyanite
 - A Andalusite
 - S Staurolite
 - D Diopside
 - C Chloritoid

DEFINITION OF MAP UNITS

- UNCONSOLIDATED DEPOSITS
- Qa Alluvium
 - Qab Abandoned flood plain alluvium
 - Qac Alluvium and colluvium
 - Qaf Alluvial fan deposits
 - Qs Silt and peat
 - Qsu Silt, undifferentiated and organic material
 - Qg Gravel
 - Ql Loess
 - Qm Moraine deposit, undifferentiated
- SEDIMENTARY ROCKS
- Tcs Conglomerate and sandstone
 - Tkg Granite
 - Tkf Felsic igneous rock
- UNMETAMORPHOSSED IGNEOUS ROCKS
- Rjqa Quartzite, argillite, conglomerate, and hornfels
 - MuPaat Argillite, tuff, quartzite, and conglomerate
 - MuPaqa Argillite and quartzite
 - Pzmg Ultramafic and mafic rocks and greenstone
 - Dsd Dolomite and argillite
 - OSi Limestone, dolomite, and shale
 - OSs Siltsstone, dolomite, chert, and mafic igneous rocks
 - Old Livengood Dome(?) Chert
 - PzCa Argillite, grit, and quartzite
 - PzCqa Grit, quartzite, and argillite
- AREA SOUTH OF TINTINA FAULT ZONE
Yukon Crystalline Terrane
(Churkin and others, 1982)
- Ds Augen gneiss
 - Pzqa Quartzite, meta-argillite and phyllite
 - Pzpm Phyllite, calcareous phyllite, and marble
 - PzCs Pelitic schist
 - PzCsm Garnet-muscovite schist
 - PzCaD Dolomite and marble
 - PzCqC Quartzite and quartzitic schists (includes magnetic chlorite schist subunit (PzCqcm))
 - PzCm Mafic schist
 - PzCgr Grit and quartzite
- ULTRAMAFIC, MAFIC, AND ECLOGITIC ROCKS
- Pzps Serpentinized peridotite
 - Pzcs Greenstones
 - Pzce Eclogite
- AREA NORTH OF TINTINA FAULT ZONE
Circle Terrane
(Churkin and others, 1982)
- MuPc Circle Volcanics and associated rocks
 - Wmc Chert, argillite, and quartzite
- Crazy Mountains Terrane
(Churkin and others, 1982)
East Crazy Mountains
- MuQa Diorite
 - Pzcg Chert pebble conglomerate
 - Pzcc Chert, conglomerate, and limestone
 - DI Limestone
 - PzCa Argillite, grit, and quartzite
- East Crazy Mountains
- Pzcg Chert pebble conglomerate
 - DI Limestone
 - PzCa Argillite, grit, and quartzite
- Preacher Block
- Pzcc Chert and argillite
 - Pzcl Limestone and chert
 - PzCa Argillite, grit, and quartzite
 - PzCb Basalt and limestone

GEOLOGIC BASE FROM FOSTER AND OTHERS (1953), U.S.G.S. OF 83-170-A

SCALE 1:250,000
5 0 5 10 15 20 25 km

AEROMAGNETIC MAP AND INTERPRETATION OF MAGNETIC AND GRAVITY DATA, CIRCLE QUADRANGLE, ALASKA

BY JOHN W. CADY AND FLORENCE R. WEBER

PLATE 2 - AEROMAGNETIC INTERPRETATION MAP

1983

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