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Table 1. Semiquantitative Spectrographic Analyses

Analyses by Chris Heropoulos 1966, 1967 #214

Results are reported in percent to the nearest number in the series 1, 0.7, 0.5, 0.3, 0.2, 0.15, and 0.1, etc., which represent approximate midpoints of interval data on a geometric scale. The assigned interval for semiquantitative results will include the quantitative value about 30 percent of the time. (Those analyses for gold that are reported in parts per million are by atomic absorption method; T. Ging, E. Martinez, T. Roemer and Z. Stephenson, analysts.)

Panned Concentrates of Stream Sediments

Sample Number (Locality number on figure 1)	Quadrangle	Percent Copper	Percent other elements in possible anomalous concentrations
R49(.1)	Baird Mtns.	.01	Ti 20.0 W .07
R49(.2)	" "	.01	W .1 Ba .2
T27(.11)	" "	.03	--
T36(.11)	" "	.05	--
T59	" "	.02	Zn .05
T65(.1)	" "	.005	Au .5 Ag .1 Zn .07 Sn .05
T65(.2)	" "	.003	Sn .05
T65(.3)	" "	.007	Au 3.0 Ag .5
T66(.1) (dredge concentrate)	" "	.015	Au .3 Ag .05 Sn .15 W .1
T44	" "	.007	--
T88	Ambler River	.02	Ag .03 Au .2 Rare Earths 4.5 (35% by weight Au removed before analysis)

Stream Sediment Samples

Sample Number (Locality number on figure 1)	Quadrangle	Percent Copper	Percent other elements in possible anomalous concentrations
R5	Ambler River	.001	--
R10	" "	.015 150	--
R25	" "	.0005	--
R48(.1)	Baird Mtns.	.01 100ppm	Ag .00007 Ti 1.0
R49	" "	.007	--
R68	" "	.001	--
R70	" "	.0007	--
R82	" "	.007	--
R84	" "	.002	Sr .1
R85	" "	.005	--
R108	" "	.003	--
R129	" "	.003	--
T6	Ambler River	.0015	--
T47	Baird Mtns.	.003	Sr .1
T65	" "	.005	--
T80	" "	.01 100	Ti 1.0
T81	" "	.01 100	Ti 1.5
T85(.5)	" "	.005	--
T86(.1)	" "	.005	--
T89	" "	.005	--
T90	" "	.005	--
T100 .3	" "	.003	--
T100 .4	" "	.005	--
T105	" "	.015 150	--
T110(.3)	" "	.005	Mo .0015
T110(.4)	" "	.003	Mo .001
T113(.3)	Misheguk Mtn.	.007	--
T142	" "	.01 100	Ba .7
T143(.2)	" "	.01 100	Ba .5
T149(.8)	" "	.01 100	Ni .015
T150(.1)	" "	.015 150	Ni .07
T150(.2)	" "	.02 200	Cr .5 Ni .03
T151	" "	.007	Ni .15 Cr 1.0
B39	Ambler River	.0015	Sn .03
B63	" "	.0015	Sn .015
B68	" "	.001	--
B103	" "	.005	--
B115	Baird Mtns.	.007	Ni .01
B153	" "	.003	Sr .07
B169	" "	.005	--
B178	" "	.005	--
B191	" "	.007	--
B200	" "	.007	--
B214	" "	.007	--
B283	Ambler River	.005	--

Bedrock and Soil Samples

Sample Number (Locality number on figure 1)	Quadrangle	Percent Copper	Percent other elements in possible anomalous concentrations	Remarks (Grab samples except as noted)
R29	Ambler River	.003	--	Greenstone
R31	" "	.0002	--	Quartzite
R52	Baird Mtns.	.003	--	Quartzose mica schist
R127	" "	.0005	--	Vein quartz in phyllite
R178	" "	.005	--	Vein quartz in phyllite
R190	" "	1.0 ×	--	Mineralized quartz vein in limestone; malachite and limonite
T77	" "	.01 100	Ti 1.0	Soil sample
T88	Ambler River	.07 700	Mn .3 W .1 Zn .05	Vein quartz from headwater basin of small gold placer
T116	Misheguk Mtn.	.05 500 ×	Mn >10	Manganese nodule
B23	Ambler River	.015 150	--	Pyrite from pyritic slate
B113	Baird Mtns.	.003	--	Quartz vein in phyllite
B120(B)	" "	.005	--	Black silty slate
B120(C)	" "	.001	Sr .15 Mn .2	" "
B120(E)	" "	.0005	Ba .2	" "
B120(G)	" "	.001	--	" "
B142	" "	.02 200	Ag .0003 Pb .02 Ti 1.5	Gossan on quartz vein
B154(B)	" "	.003	Ag .0001 Mo .01	Black slaty siltstone
B173	" "	.001	--	Quartz vein in phyllite
B174	" "	.005	--	Quartz vein in calcareous phyllite
B178(A)	" "	1.0 ×	Ag .00015 (Au .03 parts per million)	Quartz vein in greenstone sill
B178(B)	" "	.02	--	Greenstone
B188(B1)	" "	.0015	Ni .005	Phyllitic quartz siltstone
B189	" "	.01	--	Silty sandstone
B191	" "	.0015	--	Quartz vein in sandstone
B191(A)	" "	.002	--	Calcareous sandstone
B192(A)	" "	.001	--	Quartz vein in calcareous sandstone
B192(B2)	" "	.0015	Ni .0015 Cr .002	Slaty siltstone with chrome mica
B192(D2)	" "	.007	Ni .01 Cr .02	" "
B192(G2)	" "	.007	Ni .015 Cr .02	" "
B192(X)	" "	.002	Ni .01 Cr .02	" "
B193	" "	.0015	--	Silty Sandstone
B199	" "	.0015	--	" "
B201	" "	.0015	--	Quartz vein in quartzite
B203	" "	1.5	Ag .0002	Pyritic quartz vein in phyllite
B203	" "	20 to 30	Ag .005 (Au .05 parts per million)	Pyrite and chalcopyrite separated from vein quartz
M98(A)	Ambler River	.3	Ag .005 Pb .15 Sb .1	Mineralized quartz vein in limestone; malachite, azurite, and galena

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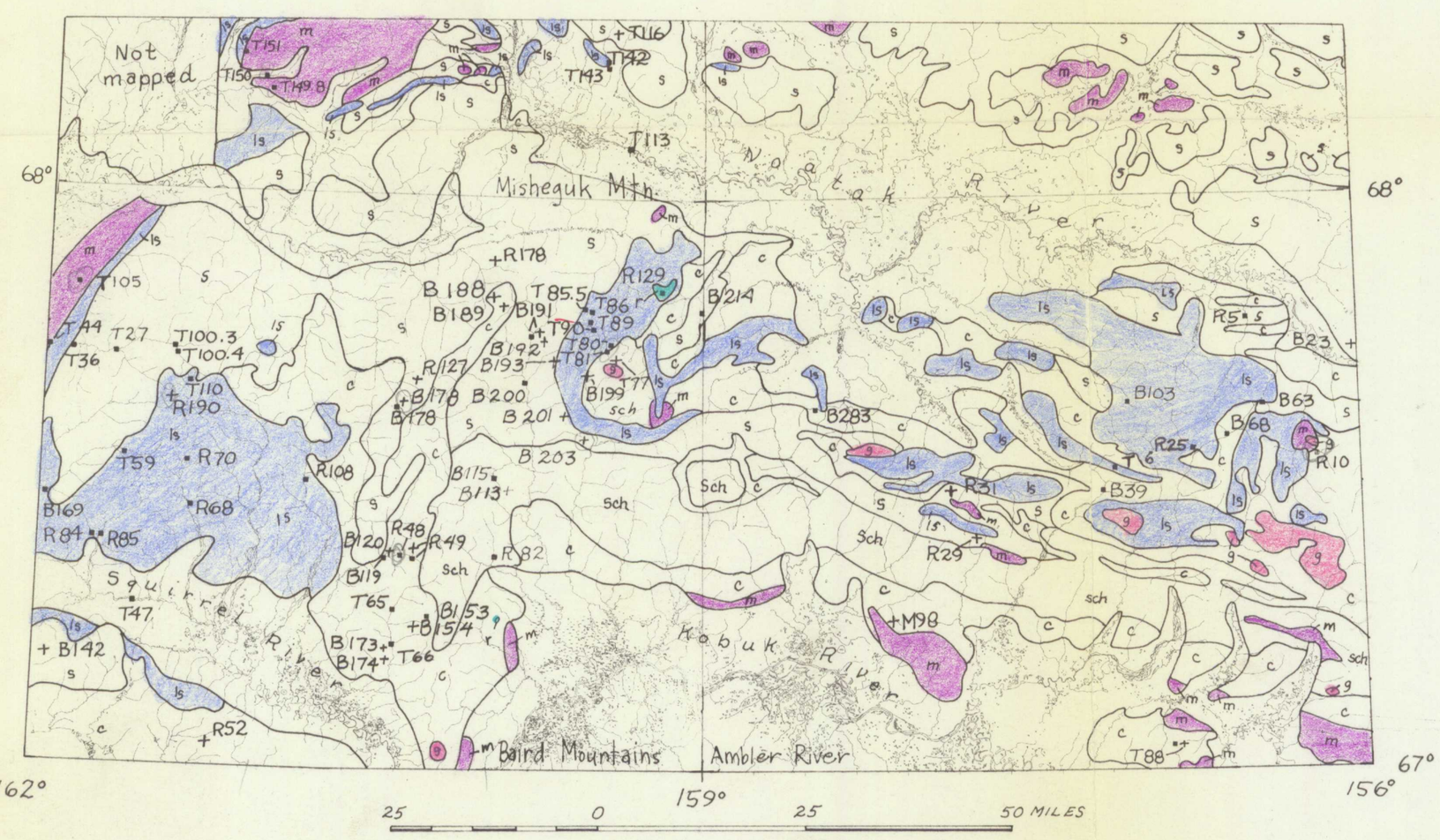

Scale
1:1,000,000

Fig. 1. Generalized geologic map and sample locality index

EXPLANATION

MESOZOIC AND QUATERNARY — Undifferentiated sedimentary rocks and surficial deposits

MESOZOIC OR TERTIARY — r — Rhyolite

MESOZOIC(?) — g — Granitic intrusive rocks

PALEOZOIC OR MESOZOIC — m — Mafic igneous and metaigneous rocks

PALEOZOIC — ls — Limestone, dolomite, and marble

c — Calcareous clastic rocks; limestone and clastic rocks; calcareous schist. May include some rocks of Mesozoic age

s — Clastic sedimentary rocks

sch — Metamorphic rocks

Geologic contact or fault

• T81 — Stream sediment sample locality

+ R31 — Bedrock or soil sample locality

(See Table 1 for analyses)

COPPER ANALYSIS OF SELECTED SAMPLES, SOUTHWEST BROOKS RANGE, ALASKA

W. P. Brosgé, H. N. Reiser and I. L. Tailleur

1967

#214

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