



PALEOZOIC  
MESOZOIC  
TERTIARY  
QUATERNARY

EXPLANATION

Undifferentiated  
sedimentary rocks  
and surficial  
deposits

r  
Rhyolite

g  
Granitic intrusive  
rocks

m  
Mafic igneous and  
metamorphic rocks

ls  
Limestone,  
dolomite,  
and marble

c  
Calcareous elastic  
rocks: limestone  
and elastic rocks;  
calcareous schist.  
May include some  
rocks of Mesozoic  
age

s  
Classic sedi-  
mentary rocks

sch  
Metamorphic  
rocks

Geologic contact  
or fault

• T81  
Stream sediment  
sample locality

+ R31  
Bedrock or soil  
sample locality

(See Table 1 for analyses)

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

Fig. 1. Generalized geologic map and sample locality index

~~COPPER~~  
~~PPER~~ ANALYSIS OF SELECTED SAMPLES, SOUTHWEST BROOKS RANGE, ALASKA

W. P. Brosge, H. N. Reiser and I. L. Tailleux

1967



Table 1. Semiquantitative Spectrographic Analyses

Analyses by Chris Heropoulos 1966, 1967

Stream Sediment Samples					Bedrock and Soil Samples				
Sample Number (Locality number on figure 1)	Quadrangle	Percent Copper	Percent other elements in possible anomalous concentrations	Sample Number (Locality number on figure 1)	Quadrangle	Percent Copper	Percent other elements in possible anomalous concentrations	Remarks (Grab samples except as noted)	
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 mid-points 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	R29	Ambler River	.003	--	Greenstone	
R49(.2)	"	.01	W .07	R31	"	.0002	--	Quartzite	
T27(.11)	"	.03	Ba .2	R52	Baird Mtns.	.003	--	Quartzose mica schist	
T30(.11)	"	.05	--	R127	"	.0005	--	Vein quartz in phyllite	
T59	"	.02	Zn .05	F178	"	.005	--	Vein quartz in phyllite	
T65(.1)	"	.005	Au .5	R190	"	1.0	--	Mineralized quartz vein in limestone; malachite and limonite	
			Ag .1						
			Zn .07	T77	"	.01	Ti 1.0	Soil sample	
T65(.2)	"	.003	Sn .05	T88	Ambler River	.07	Mn .3	Vein quartz	
T65(.3)	"	.007	Au 3.0				W .1	from headwater basin of small gold placer	
T66(.1)	"	.015	Ag .5				Zn .05		
			Ag .05	T110	Misheguk Mtn.	.05	Mn >10	Manganese nodules	
			Sn .15	B23	Ambler River	.015	--	Pyrite from pyritic slate	
			W .1	B113	Baird Mtns.	.003	--	Quartz vein in phyllite	
T44	"	.007	--	B120(B)	"	.005	--	Black silty slate	
T88	Ambler River	.02	Ag .05	B120(C)	"	.001	Sr .15	"	
			Au .2	B120(E)	"	.0005	Mn .2	"	
			Rare	B120(G)	"	.001	Ba .2	"	
			Earths 4.5	B142	"	.02	Ag .0003	Gossan on quartz vein	
			(35% by weight Au removed before analysis)	B154(B)	"	.003	Pb .02		
				B173	"	.001	Ti 1.5	Black slaty siltstone	
				B174	"	.005	Ag .0001	Quartz vein in phyllite	
				B178(A)	"	1.0	Mo .01	Quartz vein in calcareous phyllite	
				B178(B)	"	.02	--	Quartz vein in greenstone sill	
				B188(B1)	"	.0015	Ni .005	Greenstone	
				B189	"	.01	--	Phyllitic quartz siltstone	
				B191	"	.0015	--	Silty sandstone	
				B191(A)	"	.002	--	Quartz vein in sandstone	
				B192(A)	"	.001	--	Calcareous sandstone	
				B192(B2)	"	.0015	Ni .0015	Quartz vein in calcareous sandstone	
				B192(D2)	"	.007	Cr .002	Slaty siltstone with chrome mica	
				B192(G2)	"	.007	Ni .01	"	
				B192(X)	"	.002	Cr .02	"	
				B193	"	.0015	Ni .015	"	
				B199	"	.0015	Cr .02	"	
				B201	"	.0015	--	"	
				B203	"	1.5	Ag .0002	Silty sandstone	
				B203	"	20 to 30	Ag .005	Quartz vein in quartzite	
							(Au .05 parts per million)	Pyrite and chalcopryrite separated from vein quartz	
				M98(A)	Ambler River	.3	Ag .005	Mineralized quartz vein in limestone; malachite, azurite, and galena	
							Pb .15		
							St .1		