

No.	Name of deposit	Tectonic Unit or Position	Age of hostrock	General hostrock lithology	Metamorphic grade	Shape	Size	Mode of aggregation	Main sulfide (+ oxide)	Grade in wt. %				in ppm		Other element of special interest	Comments	References (see Sheet 1)	
										S	Cu	Zn	Pb	Au	Ag				
62.	Gold Hill district, W. C. includes Randolph Shaft and Southern Copper Company, Union Copper, and several smaller deposits	Carolina Slate Belt; island-arc volcanics; zone between Gold Hill and Silver Hill faults	Cambrian	Andesitic tuff; chlorite-sericite phyllite; silicified rhyolite tuff	Greenschist facies	Lenses (1-3.5 m thick)		D(M)	Pyrite	1.5-3.0							Mineralization along bleached and silicified beds in the phyllite, consists of pyrite with minor chalcopyrite, galena, sphalerite.	13, 61, 73	
63.	Cline, N. C.	Carolina Slate Belt; island-arc volcanics; near Gold Hill fault zone	Cambrian or Upper Precambrian	Andesitic greenstone and dacitic tuff; parts chloritic and silicified	Greenschist facies	Layers and quartz veins		D	Pyrite								Mined intermittently 1895 to 1940's; ore contains chalcopyrite; quartz veins contain siderite and some calcite.	13, 45	
64.	Phoenix, N. C.	Carolina Slate Belt; island-arc volcanics; near Gold Hill fault zone	Cambrian or Upper Precambrian	Andesitic tuff	Greenschist facies	Thin lenses; quartz veins		D(M)	Pyrite	1.0-3.0				up to 34.3			Some ore is 3 to 60% of intergrowth pyrite, chalcopyrite, quartz, calcite, barite, and siderite, with traces of galena. Free Au in barite and calcite.	13, 70, 73	
65.	Scarlett, N. C.	Carolina Slate Belt; island-arc volcanics	Cambrian	Biotitic metarhyolite; epidote-biotite-quartz rock (epidote); quartz-sericite-chlorite schist (metarhyolite)	Greenschist facies	Tabular lenses; quartz veins		M	Pyrite	2.0-5.0	.4-8.7	.007-.01		24.7			Mined intermittently, 1899-1915; ore mainly sphalerite, chalcopyrite, and pyrite. Mine produced Cu, Zn, and Au	13, 60	
66.	Russell; Coggins, N. C.	Carolina Slate Belt; island-arc volcanics	Cambrian	Argillite and silicified argillite, now siliceous sericitic phyllite	Greenschist facies	Layers; 6 parallel lenses (Russell)		D(M)	Pyrite								Ore contains minor chalcopyrite. Ore at Russell in 6 parallel zones totalling about 600 m wide and trending NE parallel to strike of argillite. Ore probably a stock-work vent deposit (R. H. Carpenter, oral communication, 1979).	13, 73	
67.	Kings Mountain, N. C.	Kings Mountain belt; island-arc volcanics and associated sediments. May be equivalent to Chopawamsic Formation of Virginia.	Cambrian	Marble and interbedded biotite schist and graphitic slate, all within belt of silicic metavolcanic rock.	Greenschist or albite epidote amphibolite facies			D(M)	Pyrite					3.4-10.3			Mined for gold; pyrrhotite, chalcopyrite, galena, and sphalerite not uncommon.	34, 70, 73	
68.	Long Creek, N. C.	Kings Mountain belt; island-arc volcanics and associated sediments. May be equivalent to Chopawamsic Formation of Virginia.	Cambrian	Schist; quartz lenses		Lenses, 1-2.5 m thick		D	Pyrite					13.7			Ore shoots reportedly rich in pyrite, chalcopyrite, galena, sphalerite, and a bismuth mineral. Called Oliver mine in some later reports.	70, 73	
69.	Oliver, N. C.	Charlotte belt	Cambrian ?						Pyrite								Mined for gold. Gold occurs in galena	70, 79	
70.	Carroll-Ross (Wolf Creek); Bar Kat, S. C.	Kings Mountain belt; island-arc volcanics and associated sediments. May be equivalent to Chopawamsic Formation of Virginia	Cambrian	Biotitic amphibolite schist; foliated meta-conalite	Amphibolite facies			D	Pyrite	42				3.4-36			Mined for gold; gold in pyritic vein quartz that is conformable to schistosity of wall rocks.	67, 73	
71.	Nanny Mountain, S. C.	Charlotte belt	Cambrian ?	Quartz mica slate		Layer, up to 15 m thick		M(D)	Pyrrhotite								Mined for gossan iron ore, 1760-1820, overlying massive layer or lens of pyrrhotite	86	
72.	Blackmon, S. C.	Carolina Slate Belt; island-arc volcanics	Cambrian	Sericite schist (locally may show contact effects of intrusive granitic rocks and diabase)	Greenschist facies	Lenses	est. 100,000 m.t.	D	Pyrite					3.4			Mined for gold. Ore occurs in zone of altered and silicified schist (meta-felsite ?). Minor chalcopyrite, sphalerite, and galena present.	34, 73	
73.	Brewer, S. C.	Carolina Slate Belt; island-arc volcanics	Cambrian	Quartz-sericite schist (meta-felsite)	Greenschist facies	Lenses; breccia masses		D(M)	Pyrite					5.1		F, Bi, Sn	Mined for gold; gossan indicates sizable pyrite bodies. Topaz a major gangue mineral in one part of orebody. Ore zone strongly silicified.	34, 73	
74.	Halle, S. C.	Carolina Slate Belt; island-arc volcanics	Cambrian	Quartz-sericite schist (meta-felsite)	Greenschist facies	Layers; stringers	1 million m.t.	D(M)	Pyrite	23.5				3.8-68.6			Mined for gold; free gold generally within pyrite. Pyrite typically disseminated in felsitic tuff. Tuff silicified. Disseminated pyrite makes up to 30 percent of ore; pyrite locally massive.	34, 73, 83	
75.	Dorn, S. C.	Carolina Slate Belt; island-arc volcanics	Cambrian	Sericite schist; sericite-chlorite-quartz schist. Mafic dike adjacent to mineralized zone.	Greenschist facies	Lenses		M(D)	Pyrite	2-3	25-40	6-12	34.3	445.7-582.9			Mined for gold, mainly before 1880, from weathered zone. Lens of massive chalcopyrite below weathered zone. Other lenses composed of galena, sphalerite, and chalcopyrite. Metal values reported by company doing development work in 1930's.	73	
76.	Seminole (Magruder), Ga.	Carolina Slate Belt; island-arc volcanics	Cambrian	Quartz-sericite schist (meta-felsite)	Greenschist facies	Lenses, layers		D(M)	Pyrite	3.0				3.4	137-240*		Mined principally for gold and copper. A concentrate made from milling pyriticiferous schist contains 10.5% chalcopyrite, 4.8% sphalerite, 3.3% galena, 45.0% pyrite, 2.2% barite, 17.0% quartz, and 16.0% ferromagnesian silicates.	73, 95, 97	
77.	Redmond; Wilkins Creek, N. C.	Faulted contact zone of Grenville basement and rift-zone sediments, Ocoee Basin, Blue Ridge thrust sheet	Upper Precambrian (Ocoee or Grenville?)	Chloritic schist, probably derived from garnet-actinolite schist; altered granite; metasedimentary quartz-mica schist		Lenses	Production less than 50 m.t.	D(M)	Pyrite (Redmond, minor) Pyrrhotite (Wilkins Creek)								Data only for Redmond deposit; hand picked ore in shipment of 44.5 short tons averaged 12.1% lead and 6.5% zinc; ore occurs in sulfide-quartz lenses along fault zone.	38	
78.	Wayhuts, N. C.	Supracrustal schist/gneiss overlying Grenville basement	Upper Precambrian	Quartz-mica gneiss/schist	Amphibolite facies (garnet isograd)	Layer		M	Pyrrhotite	23	1.7					Co, Ni	Ore layer at contact of ultramafic intrusive and contorted faulted gneiss/schist. Ore is siliceous and contains several percent of sphalerite, plus chalcopyrite, galena, pyrrhotite and pyrite with gangue of chlorite, quartz, calcite, and actinolite.	82, 94	
79.	Savannah (Betts Gap), N. C.	Grenville basement near contact with supracrustal schist/gneiss; may be fault slice of the schist/gneiss	Upper Precambrian (Grenville or younger)	Quartz-biotite schist; quartzose gneiss; hornblende gneiss; pegmatite	Amphibolite facies (garnet isograd)	Layers, lenses, 3-5.5 m thick		M(D)	Pyrrhotite		.6-2.8						One unconfirmed report in files of U.S. Geological Survey based on 15 holes drilled in 1896 indicates 10.05 oz/ton Au.	93	
80.	Cullhovee, N. C.	Rift-zone marine sedimentary rocks resting on older Upper Precambrian metasedimentary rocks and Grenville basement (Blue Ridge thrust sheet). Contact zone of "Carolina" and "Roan" gneisses.	Upper Precambrian	Muscovite-biotite-plagioclase-garnet schist; hornblende gneiss	Amphibolite facies (garnet isograd ?)	Layers, lenses	22,700 m.t. to 160 m depth	M	Pyrite	27	4.0			1.4	13.7		Orebody 60-120 m long x .6-2 m thick, consists of pyrite, pyrrhotite, chalcopyrite, magnetite, and sphalerite. Mined in 1860's for supergene copper.	30, 56, 58, 82	
81.	Otto, N. C.	Rift-zone marine sedimentary rocks resting on Grenville basement (Blue Ridge thrust sheet)	Upper Precambrian	Biotite-muscovite schist; granite gneiss; hornblende gneiss	Amphibolite facies ?				Pyrrhotite	33	.21	1.14	.26				Ore contains minor pyrite, sphalerite, and chalcopyrite; gangue is of quartz, feldspar, and calcite.	82	
82.	Hazel Creek, N. C.; includes Westervelt ore lens, 750 m N. E.	Rift facies flysch-type sediments (metamorphosed), Ocoee basin (Blue Ridge thrust sheet)	Upper Precambrian	Sericitic/chloritic graphitic phyllite; feldspathic quartzite		Lenses, 30 m long, 1-2 m thick	42,000 m.t.	M(D)	Pyrrhotite		3.0-3.5	3.0-3.5	.5				Total production, 295 m.t. copper. 7-27% copper in supergene zone. Principal sulfides are pyrrhotite, chalcopyrite, and sphalerite; minor galena, gold and silver.	29, 94	
83.	Fontana, N. C.	Rift facies flysch-type sediments (metamorphosed), Ocoee basin (Blue Ridge thrust sheet)	Upper Precambrian	Sericitic/chloritic graphitic schist/phyllite; meta-arkose; meta-graywacke; nearby diorite		Lens, 1-6 m thick	730,000 m.t.	M	Pyrrhotite	21	7.4	1.8		.24	13.2		Mined 1926-1944, producing 83,516.88 lbs. of copper. Ore contains pyrrhotite, chalcopyrite, sphalerite, minor galena, magnetite.	29, 82, 94	
84.	Ducktown district, Tenn. (8 major orebodies)	Rift facies flysch-type sediments (metamorphosed), Ocoee basin (Blue Ridge thrust sheet)	Upper Precambrian	Metagraywacke gneiss; quartz-mica pelitic schist; biotite-actinolite schist	Amphibolite facies (staurolite isograd)	Layers, tabular lenses	80 million m.t. to 600 m depth	M	Pyrrhotite	18-36	.6-4.0	.8-6.0	tr				Supergene copper mined, 1847-1877; primary sulfide, 1890-present. Production primarily for sulfuric acid since 1907.	25, 30, 58, 66, 82	
85.	Chastatee, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Hornblende gneiss (amphibolite ?); quartzitic muscovite-biotite gneiss/schist	Amphibolite facies (garnet isograd)	Tabular long lenses, 1.5-12 m thick	1.1 million m.t. to 150 m depth	M(D)	Pyrite	30-44	1.0	.7					Hard lump pyrite capped by gossan. Mineralization is along contact of hornblende gneiss and quartz-mica gneiss, favoring the former. Ore consists of pyrite, minor chalcopyrite, and gangue of quartz, garnet, chlorite.	30, 59, 85	
86.	Standard, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Biotite and sericite schists; chlorite schist; hornblende schist	Amphibolite facies	Tabular long lenses, 2-3 m thick	30,000 m.t. (past production)	M(D)	Pyrite	35	.1	1.0					Ore has minor sphalerite and trace of chalcopyrite and inclusions of chlorite schist. Hornblende gneiss nearby. Site of old Franklin or Creighton gold mine.	30, 85	
87.	Rich, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Mica schists (metasedimentary rocks)	Amphibolite facies (garnet isograd)			M(D)	Pyrite	34-42		1.5-2.1	.12-.15				Ore contains minor sphalerite, galena, and a trace of chalcopyrite.	85	
88.	Bell-Star, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Hornblende gneiss (belt within broad area of mica gneiss)	Amphibolite facies (garnet isograd)	Layer, maximum thickness, 4.5m		M(D)	Pyrite								Ore is pyrite in gangue of granular quartz lenses, sericite, and chlorite; local zones rich in sphalerite. "Sandstone" bed, approximately 100 m thick, is strongly banded, finely crystalline quartz-magnetite-garnet iron-formation-like rock, about 45 m below footwall of sulfide layer.	85	
89.	Marietta, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Hornblende gneiss (belt within broad area of mica gneiss)		Layer or lens, 3-2.5 m thick	Estimated 20,000 m.t. to depth of 30 m	D(M)	Pyrite								Ore bed consists of pyrite with gangue of quartz and minor biotite.	85	
90.	Shirley, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Garnetiferous chloritic hornblende schist/gneiss; light-colored mica gneiss	Amphibolite facies (garnet isograd)	Layers, 2.5-3.6 m thick	Estimated 500 m.t. (past production)		Pyrite								As (trace)		
91.	Little Bob, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Hornblende schist/gneiss; quartz-biotite schist; quartzitic sericite schist; light-colored mica gneiss	Amphibolite facies (garnet isograd)	Lenses, an echelon, 1.5-9 m thick	136,000 m.t.	M	Pyrite	33-40	1.82	.2-3.0						Ore consists of pyrite, chalcopyrite, sphalerite, magnetite, and minor pyrrhotite. Gangue is of quartz, biotite, hornblende, and garnet.	30, 54, 85
92.	Wills Rica, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Hornblende gneiss bordered by quartz-mica-feldspar gneiss	Amphibolite facies (garnet isograd)	Tabular (ribbon-like) lenses, 4-2 m thick	Estimated 230,000 m.t. to 160 m depth	M	Pyrite	45	tr						As, P (trace)	Ore consists of pyrite, pyrrhotite, magnetite, and a gangue of quartz, garnet, and calcite.	30, 54, 85
93.	Jenny Stone, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Hornblende gneiss	Amphibolite facies	Tabular (layer)	570,000 m.t. to 160 m depth	M	Pyrrhotite	30	1.0	.7						Ore consists of abundant pyrrhotite, moderate amounts of pyrite, and minor chalcopyrite and sphalerite.	30, 85
94.	Swift, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Hornblende gneiss; chlorite schist; quartz-calcite-biotite/chlorite-magnetite schist	Amphibolite facies	Lens ? .5-3 m thick	225,000 m.t. to 160 m depth	M	Pyrrhotite and pyrite	33								Mined 1906-1911; 4,000 s.t. ore shipped.	30, 54, 85
95.	Smith-McCandless, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Quartz-sericite-chlorite schist	Amphibolite facies (garnet isograd)	Layer, 1-3 m thick	Estimated 250,000 m.t.	M(D)	Pyrite									First developed in late 1850's and further worked, 1901-1905. About 1,500 s.t. pyrite produced.	54, 85
96.	Talapoosa (Waldrop), Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Limestone in chloritic schist; hornblende gneiss	Amphibolite facies ?	Elongate tabular lens, 1-7m thick, averaging 1.5 m	90,000 m.t. to depth of 100 m	M	Pyrite	25-40	1.7-4.5	.05		3.4	6.8-41.1			First mined about 1873-1874 and most actively 1881-1885. Produced about 15,000 s.t. pyrite.	30, 54, 85
97.	Reeds Mountain, Ga.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Mica schist; chlorite schist; hornblende schist/gneiss	Amphibolite facies	Lenses, 3 m thick			Pyrite	20-48							P	Prospected before 1860; gossan iron mined approximately 1900-1910. About 4,000 s.t. pyrite shipped 1910-1914 from earlier mining. Phosphorus content of .027% and .035% in two analyses.	30, 54, 85
98.	Stone Hill (Woods Copper and includes Smith's Copper), Ala.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt (Hayesville thrust sheet).	Upper Precambrian	Hornblende gneiss; chlorite schist; nearby mica schist	Amphibolite facies (garnet isograd)	Lenses; massive, 1-8 m, disseminated, 6 m thick	Estimated 19,500 m.t.	M(D)	Pyrite	20	2-4	.8		.34-.68	85-106			Ore consists of pyrite, chalcopyrite, and pyrrhotite.	1, 29, 30
99.	Arbacoochee district, Ala.	Talladega belt (Hillabee Schist)	Middle Paleozoic ?	Chlorite schist	Greenschist facies			D	Pyrite									Mined for gold-quartz veins conformable within pyritized chloritic schist representing stratabound mineralization.	1
100.	Chilafinnee district (includes King Mine), Ala.	Talladega belt (Hillabee Schist)	Middle Paleozoic ?	Chlorite schist	Greenschist facies			D	Pyrite									Mined for gold-quartz veins conformable within pyritized chloritic schist representing stratabound mineralization.	1
101.	Pyriton, Ala.	Talladega belt (Hillabee Schist)	Middle Paleozoic ?	Chlorite schist	Greenschist facies	Tabular lenses, 1.5-6 m thick, averaging 2 m	2.75 million m.t. to 150 m depth	M(D)	Pyrite	40	1.2	.5						Past production, 136,000 m.t. pyrite.	1, 30
102.	Stringfellow, Ala.	Rift facies flysch-type sediments and mafic volcanics (metamorphosed). Ashland-Wedowee belt.	Upper Precambrian	Slaty and arenaceous metasedimentary rocks, partly graphitic; garnet schist; hornblende gneiss nearby	Amphibolite facies (garnet isograd)	Lens		D(M?)	Pyrite									Small amount of chalcopyrite associated with the pyrite.	1
103.	Stewart (Parsons), Ala.	Talladega belt (Hillabee Schist)	Middle Paleozoic ?	Chlorite schist ?					Pyrite									Mined for gold. Auriferous zone about 60 m wide and .8 m long, along trend of host rock. Dumps contain masses of pyrite.	1