UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

TABLE DESCRIBING METALLIFEROUS AND SELECTED NONMETALLIFEROUS MINERAL DEPOSITS IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA

TO ACCOMPANY
OPEN-FILE REPORT 78-558B

This report is preliminary and has not been reviewed for conformity with Geological Survey standards and nomenclature

Menlo Park, California

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TABLE DESCRIBING METALLIFEROUS AND SELECTED NONMETALLIFEROUS MINERAL DEPOSITS IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA

(To accompany open-file map 78-558B)

By Béla Csejtey, Jr., and R. J. Miller

EXPLANATORY STATEMENT

This table briefly describes the known deposits and occurrences of metallic and selected nonmetallic mineral commodities in the Talkeetna Mountains quadrangle, Alaska. The table and accompanying map are part of a multidisciplinary mineral resource assessment of the quadrangle by the U.S. Geological Survey's Alaska Mineral Resource Assessment Program (AMRAP). This report is one component of the assessment; its purpose is to provide background information that will be integrated with other geological, geochemical, and geophysical data for the resource assessment.

The present report, both map and table, is based on literature search, consultations with colleagues, and fieldwork by the authors. A U.S. Bureau of Mines map showing locations of mining claims in the quadrangle was also utilized. Because of the varied sources of information, disparities exist in the data base ranging from adequately studied deposits to others that are only vaguely mentioned in the literature.

The primary aim of the present report is to locate and to briefly describe the known deposits of the quadrangle, utilizing the format established by Elliott and others (1978). A subsequent report will provide an assessment of the mineral resource potential of the quadrangle.

EXPLANATION

TABLE HEADINGS

MAP NO. AND NAME(S) (if known)

Map no. refers to a specific deposit on the mineral deposits map. Name(s) of prospects or mines are derived from published sources or from general usage. In several cases, more than one prospect or occurrence are grouped under the same map number.

LOCATION

Location refers to the standard township and range land designations relevant to specific parallels and meridians on the U.S. Geological Survey quadrangle map used as a base for this report.

CATEGORY

M -- mine
P -- prospect
O -- occurrence

The terms mines, prospect, and occurrences are used as follows:

Mine -- a mineral deposit with recorded production. Ore was mined but not necessarily shipped.

Prospect -- a deposit which has been staked and, in many cases, has been scantily explored; lacks evidence of production. Claims may or may not be active. Some of the placer gold deposits that are listed as prospects probably have had at least meager production but, because of lack of definitive evidence, they are classified as prospects.

Occurrence -- generally a minor deposit that, as far as known, is unclaimed and is mainly known from recent U.S. Geological Survey field investigations or from the analyses of geochemical rock samples. Also includes the locations of float samples with anomalous concentrations of metals. The criteria for anomalous geochemical rock samples are discussed in the Explanatory note.

RESOURCE(S) (minor constituents or potential byproducts in parentheses)

Indicates commodity or commodities that are known or reported at each locality. Question marks are used where presence of commodity is inferred from indirect evidence or based on unverified reports. Commodities are listed in decreasing order of probable commercial value or of abundance in the deposits. Metallic commodities are denoted by standard chemical symbols.

FORM

Denotes the physical aspect of a deposit. Queried where uncertain. Left blank for occurrences based on mineralized rock samples found only in float.

TYPE

Rather speculative designation concerning the genesis of the deposit. Queried where based on insufficient information. Left blank for mineralized rock samples found only in float.

BRIEF DESCRIPTION

Provides brief descriptions of the geology and mineralogy of the deposits and, where applicable, production data. Several prospects are known only from a U.S. Bureau of Mines claim map (1973); information of these is generally limited to reported commodities and category of deposit.

PRINCIPAL REFERENCES

Cites sources for information used in the table and map. For prospects and occurrences known primarily from analyzed geochemical rock samples reported by Miller and others (1978), the sample field numbers are given in parentheses. A list of references cited follows the table.

ABBREVIATIONS USED

Standard chemical symbols are used; for example, Cu - copper, Au - gold, Sn - tin.

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
1	T.33N.,R.4W.	P	Ag,As,Mo(Pb,Au)	Disseminated	Hydrothermal	Small pyrite-bearing mineralized zone in brecciated chert and argillite of unit Jta. Several claims in adjacent area	Miller and others, 1978 (sample no. 75NwO95); U.S. Bur. Mines, 1973
2	T.22S.,R.12W.	P	Au(Ag)	Vein	Hydrothermal	Lode claims in chert and argillite of unit Jta	U.S. Bur Mines, 1973; MacKevett and Holloway, 1977
3	T.22S.,R.12W.	P	Au	Vein	Hydrothermal	----------do.----------	-------Do.-------
4	T.22S.,R.12W.	P	Sn(Ag,As,Cu,Mo, Zn,Pb)	Disseminated	"Porphyry tin"	Primarily tin mineralization (cassiterite) in small outcrop of greisenized Tertiary granitic intrusive into unit DSga	Reed, 1978
5	T.32N.,R.2W.	O	Cr(Pb)	Disseminated	Metamorphic?	Scattered pyrite in altered contact metamorphosed argillite and graywacke of unit Kag; adjacent to Tertiary granitic intrusion	Miller and others, 1978 (sample no. 75NwO03A)
6	T.32N.,R.2W.	P	Cu(Au)	Vein?	Hydrothermal?	Lode claims in small Tertiary granitic intrusion	MacKevett and Holloway, 1977; U.S. Bur. Mines, 1973
7 Mint	T.32N.,R.1E.	M	Sb,Ag,Cu,As(Pb, Au)	Veinlets	Hydrothermal	Pyrargyrite and miargyrite, along with minor amounts of other sulfides, in quartz veinlets cutting argillite of unit Kag. Some production. Several lode claims in adjacent areas	Capps and Short, 1926; Richter, 1963; Berg and Cobb, 1967, p. 27; Cobb, 1972; MacKevett and Holloway, 1977
8	T.32N.,R.1E.	P	Mo(Cu,Zn)	Disseminated	Hydrothermal, porphyry?	Molybdenite, pyrite, minor chalcopyrite, and sphalerite in silicified shear zone within Tertiary granitic intrusion	Richter, 1963
9 Treasure Creek	T.32N.,R.1E.	P	Mo(Cu,Au,Zn)	Vein and veinlet	Hydrothermal	Molybdenite and associated sulfides in contact metamorphosed argillite and graywacke of unit Kag; adjacent to Tertiary granitic intrusion	-----Do.-----

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
10	T.33N.,R.7W.	O	(Au,Ag)	Vein	Hydrothermal	Small quartz veins in argillite of unit Kag. No visible ore minerals	Miller and others, 1978 (sample no. 75NW132)
11	T.32N.,R.4E.	O	Mo(Pb)	Disseminated	Hydrothermal?	Scattered pyrite in mica schist adjacent to Tertiary granitic intrusion	Miller and others, 1978 (sample no. 77Cy016B)
12	T.22S.,R.5W.	P	Au	Disseminated	Placer	Several claims in creek bed. Surficial deposits are too small to show at the scale of geologic map	U.S. Bur. Mines, 1973
13	T.22S.,R.3W.	O	Au(Ag)	Disseminated	Hydrothermal	Pyrite and quartz in alteration zone within Tertiary granitic intrusion	Miller and others, 1978 (sample no. 73St0070); T. E. Smith, written commun., 1973
14	T.22S.,R.2W.	O	(Mo)	Disseminated?	Hydrothermal?	Low-grade, sulfide-bearing alteration zone in mafic metavolcanic rocks of unit Tav	Miller and others, 1978 (sample no. 73St1035); T.E. Smith, written commun., 1973
15	T.22S.,R.2W.	O	Ag(Mo,Au)	Disseminated	Porphyry?	Small sulfide-bearing alteration zone in felsic volcanic dike intruding mafic metavolcanic rocks of unit Tav	Miller and others, 1978 (sample nos. 73St1030, 73St0040); T. E. Smith, written commun., 1973
16	T.22S.,R.2W.	P	(Cu)	Disseminated	Porphyry?	Low-grade, chalcopyrite-bearing mineralized felsic volcanic dike cutting mafic metavolcanic rocks of unit Tav	MacKevett and Holloway, 1977; U.S. Bur. Mines, 1973

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
17	T.33N.,R.9E.	O	Cu	Disseminated?	Volcanogenic?	Low-grade copper mineralization in mafic metavolcanic rocks of unit Pzv	Miller and others, 1978 (sample no. 73St1050); T. E. Smith, written commun., 1973
18 Lichen	T.32N.,R.11E.	P	Cu(Au,Ag)	Disseminated and veinlet	Submarine volcanogenic	Chalcopyrite, bornite, and other copper minerals scattered in a mafic metavolcanic flow of unit Pzv. Mineralized zone extends for about 900 m, and it is less than 2 m wide	Smith and others, 1975
19	T.32N.,R.9E.	O	(Mo,Au)	Disseminated	Porphyry? Hydrothermal?	Very low-grade, sulfide-bearing mineralized zone in quartz diorite of unit TKg	Miller and others, 1978 (sample no. 73St0164); T. E. Smith, written commun., 1973
20	T.32N.,R.9E.	O	As(Ag,Pb)	---	---	Disseminated sulfide minerals in float of mafic metavolcanic rock	Miller and others, 1978 (sample no. 73St1107); T. E. Smith, written commun., 1973
21	T.32N.,R.9E.	O	Ag(As,Mo,Sn,Au)	---	---	Disseminated fine-grained sulfide minerals in float of mafic metavolcanic rock	Miller and others, 1978 (sample no. 73St1099); T. E. Smith, written commun., 1973
22	T.32N.,R.8E.	O	Ag(Mo,Pb,Sn,Zn)	Disseminated, vein?	Hydrothermal?	Very low-grade, sulfide-bearing mineralized zone in mafic to intermediate metavolcanic rocks of unit Pzv	Miller and others, 1978 (sample nos. 73St1100, 73St1101); T. E. Smith, written commun., 1973

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
23	T.32N.,R.9E.	O	(Ag,Mo,Zn)	---	---	Float of altered mafic to intermediate metavolcanic rock	Miller and others, 1978 (sample no. 73Stl104); T. E. Smith, written commun., 1973
24	T.32N.,R.8E.	O	(Ag,Mo)	Disseminated	Hydrothermal?	Very low grade, sulfide-bearing mineralized shear zone in mafic to intermediate metavolcanic rocks of unit Pzv	Miller and others, 1978 (sample nos. 73Stl103, 73Stl105); T. E. Smith, written commun., 1973
25	T.32N.,R.8E.	P	Cu	Disseminated, massive, and vein?	Hydrothermal?	Copper minerals, mainly chalcopyrite, within an extensive shear zone along contact between units Tkv and Pzv	MacKevett and Holloway, 1977; U.S. Bur. Mines, 1973
26	T.31N.,R.9E.	O	(Cu,Au)	Veinlet	Hydrothermal	Minor chalcopyrite and pyrite in small quartz vein cutting mafic metavolcanic rocks of unit Pzv. Exposures too small to show on geologic map	Miller and others, 1978 (sample no. 7TM276)
27	T.30N.,R.7E.	O	(Ag)	Vein	Hydrothermal	Minor pyrite in small quartz vein cutting mafic metavolcanic rocks of unit Pzv	Miller and others, 1978 (sample no. 72Cy038)
28	T.31N.,R.3E.	P	Au	Disseminated	Placer	Placer claim at the mouth of small tributary of Susitna River	U.S. Bur. Mines, 1973
29	T.30N.,R.3E.	P	Au	Disseminated	Placer	Placer claim along small creek incised into extensive Quaternary surficial deposits	------Do.------

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
30	T.30N.,R.2E.	P	Au	Disseminated	Placer	Placer claim along small creek incised into extensive Quaternary surficial deposits	U.S. Bur. Mines, 1973
31 Ihly	T.30N.,R.1W.	P	Ag,Pb	Vein	Hydrothermal	Argentiferous galena in quartz veinlets that cut an altered felsic volcanic dike in rocks of unit Kag	Berg and Cobb, 1967, p. 27
32	T.31N.,R.2W.	P	Au	Disseminated	Placer	Several placer claims along creek in alluvium too small to show on geologic map	MacKevett and Holloway, 1977; U.S. Bur. Mines, 1973
33 Susitna River-Gold Creek	T.31N.,R.2W.	P	Au	Disseminated	Placer	Gold placers sporadically explored for many years; possibly token production. Location shown on map is only approximate	Capps, 1919a, p. 231; Cobb, 1972
34	T.29-30N.,R.2W.	P	Au	Disseminated	Placer	Placer claims along upper Chunilna River in alluvial deposits too small to show on geologic map	MacKevett and Holloway, 1977; U.S. Bur. Mines, 1973
35	T.28-29N.,R.3W.	P	Au	Disseminated	Placer	Placer claims in alluvium too small to show on geologic map	-----Do.-------
36	T.28N.,R.4W.	P	Au	Disseminated	Placer	----------do.----------	-----Do.-------
37	T.28N.,R.3W.	P	Au	Disseminated	Placer	----------do.----------	-----Do.-------
38	T.27-28N.,R.3-4W.	P	Au	Disseminated	Placer	Placer claims in alluvium along Chunilna River	-----Do.-------
39	T.27N.,R.3-4W.	P	Au	Disseminated	Placer	Placer claims in alluvium too small to show on geologic map	-----Do.-------
40	T.28N.,R.2E.	O	(Ag,Au,Pb)	Disseminated	Hydrothermal	Very fine grained disseminated, pyrite-bearing gossan along shear zone in mafic metavolcanic rocks of unit Pzv	Miller and others, 1978 (sample no. 75Cyl058)
41	T.28N.,R.2E.	O	Zn	Disseminated	Hydrothermal	Pyrite-bearing gossan in sheared metaandesite of unit Pzv	Miller and others, 1978 (sample no. 75Dr007)

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
42	T.28N.,R.2E.	0	Mo,Ag(Pb,Sn,As)	Disseminated	Hydrothermal	Deep-red to light-brown, pyrite-bearing, extensive gossan in aphanitic intermediate metavolcanic rocks of unit Pzv	Miller and others, 1978 (sample nos. TM0287RD, 75Dr014, 75MS011)
43	T.29N.,R.3E.	0	Cu(Au,Mo)	Vein, disseminated	Hydrothermal	Quartz veinlets with pyrite cutting pyrite-bearing alteration zone, containing some malachite stains, in mafic metavolcanic rocks of unit Pzv. Extent of mineralized alteration zone appears to be small	Miller and others, 1978 (sample nos. 72Cy073, 72Cy061)
44	T.28N.,R.3E.	0	Cu(Zn)	Disseminated	Volcanogenic?	Altered mafic metavolcanic rocks of unit Pzv. No visible ore minerals	Miller and others, 1978 (sample no. 74Cy062)
45	T.28N.,R.4E.	0	Ag,Cu	Disseminated	Hydrothermal?	Small brecciated shear zone, with limonite and malachite, in mafic metavolcanic rocks of unit Pzv	Miller and others, 1978 (sample no. 75Nw141)

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
46	T.28N.,R.4E.	O	Cu	Disseminated	Hydrothermal	Minor chalcopyrite and pyrite in small alteration zone within argillite of unit Pzv	Rose, 1967, p. 5
47	T.28N.,R.5E.	O	(Au,Ag)	Disseminated	Hydrothermal	Scattered pyrite in altered phyllite of unit Pzv	Rose, 1967, p. 4
48	T.28N.,R.5E.	P	Cu	Disseminated	Volcanogenic? Hydrothermal?	Copper minerals and pyrite in mafic metavolcanic rocks of unit Pzv	MacKevett and Holloway, 1977
49	T.28N.,R.5E.	O	Cu	Vein, replacement	Hydrothermal? Submarine volcanogenic?	Pyrrhotite and chalcopyrite within greenstone of unit Pzv. Extent of mineralized zone is small	Rose, 1967, p. 5
50	T.28N.,R.5E.	O	(Cu,Au,Ag)	Disseminated	Hydrothermal? Porphyry?	Minor pyrite, pyrrhotite, and chalcopyrite; disseminated in altered gneissose quartz diorite of unit Jpm	Rose, 1967, p. 4
51	T.28N.,R.5E.	O	(Ag,Cu)	---	---	Float of vein quartz with pyrite and chalcopyrite	Anderson, 1969, p. 10-12
52	T.28N.,R.5E.	O	(Cu)	Veinlets, disseminated	Hydrothermal?	Minor pyrrhotite and chalcopyrite, disseminated and in veinlets cutting altered metagabbro of unit Pzv	Rose, 1967, p. 4
53	T.28N.,R.9E.	P	Au(Pt)	Disseminated	Placer	Placer claims along upper Busch Creek incised into extensive Quaternary surficial deposits	U.S. Bur. Mines, 1973
54	T.10N.,R.10W.	O	(Zn)	Disseminated	Porphyry?	Small felsic volcanic dike with traces of pyrite, cutting greenstone of unit Jpm	Miller and others, 1978 (sample no. 77CyO70B)
55	T.26N,R.10E.	P	Au	Disseminated	Placer	Several placer claims along Oshetna River	U.S. Bur. Mines, 1973
56 Gold Creek	T.25-26N.,R.9E.	P	Au	Disseminated	Placer	Several placer claims along Gold Creek in Quaternary alluvium too small to show on geologic map	Chapin, 1918, p. 64; U.S. Bur. Mines, 1973; Cobb, 1972

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
57 Granite Creek	T.26N.,R.9E.	P	Au	Disseminated	Placer	Placer claim along lower Granite Creek	Chapin, 1918, p. 64
58	T.26N.,R.8E.	O	Zn	Veinlets	Hydrothermal	Limonite and pyrite along fractures in small gossan within metaandesite of unit Jtk	Miller and others, 1978 (sample no. 77Cy080)
59	T.26N.,R.8E.	P	Cu(Au)	Vein?	Hydrothermal?	Lode claims in granitic rocks of unit Jpm	U.S. Bur. Mines, 1973; MacKevett and Holloway, 1977
60 Roaring Creek	T.25N.,R.8E.	P	Au	Disseminated	Placer	Placer claims along lower Roaring Creek	Chapin, 1918, p. 64
61	T.25N.,R.6E.	P	Au	Disseminated	Placer	Several placer claims	U.S. Bur. Mines, 1973
62	T.26N.,R.6E.	O	(Sn,Zn)	Disseminated	Porphyry?	Tertiary, pyritiferous, altered andesite dikes cutting diorite of unit Jpm	Miller and others, 1978 (sample no. 74Cy078A)
63	T.26N.,R.4E.	P	Cu?,Au?	Veins?	Hydrothermal?	Lode claims in Tertiary volcanic rocks	U.S. Bur. Mines, 1973; MacKevett and Holloway, 1977

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
64	T.26N.,R.3E.	O	Ag,Cu(Au)	---	---	Float of vein quartz with pyrite, chalcopyrite, and possibly pyrrhotite	Miller and others, 1978 (sample no. TM0066RA)
65	T.26N.,R.3E.	O	Cu(Sn)	---	---	Float of vein quartz with pyrite and malachite stains	Miller and others, 1978 (sample no. 73Cy126)
66	T.25N.,R.3E.	O	(Mo)	Veinlets	Hydrothermal	Pyrite-bearing quartz veinlets in altered granodiorite of unit Jpm	Miller and others, 1978 (sample no. TM0103RB)
67	T.25N.,R.3E.	O	Cu(Pb,Au)	---	---	Float of pyrite and malachite-bearing altered granitic rock	Miller and others, 1978 (sample no. TM0104R)
68	T.25N.,R.3E.	P	Cu	Vein?	Hydrothermal?	Copper minerals, mainly malachite, in brecciated granitic rocks of unit Jpm. Site of diamond drilling in early 1970's. Several claims in area	MacKevett and Holloway, 1977; U.S. Bur. Mines, 1973
69	T.25N.,R.2E.	O	Co,Cr,Ni(Zn, Au)	Disseminated	Magmatic? and (or) hydrothermal?	Altered mafic metavolcanic rock, possibly serpentinite, of unit Pzv. No visible ore minerals	Miller and others, 1978 (sample nos. TM0050RA, TM0050RB, TM0050RC)
70	T.26N.,R.2E.	O	Ag,Mo(Pb,Zn, Au)	Disseminated	Hydrothermal?	Altered, pyrite-bearing felsic dike of unit Tv cutting mafic metavolcanic rocks of unit Pzv	Miller and others, 1978 (sample nos. TM0107RB, TM0107RE)
71 Eastview	T.26N.,R.2E.	P	Cu	Vein	Hydrothermal	Quartz veins, with pyrite and chalcopyrite, cutting metaandesite of unit Pzv	Capps, 1919b, p. 203
72 Phoenix	T.26N.,R.2E.	P	Cu	Vein	Hydrothermal	Chalcopyrite, hematite, minor bornite, and quartz in veinlets cutting sheared metaandesite of unit Pzv	Capps, 1919b, p. 202

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
73 Blue Lode	T.26N.,R.2E.	P	Cu	Vein, replacement	Hydrothermal	Chalcopyrite and bornite in gouge within metaandesite of unit Pzv	Capps, 1919b, p. 202-203
74 Ice Cream Mountain, Rainbow Lake	T.26N.,R.2E.	P	Cu	Vein?	Hydrothermal?	Several lode claims in mafic metavolcanic rocks of unit Pzv. Probably some geologic conditions as in the Eastview, Phoenix, and Blue Lode claims	U.S. Bur. Mines, 1973
75 Talkeetna	T.26N.,R.2E.	P	Cu,Ag(Au,Mo)	Vein, disseminated	Hydrothermal	Replacement lodes along shear zones and in adjacent wall rock of mafic metavolcanic rocks of unit Pzv. The lodes contain chalcopyrite, hematite, pyrite, and quartz. Several lode claims in area	Capps, 1919b, p. 203-204; Miller and others, 1978 (sample nos. 73Cy123, 75Cy127)
76	T.26N.,R.2E.	P	Cu	Vein? Disseminated?	Hydrothermal	Several lode claims in mafic metavolcanic rocks of unit Pzv	U.S. Bur. Mines, 1973
77	T.26N.,R.3E.	O	Cu(Pb)	Disseminated, vein	Hydrothermal	Small replacement lodes and veinlets with chalcopyrite in altered mafic metavolcanic rocks of unit Pzv	Miller and others, 1978 (sample no. 73Cy122)

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
78	T.27N.,R.3E.	O	(Cr)	Disseminated	Volcanogenic?	Altered mafic metavolcanic rock of unit Pzv. No visible ore minerals	Miller and others, 1978 (sample no. TM0057R)
79 Copper Wonder	T.26N.,R.2E.	P	Cu(Fe)	Vein, replacement	Hydrothermal	Chalcopyrite, hematite, pyrite, and quartz in a zone of sheared metaandesite of unit Pzv	Capps, 1919b, p. 201-202
80	T.26N.,R.2E.	O	Zn(Pb,Au)	Vein, disseminated	Hydrothermal	Disseminated pyrite and quartz veinlets in altered mafic metavolcanic rock of unit Pzv	Miller and others, 1978 (sample no. 75Cy044)
81 Copper King	T.26N.,R.1E.	P	Cu,Au,Ag	Disseminated, veins	Hydrothermal	Chalcopyrite, hematite, pyrite, and quartz in zone of sheared metaandesite of unit Pzv	Capps, 1919b, p. 201
82 Iron Creek, Morning Star	T.26N.,R.1E.	P	Cu	Veins?	Hydrothermal?	Several lode claims in mafic metavolcanic rocks of unit Pzv. Geologic conditions probably similar to that of the Copper King claim	U.S. Bur. Mines, 1973
83 Copper Queen	T.26N.,R.1E.	P	Cu,Au	Disseminated, replacement	Hydrothermal	Pyrite, chalcopyrite, arsenopyrite, and quartz in a zone of sheared and altered mafic metavolcanic rocks of unit Pzv. Exposure is along the bank of Iron Creek in a rock bluff too small to show on geologic map	Capps, 1919b, p. 199-201
84	T.27N.,R.2E.	O	Cu,Ag(Au,Zn,Pb)	Vein	Hydrothermal	Quartz vein, about 60 cm thick, with chalcopyrite, pyrite, and malachite stains. Country rock is mafic metavolcanic rock of unit Pzv	Miller and others, 1978 (sample nos. 73Cy124, 75CyD09A)
85	T.27N.,R.1E.	P	Au	Disseminated	Placer	Placer claims along small creek in alluvium too small to show on geologic map	U.S. Bur. Mines, 1973
86	T.27N.,R.1E.	O	(Mo)	---	---	Float of altered granodiorite with disseminated pyrite	Miller and others, 1978 (sample no. TM184RB)

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
87	T.26N.,R.1W.	O	Ag,As,Cu,Zn(Pb)	Disseminated	Hydrothermal	Dark-red to yellow,pyrite-bearing gossan in mafic metavolcanic rocks of unit Pzv. No visible ore minerals	Miller and others, 1978 (sample no. 75Dr002)
88	T.25N.,R.1W.	P	Cu,Mo(Pb,Au,Zn)	Disseminated	Porphyry	Copper minerals and molybdenite disseminated in altered Tertiary granitic rock of unit unit Tbgd	MacKevett and Holloway, 1977; Miller and others, 1978 (sample nos. 75Cy157B, 77Cy010, TM024RB, TM024RD, TM024RA)
89	T.25N.,R.1W.	O	(Cu,Zn,Au)	---	---	Float of pyrite-bearing and silicified granitic rock	Miller and others, 1978 (sample no. TM0015RB)
90	T.25N.,R.1W.	O	(Pb,Sn,Au)	---	---	Float of pyrite-bearing vein quartz	Miller and others, 1978 (sample nos. TM0017RB, TM0017RC, TM0017RE)

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
91	T.24N.,R.2W.	O	(Cr,Sb,Sn)	Disseminated	Porphyry? Hydrothermal?	Altered granitic rock of unit TKg with mafic metavolcanic xenoliths. No visible ore minerals	Miller and others, 1978 (sample no. 74Cy029A)
92	T.24N.,R.2W.	O	(Ag,Sn,Zn,Au)	Disseminated	Hydrothermal? Volcanogenic?	Altered metaandesite of unit Pzv. No visible ore minerals	Miller and others, 1978 (sample no. 74Cy030)
93	T.23N.,R.3W.	P	Au	Disseminated	Placer	Placer claims, location uncertain	U.S. Bur. Mines, 1973
94	T.23N.,R.1E.	P	Cu,Au,Ag	Vein?	Hydrothermal?	Lode claims in tonalite of unit TKt	------Do.------
95	T.23N.,R.1E.	P	Au?	Vein?	Hydrothermal?	----------do.----------	------Do.-------
96	T.24N.,R.1E.	O	Ag,Cu(Au)	---	---	Float of vein quartz with pyrite, chalcopyrite, and malachite stains	Miller and others, 1978 (sample no. 72Cy110)
97	T.24N.,R.2E.	O	Cr(Ni,Sb)	---	---	Several float samples of altered mafic metavolcanic rocks, possibly serpentinite. No visible ore minerals	Miller and others, 1978 (sample nos. 74Cy097A, 74Cy097C, 74Cy097D)
98	T.24N.,R.2E.	O	Ag,Cu(Pb,Au)	---	---	Float of malachite-stained granitic rock	Miller and others, 1978 (sample no. 74Cy096)
99 Mazuma Creek, Caribou Creek	T.22-23N.,R.9E.	P	Au	Disseminated	Placer	Several placer claims along Mazuma Creek and Caribou Creek in alluvium too small to show on geologic map	Martin and Mertie, 1914, p. 279-280; U.S. Bur. Mines, 1973; Cobb, 1973, p. 19
100	T.23-24N.,R.10E.	P	Au	Disseminated	Placer	Several placer claims along upper Little Nelchina River in alluvium too small to show on geologic map	U.S. Bur. Mines, 1973

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
101 Yacko Creek	T.25N.,R.11E.	P	Au	Disseminated	Placer	Several placer claims along Yacko Creek in alluvium too small to show on geologic map. Possibly some minor production	Chapin, 1918, p. 64; U.S. Bur. Mines, 1973
102 Fourth of July Creek	T.25-26N.,R.12E.	P	Au	Disseminated	Placer	Several placer claims along Four of July Creek in alluvium too small to show on geologic map	Chapin, 1918, p. 64; Cobb, 1972
103 T.6N.,R.10W.	T.6N.,R.10W.	P	Au	Disseminated	Placer	Several placer claims in alluvium too small to show on geologic map	U.S. Bur. Mines, 1973
104 Daisy Creek	T.6N.,R.10W., T.25N.,R.12E,	P	Au	Disseminated	Placer	Several placer claims along Daisy Creek in alluvium	Chapin, 1918, p. 64; Cobb, 1972; U.S. Bur. Mines, 1973
105	T.25N.,R.12E.	P	Au	Disseminated	Placer	Several placer claims along upper Daisy Creek in alluvium too small to show on geologic map	U.S. Bur. Mines, 1973
106	T.4N.,R.10W.	P	Au	Disseminated	Placer	Several placer claims	------Do.-------
107	T.3N.,R.10W.	P	Au	Disseminated	Placer	Placer claim along Old Man Creek	------Do.-------

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE TALKEETNA MOUNTAINS QUADRANGLE, ALASKA (continued)

MAP NO. AND NAME(S) (if known)	LOCATION	CATEGORY	RESOURCE(S) Minor constituents or potential byproducts in parentheses	FORM	TYPE	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
108 Crooked Creek	T.23N.,R.12E.	P	Au	Disseminated	Placer	Placer claims along lower Crooked Creek	Chapin, 1918, p. 60-61
109 Willow Creek	T.23N.,R.12E.	P	Au	Disseminated	Placer	Old placer claim along Willow Creek	U.S. Bur. Mines, 1973; Chapin, 1918, p.62
110 North Creek	T.22-23N.,R.12E.	P	Au	Disseminated	Placer	Several placer claims along North Creek in alluvium too small to show on geologic map	Martin and Mertie, 1914, p. 278; U.S. Bur. Mines, 1973
111 Albert Creek	T.22N.,R.11-12E.	M	Au(Pt)	Disseminated	Placer	Also included several other claims along Albert Creek in alluvium too small to show on geologic map. Old Albert Creek placer produced about 150 oz gold during 1914 (Chapin, 1918). This is the only placer deposit in quadrangle with proven, though minor, production	Chapin, 1918, p. 59-62; Martin, 1920, p. 23; Cobb, 1972; U.S. Bur. Mines, 1973; Cobb, 1973, p. 29
112	T.22N.,R.11E.	O	Zeolites	Disseminated	Diagenic and metamorphic	In Horn Mountains and Albert Creek region, extensive deposits of mordenite and other zeolites of possible economic interest; localized in tuffaceous part of Lower Jurassic Talkeetna Formation. Similar deposits probably occur elsewhere in Talkeetna Mountains quadrangle	Hawkins, 1976; MacKevett and Holloway, 1977
113 McDougal Creek	T.22N.,R.11E.	P	Au	Disseminated	Placer	Several placer claims along McDougal Creek in alluvium too small to show on geologic map	U.S. Bur. Mines, 1973

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