

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

MAY 2 1968  
Div. Mines & Minerals

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

METALLIC MINERAL RESOURCES MAP OF THE TELLER QUADRANGLE, ALASKA

Compiled by

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Open-file map

1968

This map is preliminary  
and has not been edited or  
reviewed for conformity with  
Geological Survey standards  
or nomenclature.

LODE DEPOSITS

Number	Name and principal reference(s)	Commodity <u>1/</u> , <u>2/</u>
1	Cape Mountain: Steidtmann and Cathcart (1922), p. 96-102; Heide, Wright, and Sanford (1946), p. 5-15	<u>Sn</u> , W, Zn
2	Potato Mountain: Steidtmann and Cathcart (1922), p. 88-94; Mulligan (1965), 85 p.	Sn
3	Rapid River: Sainsbury (1963), p. 5, 9, 11	Be
4	Unnamed occurrence: Unpublished data	Be, Ag
5	Alaska Chief: Steidtmann and Cathcart (1922), p. 81	Pb
6	Bessie and Maple: Steidtmann and Cathcart (1922), p. 78-80; Sainsbury (1963), p. 5, 8-9; Sainsbury (1964), p. 56 Wolframite-topaz: Knopf (1908b), p. 57-58	Sb, Be, Cu, Pb, Ag, Sn, W, Zn Cu, Pb, Ag, Sn, W
7	Idaho: Sainsbury (1964), p. 57 Lost River: Sainsbury (1963), p. 3, 8-9, 13	Cu Be
8	Lost River Mine: Steidtmann and Cathcart (1922), p. 51-74; Lorain and others (1959), 76 p.; Sainsbury (1964), 80 p.	Sb, Be, Bi, Cu, Pb, Mo, Ag, <u>Sn</u> , W, Zn
9	Yankee Girl: Knopf (1908b), p. 59-60; Steidtmann and Cathcart (1922), p. 80	Cu, Au, Pb, Ag, Sn
10	Tin Creek: Knopf (1908a), p. 269; Sainsbury (1963), p. 2-4, 9, 11-13	Sb, Be
11	Brooks Mountain: Knopf (1908b), p. 41-44; Brooks (1916), p. 59; Steidtmann and Cathcart (1922), p. 86-87; West and White (1952), p. 3; Sainsbury (1963), p. 13-14; Sainsbury (1964), p. 10, 57; Overstreet (1967), p. 112	Sb, Be, Bi, Cu, FM, Pb, Mz, RE, Ag, Sn, W, Zn
12	Tozer Creek, Willow Branch: Sainsbury and Hamilton (1967), p. B22-B24	Zn
13	Black Mountain: Sainsbury and Hamilton (1967), p. B23	Pb, Sn, W, Zn

1/ Symbols - Sb, antimony; Be, beryllium; Bi, bismuth; Cu, copper; FM, fissionable materials (other than monazite); Au, gold; Pb, lead; Mo, molybdenum; Mz, monazite; RE, mineral (other than monazite) that contains rare-earth element(s); Ag, silver; Sn, tin; W, tungsten; Zn, zinc.

2/ Symbol underlined indicates recorded production.

<u>Number</u>	<u>Name and principal reference(s)</u>	<u>Commodity</u> <u>1/</u> , <u>2/</u>
14	Ear Mountain: Steidtmann and Cathcart (1922), p. 103-111; Killeen and Ordway (1955), p. 65-70, 86-92; Mulligan (1959a), p. 33-52; Sainsbury (1963), p. 14-15	Sb, Be, Cu, FM, Au, Pb, Hg, Mz, RE, Ag, Sn, W, Zn
15	Ward: Mertie (1918), p. 440-441; Wright (1947), 4 p.	<u>Cu</u>
16	Unnamed occurrence: Unpublished data	Cu
17	Worcester: Mertie (1918), p. 442	Cu, Pb
18	Unnamed occurrence: Unpublished data	Cu
19	Alder Creek: Collier and others (1908), p. 280	Au

1/ Symbols - Sb, antimony; Be, beryllium; Cu, copper; FM, fissionable materials (other than monazite); Au, gold; Pb, lead; Hg, mercury; Mz, monazite; RE, mineral (other than monazite) that contains rare-earth element(s); Ag, silver; Sn, tin; W, tungsten; Zn, zinc.

2/ Symbol underlined indicates recorded production.

#### PLACER DEPOSITS

<u>Number</u>	<u>Name and principal reference(s)</u>	<u>Commodity</u> <u>1/</u> , <u>2/</u>
20	Village Creek: Heide and Sanford (1948), p. 4, 6, 13	Sn
21	Boulder Creek: Mulligan and Thorne (1959), p. 47-66; Mulligan (1966), p. 18-19, 21	Cb, Mz, RE, Ta, Sn, W
22	Goodwin Creek: Mulligan (1966), p. 18-19, 21 Goodwin Gulch: Mulligan (1966), p. 8, 18-19, 23, 29	Sn Sn
23	Cape (Tin City) Creek: Mulligan and Thorne (1959), p. 20- 43, 45-47; Barton (1962), p. 31; Mulligan (1966), p. 18, 20-23, 29; Alaska Div. Mines and Minerals (1966), p. 11, 104 First Chance Creek: Mulligan (1966), p. 18, 20-21, 23	Cb, Sn Sn

1/ Symbols - Cb, columbium (niobium); Mz, monazite; RE, mineral (other than monazite) that contains rare-earth element(s); Ta, tantalum; Sn, tin; W, tungsten.

2/ Tin has been produced from some of the listed placers.

<u>Number</u>	<u>Name and principal reference(s)</u>	<u>Commodity</u> <sup>1/</sup> , <sup>2/</sup>
24	Potato Creek: Heide and Rutledge (1949), p. 4, 7, 19	Sn
25	Diomedea (Oakland) Creek: Heide and Rutledge (1949), p. 7, 20	Sn
26	Iron Creek: Heide and Rutledge (1949), p. 7-8, 15	Sn
27	Buck Creek: Steidtmann and Cathcart (1922), p. 94-96; Mulligan (1965), p. 23-31, 62-64 Grouse Creek: Eakin (1915a), p. 91; Mulligan (1965), p. 9-11, 24-25 Peluk Creek: Mulligan (1965), p. 24, 27-30 Sutter Creek: Mulligan (1965), p. 9-11, 24-25, 56-57	Au, Mz(?), Sn, W(?) Au, Sn Sn Au, Sn
28	Baituk (Justice) Creek: Mulligan (1959b), p. 21-23	Au
29-31	Baituk Creek: Mulligan (1959b), p. 21-23	Au, Sn
32	Kigezruk Creek: Brooks (1901), p. 135; Mulligan (1959b), p. 21	Au(?), Sn
33	Anikovik River: Mulligan (1959b), p. 5	Au, Sn
34	Deer Creek: Brooks (1901), p. 134-135	Au
35	Anikovik River: Mulligan (1959b), p. 15, 17-20	Cr, Au, Sn
36	Anikovik River: Brooks (1901), p. 136-137	Sn
37	Banner Creek: Brooks (1901), p. 135; Mulligan (1959b), p. 19	Au, Sn
38	Buckner (Buhner) Creek: Brooks (1901), p. 135-136	Au, Sn
39	Ishut Creek: Brooks (1901), p. 135; Mulligan (1959b), p. 19	Au, W
40-42	Lost River: Mulligan (1959b), p. 12-15; Alaska Div. Mines and Minerals (1966), p. 103	Pb, Ag, Sn
43	Rapid River: Mulligan (1959b), p. 13-14	Sn
44	Cassiterite Creek: Steidtmann and Cathcart (1922), p. 74; Anderson (1947), p. 44; Alaska Dept. Mines (1950), p. 53	Sn, W

<sup>1/</sup> Symbols - Cr, chromite; Au, gold; Pb, lead; Mz, monazite; Ag, silver, Sn, tin; W, tungsten.

<sup>2/</sup> Gold has been produced from many and tin from several of the listed placers.

<u>Number</u>	<u>Name and principal reference(s)</u>	<u>Commodity</u> <sup>1/</sup> , <sup>2/</sup>
45	York Creek (River): Mulligan (1959b), p. 15-17	Sn, W
46	York Creek, West Fork: Mulligan (1959b), p. 15-17	W
47	Tuttle Creek: Killeen and Ordway (1955), p. 69, 82; Mulligan (1959a), p. 21-22, 33	Cb, FM, Au, Mz, Sn, W
48	Tuttle Creek: Mulligan (1959a), p. 31	Sn
49	Quartz Creek: Killeen and Ordway (1955), p. 82; Mulligan (1959a), p. 30-31	Cb, FM, Mz, RE, Sn
50	Tuttle Creek: Mulligan (1959a), p. 30, 32-33	Sn
51	Unnamed creek: Mulligan (1959a), p. 30, 32	Sn
52	Step Gulch: Killeen and Ordway (1955), p. 71, 79, 81, 83	FM, Sn
53	Pinnacle Creek: Killeen and Ordway (1955), p. 82-83	FM, Mz, Sn
54	Deer Creek: Mulligan (1959a), p. 29-30, 32	Sn
55	Step Gulch Creek: Mulligan (1959a), p. 29-30, 32	Sn
56	Pinnacle Creek: Mulligan (1959a), p. 29-30, 32	Sn
57	Crosby Creek: Mulligan (1959a), p. 29-30, 32	Sn
58-60	Eldorado Creek: Mulligan (1959a), p. 1-3, 24, 29-30, 32-33	Sn
61	Eldorado Creek: Killeen and Ordway (1955), p. 82	FM, Mz, RE, Sn, W
62	Kreuger Creek: Mulligan (1959a), p. 24, 33	Sn
63	Dick Creek: Anderson (1947), p. 41, 43-44; Moxham and West (1953), p. 4-6	Au, Sn, W
64	Sunset Creek: Martin (1919), p. 41; White, West, and Matzko (1953), p. 2; Sainsbury (1967), p. D210	Au, W
65	Igloo (Moonlight) Creek: Collier and others (1908), p. 270-271	Au
66	Dewey Creek: Collier and others (1908), p. 270-271	Au

<sup>1/</sup>

Symbols - Cb, columbium (niobium); FM, fissionable materials (other than monazite); Au, gold; Mz, monazite; RE, mineral (other than monazite) that contains rare-earth element(s); Sn, tin; W, tungsten.

<sup>2/</sup>

Gold or tin has been produced from several of the listed placers.

<u>Number</u>	<u>Name and principal reference(s)</u>	<u>Commodity</u> <u>1/</u> , <u>2/</u>
67	McKinley Creek: Collier and others (1908), p. 270-271	Au
68	Offield Creek: White, West, and Matzko (1953), p. 2	Au
69-71	Allene (Ilene, Swanson) Creek: Collier and others (1908), p. 271-272; White, West, and Matzko (1953), p. 2; unpublished data	Au
72	Goldrun Creek: Vertical aerial photographs, U.S. Navy, 1950; Alaska Div. Mines and Minerals (1964), p. 88 (reference probably to this creek, not to Gold Run)	Au
73	Budd Creek: Anderson (1947), p. 22; Moxham and West (1953), p. 4, 6; Malone (1962), p. 55 Windy Creek: Eakin (1915b), p. 372; Moxham and West (1953), p. 4	Cu, Au, Hg, Sn(?) Au, Sn(?)
74	Eagle Creek: Unpublished data	Au
75	Bering Creek: Collier and others (1908), p. 280-281	Au
76	Igloo (Eagle) Creek: White, West, and Matzko (1953), p. 1	Au
77	Windy Creek: Smith (1933b), p. 50	Au
78	Gold Run: Collier and others (1908), p. 277	Au
79	Alder Creek: Collier and others (1908), p. 279-280 Bluestone River: Collier and others (1908), p. 276-278 Gold Run: Collier and others (1908), p. 275-279; Anderson (1947), p. 43-44; White, West, and Matzko (1953), p. 1	Au Au Au, W
80	Gold Run: Collier and others (1908), p. 279	Au
81	Bluestone River: Unpublished data	Au
82	Bluestone River: Collier and others (1908), p. 273-275	Au
83	Coyote Creek: Smith (1942), p. 63	Au
84	Dese Creek: Smith (1938), p. 64; White, West, and Matzko (1953), p. 2	Au

1/ Symbols - Cu, copper; Au, gold; Hg, mercury; Sn, tin; W, tungsten.

2/ Gold has been produced from the listed placers.

Placer deposits not shown on map because occurrences could not be located closely enough to plot:

<u>Name and principal reference(s)</u>	<u>Commodity</u> <sup>1/</sup> , <sup>2/</sup>
Agiapuk River: Brooks (1901), p. 126; Smith (1933a), p. 49	Au
American River: Alaska Dept. Mines (1948), p. 39, 45	Au
Birch Creek: Alaska Dept. Mines (1950), p. 42	Au
Bluestone River, Right Fork: Collier and others (1908), p. 280	Au
Burke Creek: Smith (1933a), p. 49	Au
Canyon Creek: Smith (1930), p. 36	Au
Columbia Creek: Collier and others (1908), p. 326	Au
Lawson Creek: Collier and others (1908), p. 271-272; Alaska Dept. Mines (1948), p. 38	Au
Little Skookum Creek: Brooks (1901), p. 131	Au
Million Creek: Alaska Dept. Mines (1948), p. 41	Au
Perry Gulch: Brooks (1922), p. 22	Sn
Pinguk River: Anderson (1947), p. 44	W
Sterling Creek: Knopf (1908b), p. 62	Au, Sn

<sup>1/</sup> Symbols - Au, gold; Sn, tin; W, tungsten.

<sup>2/</sup> Gold has been produced from most of the listed placers.

#### REFERENCES

- Alaska Dept. Mines, 1948, Rept. Commissioner of Mines, biennium ended Dec. 31, 1948, 50 p.  
 -----, 1950, Rept. Commissioner of Mines, biennium ended Dec. 31, 1950, 57 p.  
 Alaska Div. Mines and Minerals, 1964, Rept. for year 1964, 107 p.  
 -----, 1966, Rept. for year 1966, 115 p.  
 Anderson, Eskil, 1947, Mineral occurrences other than gold deposits in northwestern Alaska: Alaska Dept. Mines Pamph. 5-R, 48 p.  
 Barton, W. R., 1962, Columbium and tantalum, a materials survey: U.S. Bur. Mines Inf. Circ. 8120, 110 p.  
 Brooks, A. H., 1901, A reconnaissance of the Cape Nome and adjacent gold fields of Seward Peninsula, Alaska, in 1900: U.S. Geol. Survey Spec. Pub., p. 1-180.  
 -----, 1916, Antimony deposits of Alaska: U.S. Geol. Survey Bull. 649, 67 p.  
 -----, 1922, The Alaska mining industry in 1920: U.S. Geol. Survey Bull. 722, p. 7-67.  
 Collier, A. J., Hess, F. L., Smith, P. S., and Brooks, A. H., 1908, The gold placers of parts of Seward Peninsula, Alaska, including the Nome, Council, Kougarok, Port Clarence, and Goodhope precincts: U.S. Geol. Survey Bull. 328, 343 p.  
 Eakin, H. M., 1915a, Tin mining in Alaska: U.S. Geol. Survey Bull. 622, p. 81-94.  
 -----, 1915b, Placer mining in Seward Peninsula: U.S. Geol. Survey Bull. 622, p. 366-373.  
 Heide, H. E., and Rutledge, F. A., 1949, Investigation of Potato Mountain tin placer deposits, Seward Peninsula, northwestern Alaska: U.S. Bur. Mines Rept. Inv. 4418, 21 p.

- Heide, H. E., and Sanford, R. S., 1948, Churn drilling at Cape Mountain tin placer deposits, Seward Peninsula, Alaska: U.S. Bur. Mines Rept. Inv. 4345, 14 p.
- Heide, H. E., Wright, W. S., and Sanford, R. S., 1946, Exploration of Cape Mountain lode-tin deposits, Seward Peninsula, Alaska: U.S. Bur. Mines Rept. Inv. 3978, 16 p.
- Killeen, P. L., and Ordway, R. J., 1955, Radioactivity investigations at Ear Mountain, Seward Peninsula, Alaska 1945: U.S. Geol. Survey Bull. 1024-C, p. 59-94.
- Knopf, Adolph, 1908a, The mineral deposits of the Lost River and Brooks Mountain region, Seward Peninsula: U.S. Geol. Survey Bull. 345, p. 268-271.
- , 1908b, Geology of the Seward Peninsula tin deposits, Alaska: U.S. Geol. Survey Bull. 358, 71 p.
- Lorain, S. H., Wells, R. R., Mihelich, Miro, Mulligan, J. J., Thorne, R. L., and Herdlick, J. A., 1959, Lode-tin mining at Lost River, Seward Peninsula, Alaska: U.S. Bur. Mines Inf. Circ. 7871, 76 p.
- Malone, Kevin, 1962, Mercury occurrences in Alaska: U.S. Bur. Mines Inf. Circ. 8131, 57 p.
- Martin, G. C., 1919, The Alaskan mining industry in 1917: U.S. Geol. Survey Bull. 692, p. 11-42.
- Mertie, J. B., Jr., 1918, Lode mining and prospecting on Seward Peninsula: U.S. Geol. Survey Bull. 662, p. 425-449.
- Moxham, R. M., and West, W. S., 1953, Radioactivity investigations in the Serpentine-Kougarok area, Seward Peninsula, Alaska, 1946: U.S. Geol. Survey Circ. 265, 11 p.
- Mulligan, J. J., 1959a, Tin placer and lode investigations, Ear Mountain area, Seward Peninsula, Alaska: U.S. Bur. Mines Rept. Inv. 5493, 53 p.
- , 1959b, Sampling stream gravels for tin, near York, Seward Peninsula, Alaska: U.S. Bur. Mines Rept. Inv. 5520, 25 p.
- , 1965, Tin-lode investigations, Potato Mountain area, Seward Peninsula, Alaska: U.S. Bur. Mines Rept. Inv. 6587, 85 p.
- , 1966, Tin-lode investigations, Cape Mountain area, Seward Peninsula, Alaska; with a section on petrography by W. L. Gnagy: U.S. Bur. Mines Rept. Inv. 6737, 43 p.
- Mulligan, J. J., and Thorne, R. L., 1959, Tin-placer sampling methods and results, Cape Mountain district, Seward Peninsula, Alaska: U.S. Bur. Mines Inf. Circ. 7878, 69 p.
- Overstreet, W. C., 1967, The geologic occurrence of monazite: U.S. Geol. Survey Prof. Paper 530, 327 p.
- Sainsbury, C. L., 1963, Beryllium deposits of the western Seward Peninsula, Alaska: U.S. Geol. Survey Circ. 479, 18 p.
- , 1964, Geology of the Lost River mine area, Alaska: U.S. Geol. Survey Bull. 1129, 80 p.
- , 1967, Upper Pleistocene features in the Bering Strait area: U.S. Geol. Survey Prof. Paper 575-D, p. D203-D213.
- Sainsbury, C. L., and Hamilton, J. C., 1967, Mineralized veins at Black Mountain, western Seward Peninsula, Alaska: U.S. Geol. Survey Prof. Paper 575-B, p. B21-B25.
- Smith, P. S., 1930, Mineral industry of Alaska in 1927: U.S. Geol. Survey Bull. 810, p. 1-64.
- , 1933a, Mineral industry of Alaska in 1930: U.S. Geol. Survey Bull. 836, p. 1-83.
- , 1933b, Mineral industry of Alaska in 1931: U.S. Geol. Survey Bull. 844-A, p. 1-82.
- , 1938, Mineral industry of Alaska in 1936: U.S. Geol. Survey Bull. 897-A, p. 1-107.

- Smith, P. S., 1942, Mineral industry of Alaska in 1940: U.S. Geol. Survey Bull. 933-A, p. 1-102.
- Steidtmann, Edward, and Cathcart, S. H., 1922, Geology of the York tin deposits, Alaska: U.S. Geol. Survey Bull. 733, 130 p.
- West, W. S., and White, M. G., 1952, The occurrence of zeunerite at Brooks Mountain, Seward Peninsula, Alaska: U.S. Geol. Survey Circ. 214, 7 p.
- White, M. C., West, W. S., and Matzko, J. J., 1953, Reconnaissance for radioactive deposits in the vicinity of Teller and Cape Nome, Seward Peninsula, Alaska, 1946-47: U.S. Geol. Survey Circ. 244, 8 p.
- Wright, W. S., 1947, Ward copper deposit, Seward Peninsula, Alaska: U.S. Bur. Mines Rept. Inv. 4110, 4 p.

#### SOURCE OF GEOLOGIC DATA

Sainsbury, C. L., 1968, Unpublished compilation, 1:250,000.

