UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MINERAL OCCURRENCES (OTHER THAN MINERAL FUELS AND CONSTRUCTION MATERIALS) IN THE KANTISHNA RIVER AND RUBY QUADRANGLES, ALASKA

By
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Introduction

These summaries of references are designed to aid in library research on occurrences of mineral commodities (other than mineral fuels and construction materials) in the Kantishna River and Ruby quadrangles in central Alaska. All references to reports of the Geological Survey, to most reports of the U.S. Bureau of Mines, and to most reports of the State of Alaska Division of Geological and Geophysical Surveys and its predecessor State and Territorial agencies released before January 1, 1980 are summarized. In addition, unpublished data collected by Chapman during many years of personal familiarity with the region have been added where appropriate. Certain, mainly statistical, reports such as the annual Minerals Yearbook of the U.S. Bureau of Mines and the biennial and annual reports of the Alaska Division of Geological and Geophysical Surveys and its predecessor agencies are not included.

This report is divided into three parts: a section made up of summaries of data arranged alphabetically by occurrence name for each quadrangle; a second section that lists, by quadrangle, synonyms for names in the first section, the names of owners and operators of mines and prospects, and claim names (for the Kantishna River quadrangle there are no data to be shown in this section); and a final section that for each quadrangle lists alphabetically by author all references in the first section and in these introductory paragraphs.

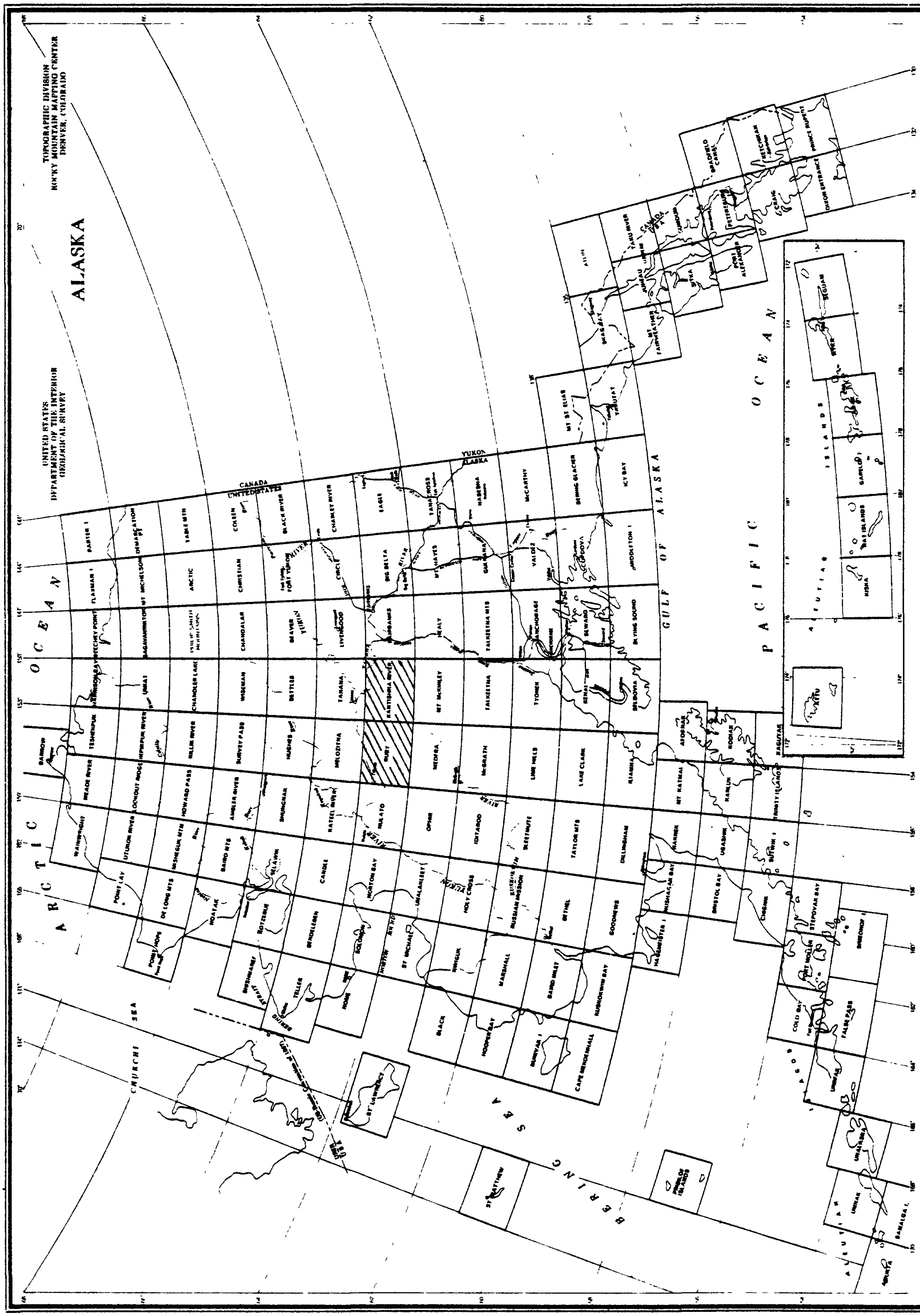
The first section consists of data on each occurrence, for each of which there is a page that gives the name of the occurrence, the mineral commodities present (listed alphabetically; RE is used for all rare-earth elements); the mining district (Ransome and Kerns, 1954 (IC 7679)) in which the occurrence is located; the name of the 1:250,000-scale topographic quadrangle; coordinates (as described by Cobb and Kachadoorian, 1961 (B 1139), p. 3-4); the number of a map (if there is one) on which the occurrence is shown and the number of the occurrence on that map; and the latitude and longitude of the occurrence. These data, presented at the top of the page, are followed by a general summary of information on the occurrence. Material in italic type is unpublished information added by Chapman. This is followed (on additional pages

if necessary) by more detailed summaries, arranged chronologically, of all references to the occurrence.

Proper names of mines, prospects, and other mineral occurrences are given if such names appear in the reports cited. If a deposit does not have such a name, but is near a named geographic feature, the name of that feature is shown in parentheses in lieu of a proper name if no ambiguity would result. All placer mines and prospects are considered under the name of the stream on which each is located. One deposit in the Kantishna River quadrangle has no proper name and is not near a named geographic feature; it is titled "Unnamed occurrence" and appears at the end of the list for the quadrangle. If a part of a proper name is not always used in references, that part of the name is shown in parentheses.

Citations are given in standard bibliographic format with the exception that references to reports and maps in numbered publication series also show in parentheses an abbreviation for the report or map series and the report or map number. Abbreviation used are:

AOF	Alaska Division of Geological and Geophysical Surveys Open-file Report
B	U.S. Geological Survey Bulletin
BMB	U.S. Bureau of Mines Bulletin
C	U.S. Geological Survey Circular
I	U.S. Geological Survey Miscellaneous Geologic Investigations Map
IC	U.S. Bureau of Mines Information Circular
OF	U.S. Geological Survey Open-file Report (numbers with a hyphen in them are formal; numbers without a hyphen are informal and used only within the Branch of Alaskan Geology of the U.S. Geological Survey)
MF	U.S. Geological Survey Miscellaneous Field Studies Map
P	U.S. Geological Survey Professional Paper
RI	U.S. Bureau of Mines Report of Investigations
TDM	Alaska Territorial Department of Mines Pamphlet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Index map

(Cosna R. tributaries) Tin(?)

Hot Springs district Kantishna River
Center part of quad.

Summary: Placer cassiterite prospects in headwater tributaries reported; not confirmed.

Reference

Joesting, 1943 (TDM 2), p. 19 -- "Good prospects of placer cassiterite have also been reported by Charles Holky in the headwater tributaries of the Cosna River, southwest of the Tofty district."

Unnamed occurrence — Lead, Silver

Kantishna district — Kantishna River (20.2, 0.5)
OF 77-169A, loc. 1 — 64°00'N, 150°15'W

Summary: Silicified zones in rhyolite porphyry of Devonian and/or Mississippian Totatlanika Schist cut by complex system of quartz veins, some of which contain galena and limonite. Assay of a grab sample showed 0.01% Pb, 0.02% Zn (no zinc mineral listed in table), and 0.05 oz Ag and 0.01 oz Au per ton.

References

Bundtzen and others, 1976 (AOF 98), loc. 78, p. 41 -- Complex vein system trends N55°E, dips 55°SE; in rhyolite porphyry unit of Paleozoic Totatlanika Schist. Some of veins constitute what appears to be a low-grade deposit of galena, limonite, and quartz.

p. 47 -- Assay data for grab sample - 0.01% Pb, 0.02% Zn, 0.05 oz Ag and 0.01 oz Au per ton.

MacKevett and Holloway, 1977 (OF 77-169A), p. 28, loc. 1 -- Silicified zones cut by a complex system of quartz veins; in rhyolite porphyry of Totatlanika Schist (Devonian and/or Mississippian). Some galena and limonite in quartz veins.

(American Cr.) Gold

Ruby district Ruby (18.0, 2.8)
MF-405, loc. 37 64°08'N, 153°39'W

Summary: Placer gold present. No evidence of workings seen in 1975. Country rock low-grade schist and quartzite. No data on extent of mining (if any), which would have been before 1915.

References

Eakin, 1916 (B 642), p. 220 -- Preliminary to Eakin, 1918 (B 667).
Eakin, 1918 (B 667), p. 51 -- Placer gold known to be present on American Cr., a western tributary of Telsitna R. about the middle of its course.
Cobb, 1977 (OF 168B), p. 44, loc. 31 -- Reference to above.
Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 1 -- Prospect workings before 1915; extent of mining and amount of gold apparently small. No evidence of workings seen in 1975. Bedrock low-grade schist and quartzite.

(Baker Cr.) Gold

Ruby district
MF-405, loc. 38

Ruby (22.3, 4.8)
64°15'N, 153°04'W

Summary: Placer gold present. No evidence of workings was seen in 1975. Country rock probably is low-grade phyllitic schist near a granitic pluton. No data on extent of mining (if any), which would have been before 1915.

References

Eakin, 1916 (B 642), p. 220 -- Preliminary to Eakin, 1918 (B 667).

Eakin, 1918 (B 667), p. 51 -- Placer gold is known to be present on Baker Cr., a western tributary of the Sethkokna R. near its mouth.

U.S. Geological Survey, 1976 (P 1000), p. 5 -- Old (pre-1915) prospect. Near pluton that ranges in composition from granite to diorite.

Cobb, 1977 (OF 77-168B), p. 44, loc. 30 -- Reference to Eakin, 1916 (B 667). [Note: Typographical error in report; should read B 667.]

Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 2 -- Prospect workings prior to 1915. Extent of mining and amount of gold apparently small. No evidence of workings seen in 1975. Bedrock probably is low-grade phyllitic schist.

(Banner Cr.) Gold(?)

Ruby district Ruby (3.4, 3.9) approx.
OF 77-168D, loc. 3 64°13'N, 155°34'W approx.

Summary: Claims staked and good prospects reported before 1915, but no record of mining. Location on creek not known, but probably near head. No data on type of bedrock.

References

Mertie and Harrington, 1916 (B 642), p. 244 -- Claims staked [before 1915]; good prospects said to have been found, but no mining.

Mertie and Harrington, 1924 (B 754), p. 95 -- Same as above.

Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 3 -- Prospects reported and claims staked before 1915; no mining reported. Location unknown, but probably near head. Type of bedrock unknown.

(Basin Cr.) Gold

Ruby district Ruby (2.6, 7.5) approx.
OF 77-168D, loc. 4 64°25'N, 155°39'W approx.

Summary: Gold production reported in 1915. Basic reference is ambiguous; work may have been on and production from tributaries Swift and Willow Creeks. See also: (Swift Cr.), (Willow Cr.).

References

Mertie and Harrington, 1916 (B 642), p. 243 -- Has been mining on Basin Cr. "Two of its tributaries, Willow and Swift creeks, received attention in 1915."

p. 265 -- Mining, 1915.

Mertie and Harrington, 1924 (B 754), p. 94 -- Same as Mertie and Harrington, 1916 (B 642), p. 243.

Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 4 -- Gold production reported in 1915. Exact location on creek uncertain. Type of bedrock uncertain; may be greenstone or metasedimentary rocks.

(Bear Gulch) (Pup) — Gold, Silver, Tin

Ruby district — Ruby (3.8-3.95, 7.1-7.3)
MF-405, loc. 12 — 64°24'-64°25'N, 155°29'-155°30'W

Summary: Gold discovered in 1910; mined until about 1933 for 1.5-2 mi. above mouth. Gold (average composition of bullion 857 parts Au and 135 parts Ag) in main paystreak in low terrace close to and SE of creek and in a smaller, higher level, lower grade pay streak; gold somewhat worn, but not well rounded. Some cassiterite accompanies gold. Main pay streak 20-30 ft deep, including 6-8 ft of gravel; as much as 100 ft wide. Most of mining by open cuts. Production from two best claims was about 24,200-29,000 fine oz of gold. Bedrock, at least in part, is deeply weathered greenstone. Source of gold and cassiterite appears to be on ridge or slope to east where cover is thick; closest known granite bodies are about 6 mi away. See also (Long Cr.).

References

Maddren, 1912 (B 520), p. 291 -- Recent discovery of gold (as of 1911).
Eakin, 1913 (B 542), p. 289, 291-292 -- Preliminary to Eakin, 1914 (B 578).
Eakin, 1914 (B 578), p. 41 -- Stream gravels auriferous for at least 2 mi above mouth. Valley narrow; pay streak closely follows course of present stream. Gravels 6-12 ft deep; in places as much as 15 ft wide; in upper part of gulch mainly unfrozen. Stream amenable to open-cut mining for entire length.
p. 44 -- Mining in 1912.
Eakin, 1914 (B 592), p. 364-366 -- Summer mining, 1913.
Brooks, 1915 (B 622), p. 57 -- Mining, 1914.
Mertie and Harrington, 1916 (B 642), p. 241 -- Gravels shallow enough to work by open-cut methods; 6-8 ft of gravel overlain by about 15 ft of muck. Stream practically worked out for about a mile and a half above mouth. Mining in 1915.
p. 165 -- Mining, 1915.
Smith, 1917 (BMB 153), p. 53 -- Mining, 1916.
Brooks, 1918 (B 662), p. 58 -- Mining, 1916.
Mertie and Harrington, 1924 (B 754), p. 93 -- Same as Mertie and Harrington, 1916 (B 642), p. 241.
Smith, 1929 (B 797), p. 22-23 -- Mining, 1926.
Smith, 1932 (B 824), p. 37 -- Mining, 1929.
Smith, 1933 (B 836), p. 38 -- Mining, 1930.
Smith, 1933 (B 844-A), p. 38 -- Mining, 1931.
Smith, 1934 (B 857-A), p. 34 -- Mining, 1932.
Mertie, 1936 (B 864-C), p. 146 -- Small tributary of Long Cr. which has produced considerable gold and contributed to pay streak of Long Cr.
p. 148-151 -- Average fineness of gold from Bear Gulch and Long Cr. from 1914 to 1931 was 857 parts Au and 135 parts Ag. Cassiterite in concentrates. 6 creek claims and one bench claim have been productive. Principal pay streak in low terrace close to and along SE side of creek. The 2 best claims (2 and 3 above Discovery) produced about $500,000-$600,000 [about 24,200-29,000 fine oz of gold]. Pay streak 20-30 ft deep; 6-8 ft of gravel; at upper end of claim 3 above Discovery

(Bear Gulch) (Pup) -- Continued

75-100 ft wide. Side channel in bench SE of creek less rich; bedrock (weathered greenstone of an old erosion surface) is 20-35 ft higher than creek level. Gold in Bear Gulch derived from SE; pay streak enriched at mouths of tributary gulches. Mining was mainly by open cuts. Was mining in 1933.

Chapman and others, 1963 (OF 239), p. 37 -- Extensive development of area did not begin until 1910 after gold was discovered on Bear Gulch.
p. 50-51 -- Amount of cassiterite small compared to that on Midnight and Birch Creeks.

Thomas, 1964, p. 6 -- Gold discovered, July 1910.

Cobb, 1977 (OF 77-168B), p. 42, loc. 10 -- Reference to Mertie, 1936 (B 864-C).

Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 5 -- Lower 1.5 mi of creek was mined. Main pay streak on low terrace on SE side of creek; also higher level, lower grade minor pay streak. Two claims produced 24,200-29,000 oz of gold. Silver is about 135 parts per thousand; cassiterite not abundant. Gold somewhat worn, but not well rounded. Some 2.5 to 100 oz nuggets [data apply to Mascot bench claim at mouth of Bear Gulch; probably should be considered part of Long Cr. deposit]. Bedrock, at least in part, is deeply weathered greenstone. Probably 2 erosion cycles. Probable lode source on ridge or slope to the east where cover is thick; some granitic and quartz-fluorite veins in actinolite, quartzite, and graphitic schists are known. Closest known granite bodies are about 6 mi to the northeast and 6 mi to the southeast.

(Beaver Cr., trib. Big Cr.) Copper, Gold, Lead, Silver

Ruby district Ruby (4.4, 10.35)
MF-405, loc. 1 64°35'N, 155°25'W

Summary: Lenticular veins of silver-bearing galena with various amounts of cerussite, anglesite, rhodochrosite, manganese oxides, gold, pyrite, ruby silver, malachite, and azurite; no zinc mineral identified, but Zn showed up in analyses; iron-rich gossan. Two mineralized zones about 800 ft apart; a few hundred feet long, maximum widths of 6 to 10 ft; limited shallow depths. Assays or analyses of 1.47 to 82 oz silver per ton, 8.7%-15.3% lead, 0.08%-0.89% zinc, 0.02% copper, and traces of gold reported. eU low (maximum of 0.003%). Discovered and explored in a small way in 1920; no production. Explored in 1960 by U.S. Bureau of Mines.

References

Brooks, 1922 (B 722), p. 54-55 -- Galena deposit discovered, 1920, and explored by pits, trenches, and short adits; material excavated probably not strictly in place. Galena in narrow veins (maximum width probably about 2 ft) and stringers in schist. Frozen talus on hillside contains blocks of ore as much as 2 ft square. All ore much oxidized and iron stained.

Brown, 1926 (B 783), p. 145-150 -- Lenticular veins of argentiferous galena (much altered to cerussite), limonite, and black material that is probably manganese oxide are as much as about 8 ft thick and apparently follow the cleavage of micaceous quartz schist country rock; cleavage strikes about N25°-30°E and dips 60°-80°SE. Assays of samples indicated as much as 82 oz silver per ton across a width of 1 or 2 ft; samples from 2 dumps contained 32 and 8 oz silver per ton and traces of gold; a sample from a trench contained 26 oz silver per ton. The surface material appears to have been enriched in silver. Exploration was by a 40-ft shaft, 2 shallow shafts, an adit and drift, and numerous trenches and pits. The chance of developing any significant tonnage of ore seems slight.

Mertie, 1936 (B 864-C), p. 226-227 -- Data from Brown, 1926 (B 783).

Mertie, 1937 (B 868-D), p. 175-176 -- Data from Brown, 1926 (B 783).

Wedow and others, 1952 (OF 51), p. 85 -- Highly oxidized galena-bearing veins cutting quartz-mica schist; not of sufficient size to be of economic interest.

White and Stevens, 1953 (C 279), p. 1 -- Silver-bearing galena deposit about 12 mi south of Ruby.

p. 3-4 -- Lenticular veins as much as several feet thick parallel to schistosity of micaceous quartz schist. Ore consists chiefly of silver-bearing galena, much cerussite and limonite, minor amounts of rhodochrosite, manganese oxides, calcite, and siderite, and traces of gold, quartz, pyrite, and ruby silver. Maximum eU of samples was 0.003%.

Cass, 1959 (I-289) -- Deposit explored about 1920; no ore was shipped.

Thomas, 1964 -- Gossan deposits are irregular tabular bodies in 2 zones 800 ft apart. Both premineralization and postmineralization faults approximately parallel to bedding and schistosity of country rock (intensely jointed and fractured schist and phyllite containing siliceous and

(Beaver Cr., trib. Big Cr.) -- Continued

calcareous bands); deposits, some of faults, bedding, and schistosity all strike about N35°E and dip steeply NW. Some of later faults are transverse and disrupt continuity of east gossan zone. East zone is 500 ft long and 0.5 to 6 ft wide; a channel sample 2.85 ft long contained 16.13 oz Ag per ton, 15.3% Pb, 0.89% Zn, 0.02% Cu, and trace Au. West zone is 300 ft long and 3-10 ft wide; a channel sample 2.6 ft long contained 1.47 oz Ag per ton, 8.7% Pb, 0.08% Zn, and trace of Au. Gossans are made up mainly of limonite and goethite with inclusions of galena, quartz, anglesite, cerussite, and schist country rock; traces of malachite and azurite, but no zinc mineral identified in samples.

Berg and Cobb, 1967 (B 1246), p. 237 -- Data from Brown, 1926 (B 783); White and Stevens, 1953 (B 279) [Not specifically cited].

Cobb, 1973 (B 1374), p. 169 -- Reference to Brown, 1926 (B 783).

Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 6 -- Small, lenticular veins of silver-bearing galena, with extensive iron-rich gossan; localized in 2 zones a few hundred feet long, maximum widths of 6-10 ft, and limited shallow depth. Assays 2-82 oz silver per ton, 9%-15% lead, minor to trace amounts of zinc, copper, gold. Very low eU. Discovered in 1920, inactive for many years; last explored in 1960 by USBM.

(Beaver Cr., trib. Poorman Cr.) Gold

Ruby district Ruby (2.1, 1.5)
MF-405, loc. 31 64°05'N, 155°43'W

Summary: About 315 oz of gold on bedrock (probably weathered basaltic greenstone) mined from drift at bottom of 60-ft shaft sunk mainly in muck; very little gravel. Mine operated 1930-32; no more gold was found.

References

Smith, 1933 (B 836), p. 37-38 -- Mining, 1930.
Smith, 1933 (B 844-A), p. 38 -- Mining, 1931.
Smith, 1934 (B 857-A), p. 34 -- Mining, 1932.
Mertie, 1936 (B 864-C), p. 169 -- In January, 1930, gold was discovered at the bottom of a 60-ft shaft northeast of the creek and about 250 ft from it. Shaft mainly through muck; little or no gravel. Discoverers said to have taken out about $6,500 [about 315 fine oz], 1930-32, but could not find any continuation of pay streak.
Cobb, 1977 (OF 77-168B), p. 43, loc. 23 -- Reference to Mertie, 1936 (B 864-C).
Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 7 -- Small drift placer mine from a 60-ft shaft. Gold on bedrock (probably weathered basaltic greenstone). Very little gravel. Produced about 315 oz of gold in 1930-32. No more found; probably inactive after 1932.

(Big Cr.) Gold, Tin

Ruby district Ruby (3.9-4.15, 11.65)
MF-405, loc. 4 64°40'N, 155°27'-155°29'W

Summary: Ground near head of creek is 15-20 ft deep, including 1-15 ft of gravel beneath muck. Placers have not been extensively or systematically prospected; pay streak inferred to be 30 ft wide, 1-15 ft thick, and to extend possibly as much as 5,000 ft downstream from mouth of Cox Pup. Gold and cassiterite reported to be distributed vertically through gravel. No known contact between slaty bedrock and granite in valley, but fragments of vein quartz with tourmaline present. Gold and cassiterite apparently close to source. Sporadic mining from 1907 to 1940's. *No sign of activity in 1975-77.*

References

Maddren, 1909 (B 379), p. 232-233 -- Preliminary to Maddren, 1910 (B 410).
Maddren, 1910 (B 410), p. 79 -- 15 holes sunk 15 to 60 ft to slaty bedrock. Gravel (schist) in layer 1-7 ft thick on bedrock overlain by sandy clay and muck. Colors of gold in all holes. Considerable pyrite in gravel and in or attached to large fragments of bedrock.
Maddren, 1912 (B 520), p. 294 -- Same data as in Maddren, 1910 (B 410).
Smith, 1930 (B 813), p. 34 -- Prospecting, primarily for tin, 1928.
p. 62 -- Prospecting for tin; masses that can not have travelled far found, 1928.
Smith, 1932 (B 824), p. 37 -- Mining, 1929.
Smith, 1933 (B 836), p. 38 -- Mining, 1930.
p. 70 -- Placer tin present.
Mertie, 1936 (B 864-C), p. 144-145 -- Data from Maddren, 1909 (B 379).
Joesting, 1942 (TDM 1), p. 34 -- Abundant placer cassiterite.
White and Stevens, 1953 (C 279), p. 3 -- eU of a concentrate sample was 0.001%.
Cass, 1959 (I-289) -- Cassiterite present.
Chapman and others, 1963 (OF 239), p. 37 -- Data on claim ownership as of 1942.
p. 40 -- Valley does not have a known granite contact, but contains significant amount of cassiterite. Fragments of vein quartz with tourmaline on dump of a placer prospect shaft.
p. 44-46 -- Ground along upper 1.25 mi of creek is 15-20 ft deep, including 1-15 ft of gravel; the rest is muck. Much of ground not frozen. Placer deposits have not been extensively or systematically prospected; pay streak inferred to be 30 ft wide and 1-15 ft thick; may extend as much as 5,000 ft downstream from mouth of Cox Pup. Gold and cassiterite reported to be distributed vertically through gravel of pay streak. In upper valley about 0.04 lb cassiterite and 0.0052 oz gold per ft^3 can be panned from dumps of prospect holes.
Cobb, 1977 (OF 77-168B), p. 42, loc. 3 -- Reference to Chapman and others, 1963 (OF 239).
Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 8 -- Some gold production, 1907-1940's; cassiterite in placers in headwaters. Gold and cassiterite apparently are close to their source. Quartz-tourmaline vein material. Probably no activity since 1950's.

(Birch Cr.)

Bismuth, Copper, Gold, RE, Silver, Thorium, Tin, Uranium

Ruby district
MF-405, loc. 9

Ruby (4.8-4.95, 8.05-8.1)
64°27'-64°28'N, 155°21'W

Summary: Placer gold mined at various times between 1914 and about 1936; some assayed 872 parts Au and 120 parts Ag. Ground mined was 70 or more ft deep; gold on or near bedrock; some of ground ran 75¢ to $1.50 per ft^2 of bedrock. Bedrock granite near head and black pyritic slate farther downstream. Stream concentrates contain much cassiterite (some very coarse; one 15-lb nugget found), some native bismuth, and much pyrite. About 2.5 tons of cassiterite concentrate saved, but probably not marketed. In addition, concentrates from granite bedrock, weathered material, and stream placers contained allanite, zircon, hematite, anatase, garnet, ilmenite, and traces of a radioactive mineral tentatively identified as uranothorite (U and Th present), malachite, and sphene. See also: (Crooked Cr.), (Straight Cr.).

References

Maddren, 1912 (B 520), p. 291 -- Gold prospects reported, 1911.

Mertie and Harrington, 1916 (B 642), p. 246-247 -- First staked in 1914. 3 mines worked, 1914-15, and other prospecting. Bedrock 70 to more than 90 ft deep. Gold found for more than 2 mi along lower Birch Cr. and between Straight and Crooked Creeks; gold on or near bedrock. Granite bedrock in upper workings; black pyritic slate farther downstream. Gold from granite area fairly coarse, badly tarnished, and accompanied by cassiterite and pyrite; farther downstream concentrates mainly pyrite from underlying slate. Unfrozen ground and live water may be encountered below 80-ft depth.

p. 165 -- Mining, 1915.

Smith, 1917 (BMB 142), p. 25 -- Mining, 1915.

Smith, 1917 (BMB 153), p. 53 -- Mining, 1916; considerable cassiterite with gold ; not saved.

Brooks, 1918 (B 662), p. 38 -- Mining, 1916.

Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.

Brooks, 1922 (B 722), p. 54 -- Mining, 1920.

Mertie and Harrington, 1924 (B 754), p. 97-98 -- Same as Mertie and Harrington, 1916 (B 642), p. 246-247.

p. 118 -- Granite at head accounts for cassiterite. Chapin, 1919 (B 692) quoted.

Smith, 1930 (B 813), p. 34 -- Prospecting, primarily for tin, 1928.

Mertie, 1936 (B 864-C), p. 157 -- Same data as in Mertie and Harrington, 1916 (B 642). Granite Mesozoic(?) in age. Recent assays show 872 parts Au, 120 parts Ag. Pyrite, cassiterite, and native bismuth in concentrates.

Smith, 1936 (B 868-A), p. 40 -- Dead work, 1934.

Smith, 1938 (B 897-A), p. 52 -- Mining, 1936.

Joesting, 1942 (TDM 1), p. 34 -- Common placer cassiterite.

White and Stevens, 1953 (C 279), p. 3-5, 7 -- Concentrates from stream placers and granite bedrock and weathered material contained allanite, zircon,

(Birch Cr.) -- Continued

hematite, anatase, garnet, ilmenite, and traces of uranothorite(?), malachite, and sphene. eU of most radioactive sample was 0.36% (concentration ratio 2,700:1).

Cass, 1959 (I-289) -- Cassiterite in placers.

Chapman and others, 1963 (OF 239), p. 37 -- Data on claim ownership as of 1942.

p. 40 -- Largest cassiterite nuggets in area; largest was 15 lb. Thin sections of impure pebbles showed that they are cassiterite-bearing vein quartz.

p. 42-44 -- Gold- and tin-bearing gravel which also includes some native bismuth discovered in 1914. Pay streak in gravel bench on west side of creek. Yield from 88,000 ft^2 of bedrock mined by underground methods between Straight and Crooked Creeks was 0.5 lb cassiterite and 75¢ to $1.50 in gold per ft^2. A half ton of concentrate that assayed 62% Sn was recovered from 482 yd^3 of gravel half a mile below mouth of Crooked Cr. In 1920, 4,000 lb tin concentrate was recovered by reworking tailings pile between Straight and Crooked Creeks. Cassiterite has been recovered from other neighboring parts of Birch Cr. Bedrock source has not been found.

Cobb, 1973 (B 1374), p. 170 -- Native bismuth and allanite in concentrates.

Cobb, 1977 (OF 77-168B), p. 42, loc. 4 -- Reference to Chapman and others, 1963 (OF 239); White and Stevens, 1953 (C 279).

Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 9 -- Significant gold (with included silver) production from 1914 to about 1936; inactive part of this period. Native bismuth a minor constituent. At least 2.5 tons of cassiterite concentrate recovered, but probably not marketed. Possible rare earth-thorium minerals in granite bedrock. Mineralization related to granite contact zone and veining(?) in pyritic shale.

(Boston Cr.) Gold(?)

Ruby district Ruby (3.9, 11.2) approx.
64°38'N, 155°29'W approx.

Summary: A few prospect shafts sunk to bedrock in winter of 1907-08. Pyrite reported. A few colors of gold probably found. Includes references to: (Boston Gulch), (Leo Gulch), (Logger Gulch).

References

Maddren, 1910 (B 410), p. 79 -- During winter of 1907-08 a few prospect holes were sunk. Colors of gold may have been found.

Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 10 -- A few prospect shafts sunk to bedrock in headwaters. Pyrite reported, and probably a few colors of gold.

(California Cr.) Gold

Ruby district Ruby (18.2, 6.3)
OF 77-168D, loc. 11 64°20'N, 153°36'W

Summary: Creek drains a small granitic stock that intrudes calcareous schists. Evidence of mining and prospect drilling, probably in early 1970's; inactive in 1975, 1976, *and 1979*. No data on gold content. Includes reference to (Titna R. tributary).

References

U.S. Geological Survey, 1976 (P 1000), p. 5 -- Recent placer mine. Near dioritic stock about 0.8 km in diameter.

Cobb, 1977 (OF 77-168B), p. 44, loc. 29 -- Written communication from R. M. Chapman, 10/15/75, is cited. Data in communication are repeated in Eberlein and others, 1977 (OF 77-168D) [below].

Eberlein and others, 1977 (OF 77-168D), p. 84, loc. 11 -- Several cuts mined for placer gold; also evidence of placer prospect drill hole lines. No information about gold content. Probably worked in or about 1970-73; inactive in 1975 and 1976. Creek drains a small granitic stock that intrudes calcareous schists.

(Center Cr.) Gold

Ruby district Ruby (4.6, 13.7)
OF 77-168D, loc. 12 64°47'N, 155°23'W

Summary: Quartz stringers and lenses in shear zones in slaty schist exposed in bluffs along Yukon R. Adit driven 150 ft in 1906 on quartz showing, but most of length in schist country rock because quartz stringers were too irregular to follow. Surface sample said to have assayed 3.1 oz gold per ton. Old reports place occurrences as 100-135 yds below mouth of Flat Cr.; location given above from field notes and visit by R. M. Chapman.

References

Maddren, 1909 (B 379), p. 231-232 -- Preliminary to Maddren, 1910 (B 410).

Maddren, 1910 (B 410), p. 77-78 -- Quartz lenses and stringers in shear zones in schist as much as 4-5 ft wide exposed in bluffs along Yukon R. In 1906 adit was driven 150 ft on and near one of quartz bodies; could not follow irregularities of quartz stringers with a straight adit, so most of it was in schist country rock; caved by July, 1908. Assays of samples from surface exposures said to have shown good gold values.

Maddren, 1912 (B 520), p. 293 -- Same as Maddren, 1910 (B 410).

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 12 -- Adit driven 150 ft on quartz vein in slaty schist in 1906. Most of vein probably barren, but a surface sample reportedly assayed 3.1 oz gold per ton.

(Cox Gulch) (Pup) — Gold, Tin

Ruby district — Ruby (4.2, 11.7)
MF-405, loc. 5 — 64°40'N, 155°27'W

Summary: Part of headwaters of Big Cr. Ground about 30 ft deep; 15 ft each of gravel and muck. Pay streak thought to be about 30 ft wide and 1,000 ft long; where mined yielded about 0.02 oz gold and 0.2-0.33 lb cassiterite per ft^2 of bedrock. Probably at least 2,100 lb cassiterite concentrate saved (but not data on possible sale). Gold generally rough; cassiterite (some crystalline) and gravel subangular; tourmaline in some quartz pebbles. Material can not have moved far from source. *Minor work continued into 1940's. No signs of recent activity in 1975-77. Amount of gold produced not known.*

References

Smith, 1930 (B 810), p. 29 -- Mining, 1927.
p. 54 -- Active prospecting for tin, 1927.
Smith, 1932 (B 824), p. 68-69 -- Prospecting for tin; some produced, 1929.
Smith, 1933 (B 836), p. 70 -- Placer tin present.
Joesting, 1942 (TDM 1), p. 34 -- Abundant placer cassiterite.
White and Stevens, 1953 (C 279), p. 3 -- eU of 5 concentrate samples was 0.001% to 0.006%.
Chapman and others, 1963 (OF 239), p. 37 -- Data on claim ownership as of 1942.
p. 40 -- No known granite contact in valley, but significant amount of cassiterite.
p. 44-46 -- Ground about 30 ft deep; 15 ft each of gravel and overlying muck. Pay streak thought to be about 30 ft wide and 1,000 ft long. According to one report about 1,000 lb of cassiterite concentrate saved; 400 lb of it came from 2,000 ft^2 of bedrock. According to another report 1,100 lb of concentrate came from 3,000 ft^2 of bedrock. Yield of gold reported to have been about 0.02 oz per ft^2 of bedrock. Cassiterite in small-pebble to granule size range, subangular, and in part crystalline. Gold generally rough. Most of gravel subangular; tourmaline in some quartz pebbles. Placer material probably not moved far from source.
Cobb, 1977 (OF 77-168B), p. 42, loc. 3 -- Reference to Chapman and others, 1963 (OF 239).
Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 13 -- Part of headwaters of Big Cr. Placers reported to have yielded gold at \$1.20-\$1.80 per ft^2 (gold at \$104.70) and cassiterite 0.2-0.33 lb per ft^2 of bedrock. Tourmaline in quartz pebbles. Gold is rough; gravel and cassiterite subangular. Probably close to lode source.

(Crooked Cr.) Gold, Tin

Ruby district Ruby (4.65-4.8, 8.0-8.05)
MF-405, loc. 7 64°27'-64°28'N, 155°22-155°23'W

Summary: Shafts were sunk on a low terrace south of creek; several feet of gravel with clayey layers beneath 40-50 ft of muck; little gold was found. Small pay streak near mouth; some mining for several hundred yards up Crooked Cr. from Birch Cr. Deposits of Crooked Cr. merge with those of Birch Cr.; as the deposits of Birch Cr. contain cassiterite, it is assumed that at least some of the material mined on Crooked Cr. also carried cassiterite. See also (Birch Cr.).

References

Mertie, 1936 (B 864-C), p. 157-158 -- Shafts were sunk on a low silt terrace south of creek, but little gold was found. 40-50 ft of silt over several feet of gravel with clayey layers.

Chapman and others, 1963 (OF 239), p. 42-43 -- Small pay streak probably extends up creek. Mining has been done for several hundred yards upstream from Birch Cr., to which Crooked Cr. is tributary.

Cobb, 1977 (OF 77-168B), p. 42, loc. 4 -- Reference to Chapman and others, 1963 (OF 239).

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 14 -- Mining chiefly in lowest part of creek just above Birch Cr. Difficult to distinguish deposits on lower part of this valley from those of Birch Cr.

(Duncan Cr.) Gold

Ruby district
MF-405, loc. 30

Ruby (3.75-3.8, 1.55-1.6)
64°05'N, 155°30'W

Summary: Pay streak in old channel. Gravels are 2-5 ft of subangular pieces of vein quartz, porous quartz breccia, and schist on schist bedrock (2 ft of which must be taken up to recover gold) beneath 40-50 ft of muck. Gold generally in small, angular particles; largest nugget reported was about 1.21 fine oz. Ground ran about 75¢ per ft^2 of bedrock (gold at $20.67). Placer deposits probably close to lode source. Breccia in gravel and fact that gold is not present farther east suggest a northeastward-trending fault zone here. Mining from 1913 to about 1936.

References

Brooks, 1914 (B 592), p. 68 -- Placer gold discovered, 1913.

Eakin, 1914 (B 592), p. 368-369 -- Placer gold discovered a mile above mouth, 1913; some mining, but hampered by drought.

Brooks, 1915 (B 622), p. 58 -- Mining, 1914.

Smith, 1917 (BMB 142), p. 25 -- Mining, 1915.

Smith, 1917 (BMB 153), p. 53 -- Mining, 1916.

Smith, 1930 (B 810), p. 29 -- Mining, 1927.

Mertie, 1936 (B 864-C), p. 163 -- Pay streak is an old channel which bears no close relationship to present course of creek. Bedrock near mouth of creek is schist, about 2 ft of which must be taken up to get good recovery; covered by 43 ft of muck and 2-5 ft of subangular gravel. A little farther upstream muck is 54 ft thick. Gravels contain vein quartz, porous quartz breccia, and schist. Gold generally in small particles and rather angular; largest nugget valued at $25 [gold at $20.67]. Pay streak reported to run about 75¢ per ft^2 of bedrock.

Smith, 1939 (B 910-A), p. 52 -- Has been mining; probably was none in 1937; reference not clear.

Smith, 1939 (B 917-A), p. 51 -- Was one of principal producing creeks of area.

Cobb, 1977 (OF 77-168B), p. 43, loc. 22 -- Reference to Mertie, 1936 (B 864-C).

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 15 -- Mining, particularly in lower part of creek, from 1913 to about 1936. Gold generally in small particles and angular. Placer deposits probably close to lode source. Gold not present east of here; this fact, plus breccia in gravel, suggests a northeastward-trending fault zone here.

(Easy Money Cr.) Gold(?)

Ruby district Ruby (5.25, 7.4) approx.
64°25'N, 155°18'W approx.

Summary: Was prospecting before 1933; no data on results, but probably not good as there is no later reference to this creek. Location on creek not given; coordinates above are for head of creek immediately upstream of swamp symbols on Ruby (B-5) quadrangle, scale 1:63,360. See also (Tip Cr.).

References

Mertie and Harrington, 1924 (B 754), p. 100 -- Easy Money and Tip Creeks were prospected in 1912. At their junction, it was 80 ft to bedrock.
Mertie, 1936 (B 864-C), p. 158 -- Has been prospecting [before 1933].

(Eldorado Cr., trib. Flint Cr.) Gold(?)

Ruby district Ruby (4.75, 7.0) approx.
64°24'N, 155°23'W approx.

Summary: Was prospecting before 1933. No data on results, which must not have been good as there is no more recent mention of this creek. Coordinates above accurate only within 1-1/4 mi.

Reference

Mertie, 1936 (B 864-C), p. 158 -- Has been prospecting [before 1933]; no extensive mining on this or other tributaries of Flint Cr. above Glen Gulch.

(Eldorado Cr., trib. Poorman Cr.) Gold(?)

Ruby district
OF 77-168D, loc. 16

Ruby (2.4, 1.7) approx.
64°06'N, 155°41'W approx.

Summary: Good gold prospects reported, 1930-31. No later mention of any development

References

Smith, 1933 (B 836), p. 38 -- Good gold prospects reported, winter of 1930-31.

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 16 -- Good prospects reported, 1930-31. No later mention of any development.

(Elk Cr.) Gold

Ruby district Ruby
W 1/4 quad.(?)

Summary: Mining reported, 1916. No other data; creek probably also known by some other name.

Reference

Brooks, 1918 (B 662), p. 58 -- Mining reported, 1916.

(Fifth of July Cr.) Gold, Tin

Ruby district Ruby (3.4, 6.65)
MF-405, loc. 14 64°23'N, 155°33'W

Summary: Some cassiterite in placers; gold very fine and had to be amalgamated to separate it from cassiterite. Incomplete recovery from 6,000 ft^2 of bedrock cleaned included in a washtub full of cassiterite and iron-bearing concentrate. Ground at mouth reported to be 70-80 ft deep; at least 30 ft deep 0.3 mi above mouth. Gravel mainly subangular to subround fragments of greenstone, schist, and quartz; commonly less than 6-7 in in diameter. Creek cuts bench of Long Cr.; some of ground mined may have been part of deposits of this bench. Mining for a few years around 1922.

References

Chapman and others, 1963 (OF 239), p. 49 -- Some cassiterite in placers. Data on amount are not reliable. Gold was very fine and had to be amalgamated to separate it from the cassiterite. Ground at mouth reported to be 70-80 ft deep; at least 30 ft deep about 0.3 mi above mouth. Dumps indicate that gravel is mainly subangular to subround fragments of greenstone, schist, and quartz; largest 6-7 in in diameter. Was mining in 1922.

Cobb, 1977 (OF 77-168B), p. 42, loc. 10 -- Reference to Chapman and others, 1963 (OF 239).

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 17 -- Worked for at least a few years around 1922. Cassiterite common, at least in lower part of valley. Limonite and "black sand" common. A washtub full of cassiterite and iron-bearing concentrate reported to represent incomplete recovery from 6,000 ft^2 of bedrock. Possibly some of ground is a bench of Long Cr. that is cut by this creek.

(Flat Cr., trib. Long Cr.) Gold, Tin

Ruby district
MF-405, loc. 21

Ruby (3.4, 5.85) approx.
64°20'N, 155°34'W approx.

Summary: Mining reported in 8 years before 1942; another reference states that there was very little mining before 1942 and none between 1942 and 1960. Some of references reporting mining may reflect confusion between this Flat Cr. and another Flat Cr. tributary to Timber Cr. near Poorman. This Flat Cr. has schist bedrock in upper course and cuts benches of Long Cr. near mouth. Small amounts of gold and cassiterite reported in prospect holes sunk in 1938; none of either found in 1942 in samples from dumps. Reported mining may have been in nearby bench gravels of Long Cr.

References

Smith, 1932 (B 824), p. 32 -- Mining, 1929.
Smith, 1933 (B 836), p. 38 -- Mining, 1930.
Smith, 1933 (B 844-A), p. 38 -- Mining, 1931.
Smith, 1934 (B 857-A), p. 34 -- Mining, 1932.
Smith, 1939 (B 910-A), p. 51-52 -- Mining, 1937.
Smith, 1939 (B 917-A), p. 50-51 -- Mining, 1938.
Smith, 1941 (B 926-A), p. 49 -- Mining, 1939.
Smith, 1942 (B 933-A), p. 46 -- Mining, 1940.
Chapman and others, 1963 (OF 239), p. 48 -- Very little mining was done before 1942 and none between 1942 and 1960. Small amounts of gold and traces of cassiterite were reported from prospect holes dug in 1938; none could be found in samples of the dumps taken in 1942.
Cobb, 1977 (OF 77-168B), p. 43, loc. 13 -- Reference to Chapman and others, 1963 (OF 239).
Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 18 -- Mining reported between 1931 and 1940, but another report indicated very little mining in this period. Possibly the mining was on benches of Long Cr. that were cut by Flat Cr. Gold and trace of cassiterite present. Schist bedrock in upper part of course. Probably confusion with the Flat Cr. near Poorman.

(Flat Cr., trib. Timber Cr.) Gold, Silver, Tin

Ruby district Ruby (3.2-3.4, 0.95-1.25)
MF-405, loc. 34 64°03'-64°04'N, 155°33'-155°35'W

Summary: Bedrock phyllite. Gold on or in upper 6 in of bedrock or on clay false bedrock a short distance above true bedrock. 2-30 ft of chert, vein quartz, and phyllite gravel (some of which probably is an old channel of Timber Cr.) beneath 40-50 ft of muck. Gold rough, mostly with quartz attached, and seldom in nuggets of more than 0.5 oz; accompanied by pyrite, rounded grains of cassiterite, magnetite, a little arsenopyrite, and (near mouth) barite. Ground ran 50¢ to $4 per ft^2 of bedrock (gold at $20.67). Gold in narrow, irregular patches and streaks over a width of as much as 1,000 ft. Three assays of gold averaged 786 parts Au and 207 parts Ag. Mining from 1913 through 1936 at least. In some references this creek apparently is confused with another Flat Cr., which is tributary to Long Cr.

References

Brooks, 1915 (B 622), p. 58 -- Two mines operated in winter of 1913-14 and one in summer of 1914. Bedrock about 60 ft deep.

Mertie and Harrington, 1916 (B 642), p. 248 -- Staked in winter of 1913-14; considerable work in 1914 and 1915. Uppermost workings less than 1/4 mi from head of creek; others extend downstream for about 1-1/2 mi. At upper end depth to bedrock is 50 ft with 2 ft of gravel; increases downstream to 65 ft with more than 20 ft of gravel, the lowest 15 ft of which is rusty and oxidized and probably represents an old channel of Timber Cr. Gold mainly on or in top of bedrock; some on clay false bedrock near base of gravels. Gold fine and rough with quartz attached to even smallest pieces. Pyrite, rounded grains of cassiterite, magnetite, and a little arsenopyrite accompany gold. Ground runs 50¢ to $4 per ft^2 [gold at $20.67] of bedrock. Gold assays about $15.75 per oz.

p. 260 — Cassiterite is wood tin; no crystal forms.
p. 265 -- Mining, 1915.

Smith, 1917 (BMB 142), p. 25 -- Mining, 1915.

Smith, 1917 (BMB 153), p. 53 -- Mining, 1916.

Brooks, 1918 (B 662), p. 57 -- Mining, 1916.

Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.

Brooks and Martin, 1921 (B 714), p. 91 -- New gold-bearing channel discovered and developed, 1919.

Brooks, 1923 (B 739), p. 38 -- Mining, 1921.

Brooks and Capps, 1924 (B 755), p. 43 -- Mining, 1922.

Mertie and Harrington, 1924 (B 754), p. 99-100, 118 -- Same as Mertie and Harrington, 1916 (B 642), p. 248, 260.

Smith, 1929 (B 797), p. 22-23 -- Mining, 1926.

Smith, 1930 (B 810), p. 29 -- Mining, 1927.

Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.

Mertie, 1936 (B 864-C), p. 166-167 -- Many of data same as in Mertie and Harrington, 1916 (B 642). Where being mined in 1933 gold-bearing deposits are distributed over a width of 1,000 ft; gold in narrow,

(Flat Cr., trib. Timber Cr.) -- Continued

irregular patches and streaks with much barren intervening ground. Gold is rough and in upper 6 in of phyllite bedrock or on bedrock surface; overburden is 18 ft of subangular chert, vein quartz, and phyllite gravel (average about 3 in in diameter) overlain by 37 ft of muck. Larger grains of gold commonly intergrown with vein quartz. Cassiterite in concentrates. Average fineness of 3 assays of gold mined in 1933 was 786 parts Au and 207 parts Ag. Largest nugget reported was a little more than half an ounce.

Smith, 1936 (B 868-A), p. 40 -- Mining, 1934.

Smith, 1938 (B 897-A), p. 53 -- Mining, 1936.

Joesting, 1942 (TDM 1), p. 35 -- Common placer cassiterite.

Chapman and others, 1963 (OF 239), p. 48 -- Flat Cr. in Chapin, 1919 (B 692), is this creek, not the Flat Cr. tributary to Long Cr. Cassiterite present.

Cobb, 1977 (OF 77-168B), p. 44, loc. 26 -- Reference to Mertie, 1936 (B 864-C).

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 19 -- Productive gold mining from 1913 at least through 1936. Seems to be on east edge of a mineral belt. A source for gold and cassiterite must be close. Gold nuggets characteristically rough with attached quartz and weighing 0.5 oz or less. Ground ran \$2.50-\$25.00 [gold at \$104.70] per ft^2 of bedrock. Barite found near mouth. Bedrock phyllite; chert and quartz in gravel.

(Flint Cr.) Gold, RE, Thorium, Tin, Uranium

Ruby district Ruby (4.45-4.9, 5.8-6.15)
MF-405, locs 17, 20 64°20'-64°24'N, 155°21'-155°24'W

Summary: Small, low-grade placer gold deposits prospected; in 1911, 40 ft^2 of bedrock prospected by a crosscut at a depth of 60 ft returned \$1 per ft^2 of bedrock (gold at \$20.67). Other prospecting was less successful and no real mining was ever reported. Creek drains contact zone of a granite body. Some cassiterite in headwater tributaries, but not in significant amounts. Heavy-mineral portions of samples of granite contained a thorium-uranium mineral tentatively identified as uranothorite, sphene, allanite, ilmenite, magnetite, and zircon. No bismuth mineral was identified; Bi was reported in a spectrographic analysis of uranothorite(?), but not elsewhere.

References

Maddren, 1912 (B 520), p. 291 -- Discovery of placer gold reported, 1911.
p. 195 -- Only good prospects are on bench between Gold Run and Eldorado Creeks, where a crosscut 100 ft long at a depth of 60 ft gave returns of \$1 per ft^2 of bedrock cleaned over 40 ft^2 [gold at \$20.67].

Mertie and Harrington, 1916 (B 642), p. 245 -- Prospecting with churn drill near mouth of Root Gulch did not result in mining.

Mertie and Harrington, 1924 (B 754), p. 97 -- Same as Mertie and Harrington, 1916 (B 642).

Mertie, 1936 (B 864-C), p. 148-149 -- Cassiterite has been found in headwater tributaries which head against Long Cr.
p. 157-158 -- Shafts sunk along NW side of upper Flint Cr. reported to have gone through 40 ft of frozen ground to porous quartzite bedrock. Considerable variety of rock types in gravel, but very few granite cobbles, though creek heads in a body of granite. Granite cobbles very decayed. No data on presence or absence of gold.

White and Stevens, 1953 (C 279), p. 4, 7-9 -- Granite on upper Flint Cr. gave average eU of 0.005% for 12 samples; average of heavy-mineral fractions was 0.037% eU, probably due mainly to a thorium-uranium mineral tentatively identified as uranothorite. Heavy fractions also contained sphene, allanite, ilmenite, magnetite, and zircon. Bismuth in spectrographic analysis.

Chapman and others, 1963 (OF 239), p. 40 -- Creek drains contact zone of a granite body, but does not appear to have significant amounts of cassiterite.
p. 49-50 -- Probably was no true mining on creek. Prospect dumps 3 mi above Glen Gulch; 9 pans [pan = 1/6 ft^3] showed 3 small colors of gold and no identifiable cassiterite. Gravel is mainly granite; some quartz.

Cobb, 1973 (B 1374), p. 170 -- Allanite present.

Cobb, 1977 (OF 77-168B), p. 42-43, locs. 6, 12 -- References to Chapman and others, 1963 (OF 239); Mertie, 1936 (B 864-C); White and Stevens, 1953 (C 279).

(Flint Cr.) -- Continued

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 20 -- Gold prospects discovered in 1911 proved to be of low grade and small extent. No mining in following years. Granite in headwaters contains very minor amounts of uranothorite(?), cassiterite, rare-earth minerals, and bismuth.

(Fourth of July Cr., trib. Long Cr.) Gold

Ruby district
OF 77-168D, loc. 21

Ruby (3.75, 6.95)
64°24'N, 155°30'W

Summary: Tiny creek from which cassiterite was not reported. Gold mining near mouth was probably in bench gravels on east side of Long Cr.

References

Chapman and others, 1963 (OF 239), p. 50-51 -- Tiny creek not sampled during Geological Survey investigation in 1942. Cassiterite not reported by local miners.

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 21 -- Mining around mouth of this small creek probably in bench gravels on the east side of Long Cr. No cassiterite with gold.

(Fourth of July Cr., trib. Sulatna R.) Gold

Ruby district
MF-405, loc. 27

Ruby (4.05, 3.0) approx.
64°10'N, 155°28'W approx.

Summary: Small-scale mining in 1916; none reported in later years.

References

Mertie and Harrington, 1916 (B 642), p. 244 -- Creek held in 1915, but little or no work done to ascertain value of ground.

Brooks, 1918 (B 662), p. 57 -- Mining in a small way started in 1916.

Mertie and Harrington, 1924 (B 754), p. 95 -- Same as Mertie and Harrington, 1916 (B 642).

Cobb, 1977 (OF 77-168B), p. 43, loc. 19 -- Reference to Brooks, 1918 (B 662).

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 22 -- First prospected in 1915. Small amount of mining, 1916; exact location on creek not given. No mention of mining in later years.

(Glacier Cr.) Bismuth, Gold, Tin

Ruby district Ruby (4.1-4.3, 12.0-12.45)
MF-405, loc. 3 64°41'-64°43'N, 155°25'-155°27'W

Summary: Near head of creek ground about 70 ft deep; dump piles mainly crystalline limestone or dolomite; some gold and cassiterite were recovered; bismuth made up 29% of one sample of sluice-box concentrate. 1.5-2 mi downstream paystreak in bench at depth of 30-45 ft contains cassiterite. 1-1/2 - 1 mi above mouth 150 lb of cassiterite concentrate recovered from workings that ran 25¢-30¢ per ft^2 of bedrock (gold at $35). No data on total production from creek.

References

Mertie, 1946 (B 864-C), p. 145 -- Some gold has been found, but no rich placer has been located.

White and Stevens, 1953 (C 279), p. 3 -- Sluice-box concentrate contained 29% bismuth.

Chapman and others, 1963 (OF 239), p. 37 -- Data on claim ownership in 1942.
p. 46-47 -- Near head muck and gravel are said to about 70 ft thick; dump piles mostly gray-to-brown crystalline limestone or dolomite; some cassiterite and gold were recovered. 1.5 to 2 mi downstream a paystreak estimated to be about 10 ft wide and 2 ft thick is in a bench on east side of creek; ground 30-45 ft deep. Gravels contain cassiterite. One miner reported the recovery of about 150 lb cassiterite concentrate from workings 1.5 mi above mouth of creek. Estimated gold yield from some of workings was 25¢-30¢ per ft^2 of bedrock [gold at $35].

Cobb, 1973 (B 1374), p. 170 -- Native bismuth in concentrates.

Cobb, 1977 (OF 77-168B), p. 42, loc. 2 -- References to Chapman and others, 1963 (OF 239); White and Stevens, 1953 (C 279).

Eberlein and others, 1977 (OF 77-168D), p. 85, loc. 23 -- Amount of gold and cassiterite in placers uncertain; probably not rich. Gold showed $1.25-$1.50 per ft^2 [gold at $104.70] at one place where 150 lb of cassiterite concentrate was recovered. Bismuth found in mining at head of creek. Bedrock slaty schist with abundant crystalline limestone/dolomite at head. Lode source of gold and cassiterite probably same as that for placers of Big Cr. and Cox Gulch.

(Glen(n) Gulch) Gold

Ruby district Ruby (4.4-5.0, 7.25-7.3)
MF-405, loc. 16 64°25'N, 155°21'-155°25'W

Summary: Gravel gold bearing for entire 2.5-mi length of creek; pay spotty; some rich places. Near head mining was by open cuts. Farther downstream ground was 25-30 ft deep and frozen; drift mining. Gold somewhat rough; some coarse; nuggets worth as much as $150 (about 7.26 fine oz) reported. Creek probably mined out about 1915. Lode source probably on nearby ridge. Country rock slate and schist near contact with granite body.

References

Maddren, 1912 (B 520), p. 291 -- Discovery of gold reported, 1911.
p. 295 -- Prospects at mouth showed 6¢ per pan in 3 ft of gravel; no pay streak on bedrock. Half a mile above mouth gravel 4 ft deep and 12-14 ft wide yielded $3.50-$4.00 [gold at $20.67] per ft^2 of bedrock; extent of pay streak not determined.
Eakin, 1913 (B 542), p. 288, 290-292 -- Preliminary to Eakin, 1914 (B 578).
Eakin, 1914 (B 578), p. 40 -- Gravels rich enough to support mining.
p. 42 -- Gravels auriferous for entire length (2.5 mi); 10-15 ft deep and unfrozen near head; deepen to 25 ft and are frozen farther downstream. Prospecting shafts sunk about 50 ft to bedrock on bench near mouth, apparently without satisfactory results.
p. 44-45 -- 6 claims worked in 1912.
Eakin, 1914 (B 592), p. 366 -- A little summer work, 1913; hampered by drought.
Brooks, 1915 (B 622), p. 57-58 -- Considerable deep mining reported, 1914.
Mertie and Harrington, 1916 (B 642), p. 246 -- Winter mining, 1915, about a mile and a half above mouth; 25-30 ft to bedrock; 1-7 ft of gravel. Farther upstream ground is shallower; was some open-cut mining. Considerable good ground about a mile from mouth of creek has been mined out. Prospecting at mouth in deeper gravels has proved fruitless; ground frozen. Gold in bottom foot of gravel or in shattered bedrock; gold somewhat rough and some is coarse; nuggets worth as much as $150 [gold at $20.67] reported.
Mertie and Harrington, 1924 (B 754), p. 97 -- Data from Mertie and Harrington, 1916 (B 642), p. 246 repeated. No extensive operations since 1915.
Mertie, 1936 (B 864-C), p. 158 -- Data also in Mertie and Harrington, 1916 (B 642). No mining in 1933.
Chapman and others, 1963 (OF 239), p. 49 -- Has been considerable gold mining and prospecting.
Cobb, 1977 (OF 77-168B), p. 42, loc. 5 -- Reference to Mertie, 1936 (B 864-C).
Eberlein and others, 1977 (OF 77-168D), p. 86, loc. 24 -- Creek 2.5 mi long; pay spotty, but rich in places. Probably mined out soon after 1915; inactive 1933 and later. Gold rough; some fairly coarse. Lode source probably on nearby ridge. Slate and schist bedrock near margin of granite body.

(Gold Run, trib. Deer Cr.) Gold(?)

Ruby district Ruby (2.5, 3.9) approx.
OF 77-168D, loc. 26 64°13'N, 155°40'W approx.

Summary: Good gold prospects said to have been found in or before 1915. No later reports of prospecting or mining on this creek.

References

Mertie and Harrington, 1916 (B 642), p. 144 -- Good prospects said to have been found; no mining reported.

Mertie and Harrington, 1924 (B 754), p. 95 -- Same as above.

Eberlein and others, 1977 (OF 77-168D), p. 86, loc. 26 -- In 1915 good gold prospects reported, but no mining; no more recent records of mining known. Exact location of prospects not known.

(Gold Run, trib. Flint Cr.) Gold(?)

Ruby district Ruby (4.8, 7.2) approx.
64°24'N, 155°22'W approx.

Summary: Was prospecting before 1933. No data on results, which must not have been good as there is no more recent mention of this creek. Coordinates above accurate only within about 1/2 mi.

References

Mertie, 1936 (B 864-C), p. 158 -- Was prospecting [before 1933]; no extensive mining on this or other tributaries of Flint Cr. above Glen Gulch.

Eberlein and others, 1977 (OF 77-168D), p. 86, loc. 25 -- Prospected but probably no mining. Geologic setting similar to Glen Gulch.

(Granite Cr.) Gold, Platinum

Ruby district Ruby (4.3, 6.15)
MF-405, loc. 19 64°21'N, 155°26'W

Summary: Creek on which there has been prospecting for placer gold. Platinum, probably in small amounts, also in concentrates. Some gold and platinum were mined in 1924 and possibly other years.

References

Smith, 1926 (B 783), p. 25 -- Platinum occurs with gold in placer; some recovered in 1924.
Moffit, 1927 (B 792), p. 33 -- Platinum was recovered in 1924; total amount of placer platinum from Alaska in 1925 was less than the year before.
Smith, 1929 (B 797), p. 40 -- Platinum known to be present.
Smith, 1930 (B 810), p. 53 -- Platinum present.
Smith, 1930 (B 813), p. 60 -- Platinum present.
Smith, 1932 (B 824), p. 67 -- Platinum present.
Smith, 1933 (B 836), p. 59 -- Platinum present.
Smith, 1933 (B 844-A), p. 67 -- Platinum present.
Smith, 1934 (B 857-A), p. 63 -- Platinum present.
Smith, 1934 (B 864-A), p. 68-69 -- Platinum present.
Mertie, 1936 (B 864-C), p. 158 -- Has been prospecting [no mention of either gold or platinum].
Smith, 1936 (B 868-A), p. 71 -- Platinum present.
Smith, 1937 (B 880-A), p. 74-75 -- Platinum present..
Smith, 1938 (B 897-A), p. 84 -- Platinum present.
Smith, 1939 (B 910-A), p. 90 -- Platinum present.
Smith, 1939 (B 917-A), p. 84 -- Platinum present.
Smith, 1941 (B 926-A), p. 78 -- Platinum present.
Joesting, 1942 (TDM 1), p. 20 -- Platinum occurs with gold in placer.
Smith, 1942 (B 933-A), p. 75 -- Platinum present.
Cobb, 1973 (B 1374), p. 170 -- Byproduct platinum (probably only a few ounces) produced from placers.
Cobb, 1977 (OF 77-168B), p. 43, loc. 11 -- Reference to Moffit, 1927 (B 792).
Eberlein and others, 1977 (OF 77-168D), p. 86, loc. 27 -- General reports of gold prospecting; no data on amount of mining. Platinum reported in 1924; probably a rare constituent of the concentrates.

(Greenstone Cr.) Gold, Silver, Tin

Ruby district Ruby (3.4-3.85, 5.15-5.4)
MF-405, loc. 23 64°18'N, 155°30'-155°33'W

Summary: Bedrock weathered greenstone; headwaters drain area underlain by granite. Gravel generally 25 or less ft thick; mainly angular greenstone; some quartz and clayey layers. Gold generally fine (some rounded; most rough and angular), spottily distributed, and on bedrock; pay streak 60-100 ft wide; dredged for 2 mi below mouth of Greenstone Gulch (800 ft of which was also dredged) in 1916-17; dredge production was about $500,000 (about 24,200 fine oz if all had been gold; bullion from Greenstone Gulch ran 865.75 parts Au and 129 parts Ag). Mining other than by dredging at least as recently as 1960's. Cassiterite present; about a mile below head of creek 100 lb per year of cassiterite concentrate was recovered, 1940-42; probably not marketed. Includes references to Greenstone. See also (Greenstone Gulch). *Some mining as recently as 1975. Creek must be nearly worked out.*

References

Eakin, 1914 (B 592), p. 367 -- Shallow, low-grade placer ground located 2 mi from head of stream in winter of 1912-13. Ground 3-12 ft deep and easily worked by open-cut methods. Profitable mining in spite of water shortage, 1913.

Brooks, 1915 (B 622), p. 57 -- Mining, 1914. Considerable ground stripped with a view toward large-scale mining.

Brooks, 1916 (B 642), p. 65 -- Dredge installed, 1915; to operate in 1916.

Mertie and Harrington, 1916 (B 642), p. 243 -- Extensive deposits of auriferous gravels; tenor said to be low. Placer ground said to be more than 100 ft wide and to extend more than 2 mi along valley bottom. Has been considerable testing of placer ground; dredge to be installed. Cassiterite present.

p. 260 -- Cassiterite in concentrates.

Smith, 1917 (BMB 142), p. 25 -- Extensive prospecting, 1915; dredge to be installed in 1916.

Smith, 1917 (BMB 153), p. 53 -- Dredge operated, 1916.

Brooks, 1918 (B 662), p. 57 -- Dredge began operating in July, 1916.

Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.

Martin, 1919 (B 692), p. 38 -- Mining, 1917; dredging ground mined out; dredge to be moved.

Martin, 1920 (B 712), p. 48-49 -- Dredge did not operate in 1918; ground mined out in 1917.

Brooks and Martin, 1921 (B 714), p. 91 -- Mining, 1919.

Mertie and Harrington, 1924 (B 754), p. 94, 117-118 -- About the same as Mertie and Harrington, 1916 (B 642). Dredge operated successfully. Chapin, 1919 (B 692) quoted.

Smith, 1929 (B 797), p. 22-23 -- Mining, 1926.

Smith, 1930 (B 810), p. 29 -- Mining, 1927.

Smith, 1930 (B 813), p. 34 -- Mining, 1928.

Smith, 1932 (B 824), p. 37 -- Mining, 1929.

Smith, 1933 (B 836), p. 38 -- Mining, 1930.

(Greenstone Cr.) -- Continued

Smith, 1933 (B 844-A), p. 38 -- Mining, 1931.
Smith, 1934 (B 857-A), p. 34 -- Mining, 1932.
Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.
Mertie, 1936 (B 864-C), p. 146 -- Considerable placer gold has been produced.

p. 152-153 -- Lower 800 ft of Greenstone Gulch and about 2 mi of Greenstone Cr. below gulch were dredged in 1916-17. Pay streak followed creek and was 60-100 ft wide; at lower end of dredged ground overburden was 25 ft thick and practically all gravel; thinned upstream. Ground dredged ran 30¢-40¢ per ft^2 of bedrock [gold at $20.67]; dredge production was about $500,000 [about 24,200 fine oz).

Smith, 1936 (B 868-A), p. 40 -- Mining, 1934.
Smith, 1938 (B 897-A), p. 52 -- Mining, 1936.
Smith, 1939 (B 910-A), p. 51-52 -- Mining, 1937.
Smith, 1939 (B 917-A), p. 50-51 -- Mining, 1938.
Smith, 1941 (B 926-A), p. 49 -- Has been a producing creek; probably no mining in 1939; reference not clear.
Joesting, 1942 (TDM 1), p. 34 -- Common placer cassiterite.
Smith, 1942 (B 933-A), p. 46 -- Has been placer mining.
White and Stevens, 1953 (C 259), p. 4 -- 3 concentrate samples showed significant eU (0.001%-0.017%); higher than most samples from area.
Cass, 1959 (I-289) -- Mining, 1955 and/or 1956.
Chapman and others, 1963 (OF 239), p. 37 -- Gold mining in 1942 and at various times between 1946 and 1960.

p. 40 -- Headwaters drain area of granite, but carry only a little cassiterite.

p. 47-48 -- About a mile below head of creek mine operator recovered (recovery nearly complete) about 100 lb of cassiterite per season for 3 years; gold fairly rough and associated with only a small amount of black sand (chiefly magnetite and ilmenite); distribution of gold spotty. About 0.75 mi downstream (in area that had been incompletely dredged) placer ground was being worked in 1956; appreciable amount of angular cassiterite present; gold rough and angular. One source of cassiterite probably between the two mining areas.

Cobb, 1973 (B 1374), p. 170 -- Dredged with Greenstone Gulch, 1916-17. Mining in 1960's.
Cobb, 1977 (OF 77-168B), p. 43, loc. 15 -- Reference to Chapman and others, 1963 (OF 239).
Eberlein and others, 1977 (OF 77-168D), p. 86, loc. 28 -- Data combined with those for Greenstone Gulch. Dredging, 1916-17, produced an estimated 24,200 oz of gold (and silver?). Cassiterite occurs in minor, but poorly documented, amounts; probably none was marketed; about 100 lb per season reported to have been recovered in 1940-42. Gold rough and angular (some rounded), generally fine grained, concentrated on bedrock and spottily distributed. Fineness 866 with silver 129. Overburden mostly gravel; 5-8 ft in upper part; 25+ ft in downstream part. Bedrock weathered greenstone; gravel mostly angular greenstone; some quartz and clayey layers.

(Greenstone Gulch) — Gold, Silver

Ruby district — Ruby (3.65-3.75, 5.4-5.55)
MF-405, loc. 23 — 64°18'-64°19'N, 155°30'-155°31'W

Summary: Headwater tributary of Greenstone Cr. Bedrock greenstone; creek gravel poorly sorted angular and subangular gabbroic greenstone with a little vein quartz; 5-8 ft thick; Most of gold on bedrock; assay showed 865.75 parts Au and 129 parts Ag. Lower 800 ft dredged; other mining farther upstream. In most references is apparently considered part of Greenstone Cr. and not discussed separately. See also (Greenstone Cr.).

References

Mertie, 1936 (B 864-C), p. 152-153 -- Lower 800 ft of gulch and about 2 mi of Greenstone Cr. below gulch were dredged in 1916-17. Dredged ground was a creek pay streak. 3 transverse pay streaks along NW valley wall upstream from dredged area have been worked. 1,200 ft upstream from dredged ground a paystreak in the gulch may be a continuation of the one dredged. Bedrock is greenstone; most of the gold is on it. Gravel is poorly sorted angular and subangular gabbroic greenstone with a little vein quartz. Gravel 5-8 ft thick at upper end of dredged area and 6 ft thick at site of work in 1933 (1,200 ft farther upstream). Gold fine grained; some angular and some worn. Assay showed 864.75 parts Au and 129 parts Ag.

Cobb, 1973 (B 1374), p. 170 -- Dredged with Greenstone Cr., 1916-17.

Cobb, 1977 (OF 77-168B), p. 43, loc. 15 -- Reference to Mertie, 1936 (B 864-C).

Eberlein and others, 1977 (OF 77-168D), p. 86, loc. 28 -- Data combined with those for Greenstone Cr.

(Little Pup) (Gulch) — Gold

Ruby district — Ruby (3.6, 1.6)
MF-405, loc. 30 — 64°05'N, 155°32'W

Summary: Pay streak on phyllite bedrock (schist at mouth of gulch); about 60 ft deep. Very little gravel, overburden minly muck. Gold (rough with quartz attached) irregularly distributed over a length of 3,000 ft and width of 5 to 18 ft. Worked for a length of about 450 ft; ground ran as much as $2.25 per ft^2 of bedrock (gold at $20.67); total production was about 230 fine oz. Last mention of activity was report of prospecting in 1933.

References

Brooks, 1915 (B 622), p. 58 -- Deep mine operated, 1914. Bedrock is about 60 ft deep; most of overlying material is muck. Pay streak 5-18 ft wide and reported to carry good values.

Mertie and Harrington, 1916 (B 642), p. 247 -- Mining, 1915.

Mertie and Harrington, 1924 (B 754), p. 98 -- Mining, 1915.

Mertie, 1936 (B 864-C), p. 163 -- Pay streak about 3,000 ft long and 5-14 ft wide. Stretch about 450 ft long was worked out before 1933; ground ran as much as $2.25 per ft^2 of bedrock [gold at $20.67]; production reported to have been $4,800 [about 230 fine oz]. About 600 ft downstream ground ran 65¢ per ft^2, but was not mined; about 300 ft upstream of worked area shaft sunk 62 ft did not find pay gravel. In general there is very little gravel; overburden above closely folded phyllite bedrock mainly muck. Prospecting in 1933.

Cobb, 1977 (OF 77-168B), p. 43, loc. 22 -- Reference to Mertie, 1936 (B 864-C).

Eberlein and others, 1977 (OF 77-168D), p. 86, loc. 29 -- Data mainly from Mertie, 1936 (B 864-C). Bedrock at mouth of gulch is schist. Most of gold was rough with quartz attached.

(Long Cr.) Gold, Silver, Tin

Ruby district Ruby (3.3-3.8, 6.4-7.25)
MF-405, loc. 13 64°22'-64°25'N, 155°30'-155°34'W

Summary: Gold discovered, 1910; almost continuous mining (including reworking old tailings) through 1977. Gold generally spongy and not well rounded; about 857 fine with silver 135; both fine- and coarse-grained (largest nugget reported was about 131 fine oz; others were 35 or more oz); on and in crevices in bedrock; some on clay false bedrock above barren gravel. Accompanied by a little cassiterite. Bedrock mainly cherty siliceous rock with talcose layers; some greenstone. Granite in divide between Long and Flint Creeks. Pay streak east of present course of creek; at least 6.5 mi long and as much as 100 ft wide; values spotty; ground from less than 0.04 to as much as 0.72 oz per ft^2 of bedrock; 20-80 ft deep. Partial production 1910-33 was about 38,500 fine oz of gold; total production through 1977 may have been at least twice as much. Creek probably nearly worked out; some peripheral placers may remain. See also (Bear Gulch). *Early work all drift mining; later work in part open-cut mining and in part reworking old tailings. All work since 1940 open-cut mining; not well documented.*

References

Maddren, 1912 (B 520), p. 291 -- Gold discovered on Long Cr. and some of its tributaries.

p. 296 -- Gold discovered about 1906. Gold in bench claims at depths of as much as 76 ft; on one claim runs $2 [gold at $20.67] per ft^2, but extent of deposit not known; on 2 other claims returns of 15¢ and 30¢ per pan reported; $1.90 nugget found.

Eakin, 1913 (B 542), p. 283, 288-289, 291 -- Preliminary to Eakin, 1914 (B 578).

Eakin, 1914 (B 578), p. 40-41 -- Valleys of Long Cr. and its tributaries contain remnants of old valley fill at levels considerably above present floodplains. Bedrock floors of valleys practically level in cross-section and slope downstream more steeply than present valley floors. On upper Long Cr. placers are 100-500 ft from creek and 30-40 ft below surface; gold coarse and close to bedrock beneath 4-6 ft of gravel overlain by clay which contains fragments of vein quartz. Pay streak below Bear Gulch more or less continuous for at least 5 mi; depth to bedrock increases from about 50 ft to 70 ft; width of pay streak increases downstream from 50 ft to more than 100 ft; gold largely on bedrock, but at downstream part of pay streak 5-6 ft of gravel is mined; material mined runs $10-$15 per yd^3 [gold at $20.67].

p. 43-44 -- Gold first found near mouth of Bear Pup in July, 1910. Mining and prospecting, 1912.

Eakin, 1914 (B 592), p. 364-365 -- Mining, 1913. Depth to bedrock near mouth of Bear Pup is 40-50 ft; 5 mi downstream depth is 85 ft. Some of deeper ground not frozen, so water is a problem in mining. Seems to be a continuous pay streak below Bear Pup; above Bear Pup gold-bearing gravels are in irregular bodies.

Brooks, 1915 (B 622), p. 57 -- Principal mining in area in 1914 was on Long Cr.

(Long Cr.) -- Continued

Brooks, 1916 (B 642), p. 65 -- Mining on Long Cr. and tributaries, 1915.
Mertie and Harrington, 1916 (B 642), p. 239-242 -- Above Long mining to left of stream and from 100 to 600 ft from it; ground 20-50 ft deep. Pay streak on bedrock and top few ft of bedrock or on false bedrock 2-3 ft above true bedrock. Muck contains fragments of vein quartz. Below Long paystreak is east of creek; depth of ground (20 to 75 ft) depends on distance from creek. Paystreak on bedrock or on false bedrock over barren gravel. Largest nugget from Ruby district was from the Mascot bench at mouth of Bear Gulch; valued at $1,900 [about 92 fine oz].
p. 265 -- Mining, 1915.
Smith, 1917 (BMB 142), p. 25 -- Mining, 1915.
Smith, 1917 (BMB 153), p. 53 -- Mining, 1916; output down.
Brooks, 1918 (B 662), p. 57 -- Mining, 1916.
Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.
Martin, 1919 (B 692), p. 38 -- Mining, 1917.
Brooks, 1922 (B 722), p. 54 -- Mining, 1920.
Brooks, 1923 (B 739), p. 38 -- Mining, 1921.
Mertie and Harrington, 1924 (B 754), p. 91-93 -- Same as Mertie and Harrington, 1916 (B 642), p. 239-242.
p. 118 -- Chapin, 1919 (B 692) quoted.
Smith, 1929 (B 797), p. 23 -- Options taken on a number of claims, 1926.
Smith, 1930 (B 813), p. 34 -- Mining and much dead work, 1928.
Smith, 1933 (B 836), p. 38 -- Mining, 1930.
Smith, 1933 (B 844-A), p. 38 -- Mining temporarily suspended, 1931.
Smith, 1934 (B 857-A), p. 34 -- Mining, 1932.
Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.
Mertie, 1936 (B 864-C), p. 146-151 -- Bedrock valley floor below mouth of Bear Gulch nearly flat in cross section; slopes downstream more steeply than present valley. Placer deposits generally on or in crevices in cherty or siliceous jointed bedrock, which also has talcose layers, or on clay false bedrock above barren gravel. No relationship between pay streak and present course of creek; depth on lower Long Cr. ranges from 20 to 80 ft. Valley narrower and overburden less above mouth of Bear Gulch; pay streak discontinuous over length of about 3 mi. Pay streak of lower Long Cr. continuous for at least 3-1/2 mi, but not consistent in richness. Rich stretches (at least one ran $15 per ft^2 of bedrock [gold at $20.67]) separated by lower grade stretches, some of which are nearly barren; ground that ran less than 85¢ per ft^2 of bedrock could not be mined; all mining was by drifting. Gold derived from east; brought in by tributaries and possibly by creep of weathered surficial material. Gold both fine and coarse (nugget reported to have been worth $2,700 [about 131 fine oz] recovered from Mascot claim; generally poorly rounded; does not appear to have travelled far from source. Average fineness of gold from Long Cr. and Bear Gulch from 1914 to 1931 was 857 parts Au and 135 parts Ag. Cassiterite in the form of wood tin in concentrates from Long Cr. and eastern tributaries. Production from Mascot claim was more than $750,000 [about 36,285 fine oz]; 2 other claims together yielded about half as much [no data on total production from creek].
Smith, 1936 (B 868-A), p. 40 -- Mining, 1934.

(Long Cr.) -- Continued

Mertie, 1937 (B 868-D), p. 173 -- Granitic rocks crop out in divide between Long and Flint Creeks, but the relationship between granitic rocks and placers is not a direct one; streams with placers do not necessarily head in granitic country rock. In the upper valley of Long Cr., for example, the mineralization apparently has been more diffuse; gold-quartz veins and other gold-bearing rocks may occur some distance, on the surface, from known outcrops of granitic rocks.
Smith, 1937 (B 880-A), p. 44 -- Mining, 1935.
Smith, 1938 (B 897-A), p. 52-53 -- Mining, 1937, and plans for large-scale surface mining operation.
Smith, 1939 (B 910-A), p. 51-52 -- Mining, 1937.
Smith, 1939 (B 917-A), p. 50-51 -- Mining, 1938.
Smith, 1941 (B 926-A), p. 49 -- Mining, 1939.
Joesting, 1942 (TDM 1), p. 34 -- Common placer cassiterite.
Smith, 1942 (B 933-A), p. 46 -- Mining, 1940.
Cass, 1959 (I-289) -- Mining, 1955 and/or 1956. Cassiterite in placers.
Chapman and others, 1963 (OF 239), p. 37 -- Mining in 1942.
p. 50-51 -- Amount of cassiterite small compared to that on Midnight and Birch Creeks.
Koschmann and Bergendahl, 1968 (P 610), p. 24, 30 -- Gold discovered, 1910.
Cobb, 1973 (B 1374), p. 170 -- Gold discovered in 1910. Mining in 1960's.
Cobb, 1977 (OF 77-168B), p. 42, loc. 10 -- References to Mertie, 1936 (B 864-C); Mertie, 1937 (B 868-D).
Eberlein and others, 1977 (OF 77-168D), p. 86, loc. 30 -- Gold placers discovered in 1910; some mining, including reworking old tailings, almost continuously through 1977. Amount of cassiterite with gold small compared to amounts on Midnight and Birch Creeks. Pay streak at least 6.5 mi long and as much as 100 ft wide; rich occurrences spotty. Workable ground ranged from less than $4.25 to $75.00 per ft^2 (gold at $104.70). Bedrock mainly cherty siliceous rock with talcose layers; minor greenstone. Brecciated, little-worn quartz in gravel. Gold both coarse and fine; generally spongy and not well rounded; includes nuggets (some 35 or more oz). Gold about 857 fine with silver 135. Partial production 1910-33 was roughly 38,500 fine oz; total production through 1977 may have been at least twice as much. Mineralized source area has not been found, but must be nearby and east of creek. Major part of mining area probably nearly worked out, but some peripheral gold-bearing placers may remain; entire creek probably has not been thoroughly prospected.

(Lucky Cr., trib. Crooked Cr.) Gold

Ruby district Ruby (4.65, 7.9)
MF-405, loc. 8 64°27'N, 155°23'W

Summary: Has been some placer gold mining, probably around 1933. Amount of potential placer ground in valley small.

References

Mertie, 1936 (B 864-C), p. 158 -- 2 men prospecting, summer of 1933.
Chapman and others, 1963 (OF 239), p. 43 — Evidence of there having been mining.
Cobb, 1972 (MF-405), loc. 8 -- Location correct; reference in table incorrect.
Eberlein and others, 1977 (OF 77-168D), p. 86, loc. 31 -- Small amount of placer gold mining, probably around 1933. Gold reported, amount unknown; presence of cassiterite uncertain. Potential amount of placer mining ground in this valley is small.

(Lucky Cr., trib. Flint Cr.) Gold

Ruby district Ruby (4.75, 7.6) approx.
OF 77-168D, loc. 32 64°26'N, 155°23'W approx.

Summary: Small stream heading in area drained by Glen Gulch, Bear Pup, and Crooked Cr. A little gold production resulted from small-scale mining in 1912-13. Ground 16-30 ft deep. Bedrock probably schist and/or slate.

References

Eakin, 1914 (B 592), p. 367 -- Small stream less than 3 mi long. Deposits 16-30 ft deep; adapted for shallow drift mining. Two small (2- and 4-man operations) made small production in 1912-13; both winter and summer mining.

Cobb, 1972 (MF-405), loc. 8 -- Location incorrect; reference in table correct.

Cobb, 1977 (OF 77-168B), p. 42, loc. 4 -- Reference to above.

Eberlein and others, 1977 (OF 77-168D), p. 87, loc. 32 -- A little gold production in 1912-13. Ground 16-30 ft deep over length of 2 mi or less. Bedrock probably schist and/or slate. Gold derived from area drained by Glen Gulch, Bear Pup, and Crooked Cr.

(Meketchum Cr.) Gold, Silver

Ruby district Ruby (4.2-4.35, 3.65-3.75)
MF-405, loc. 26 64°13'N, 155°26'-155°27'W

Summary: Pay streak 40 or less ft wide; extends about 3,000 ft along creek. Bedrock and gravel greenstone. Gold at downstream end of pay streak distributed through 10-20 ft of gravel beneath 60-70 ft of muck; farther upstream gravel 2-3 ft thick and gold on or near bedrock. Much of gold coarse. Assays showed 918 parts Au and 76 parts Ag. Gold discovered 1917; drift mining reported 1929-34. Includes reference to (Ketchum Cr.).

References

Martin, 1919 (B 692), p. 38 -- Good gravel discovered, 1917, but too deep for easy exploitation.
Smith, 1932 (B 824), p. 37 -- Mining, 1929.
Smith, 1933 (B 836), p. 38 -- Mining, 1930.
Smith, 1933 (B 844-A), p. 38 -- Mining, 1931.
Smith, 1934 (B 857-A), p. 34 -- Mining, 1932.
Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.
Mertie, 1936 (B 864-C), p. 155 -- Paystreak in present valley floor along south side of creek. At site of discovery pay streak is 40 ft wide; reported to have been traced 3,000 ft upstream and to narrow somewhat in that direction. Ground about 80 ft deep at site of discovery; 60-70 ft of muck over 10-20 ft of gravel in which gold is more or less evenly distributed; farther upstream gravel thins to 2-3 ft and gold is mainly on or near bedrock. Gravel is subangular greenstone, average size 4-6 in; bedrock greenstone. Considerable coarse gold. Mean of two assays shows 918 parts Au and 76 parts Ag.
Smith, 1936 (B 868-A), p. 40 -- Mining, 1934.
Cobb, 1977 (OF 77-168B), p. 43, loc. 18 -- Reference to Mertie, 1936 (B 864-C).
Eberlein and others, 1977 (OF 77-168D), p. 87, loc. 33 -- Some gold placer drift mining, 1917-34; no production figures available. Other data from Mertie, 1936 (B 864-C).

(Midnight Cr.) — Gold, Tin, Tungsten

Ruby district — Ruby (3.4-3.7, 5.5-5.75)
MF-405, loc. 22 — 64°19'-64°20'N, 155°31'-155°33'W

Summary: Mining (not continuous) from 1911 to about 1949. Thickness of muck and gravel increases from 9 ft in upper valley to 80 ft 1.7 mi above mouth; postulated to be 125 ft at mouth. Gold on bedrock or clay false bedrock. Pay streak 100-150 ft wide along south side of valley adjacent to creek. Gold generally fine, flaky, and rough with rounded edges; largest nuggest about 1.25 oz. Gold accompanied by much cassiterite and rare scheelite. Fineness of gold reported as 883 to 885.5, but one shipment assayed only 857.5 fine. No data on total gold production. In 1917, 1,037 lb cassiterite concentrate containing 537 lb Sn was recovered from 6,000 ft^2 of bedrock and marketed. In 1940-42 mining averaged about $1.10 (about 0.03 oz) gold and 0.06 lb cassiterite recovered per yd^3. Creek drains contact zone around a granite body; schist with quartz veins. Other bedrock in valley is slate, schist, siliceous cherty rock, and greenstone.

References

Maddren, 1912 (B 520), p. 291 -- Promising gold discovery reported, 1911.
p. 296 -- On Discovery claim pay gravels at depth of 25-30 ft; reported to carry as much as $4 in gold [at $20.67] per ft^2 of bedrock surface; tests of 15¢ per pan from gravels as much as 7 ft above bedrock surface.
Eakin, 1913 (B 542), p. 287-292 -- Preliminary to Eakin, 1914 (B 578).
Eakin, 1914 (B 578), p. 31 -- Cassiterite occurs with placer gold.
p. 41-42 -- Gold-bearing gravels similar to those on Long Cr. About 2 mi above mouth depth to bedrock is 18-22 ft; a mile downstream depth is about 60 ft; probably much greater toward mouth. Richest part of deposit in stratum between 6 and 8 ft above bedrock; probably reconcentration of older valley fill; stratum rests on large quartz, quartzite, and greenstone boulders with interstices filled with stiff greenish clay.
p. 44-45 -- Mining on one claim in 1912.
Eakin, 1914 (B 592), p. 366 -- One claim worked in 1913.
Brooks, 1914 (B 622), p. 57 -- Mining, 1914.
Mertie and Harrington, 1916 (B 642), p. 242-243 -- About a mile above winter trail [which is about 1.4 mi above mouth of creek] 14 ft of muck and 4 ft of gravel on false bedrock; quartz and greenstone boulders on dump. Ground 80 ft deep at winter trail; projected depth of 150 ft at mouth of creek. Gold all fine, with a few 25¢ nuggets [gold at $20.67]. Cassiterite common in concentrates.
p. 260 -- Cassiterite present.
p. 265 -- Mining, 1915.
Smith, 1917 (BMB 153), p. 53 -- Mining, 1916; cassiterite recovered and shipped.
Brooks, 1918 (B 662), p. 57-58 -- Mining, 1916; small shipment of tin; tungsten also reported.

(Midnight Cr.) -- Continued

Chapin, 1919 (B 692), p. 337 -- 14 sacks of cassiterite concentrate shipped to Singapore. 1,037 lb ore assayed 52.2% (537 lb) metallic tin. Net return of $156.22 from ore recovered from 6,000 ft^2 of bedrock for yield of about $0.025 per ft^2.

Martin, 1919 (B 692), p. 20, 38 -- Tin present at several places.

Mertie and Harrington, 1924 (B 754), p. 94, 117-118 -- Same as Mertie and Harrington, 1916 (B 642), p. 242-243, 260.

Mertie, 1936 (B 864-C), p. 146 -- Considerable placer gold has been produced.

p. 152 -- About the same data as in Mertie and Harrington, 1916 (B 642), and Chapin, 1919 (B 692).

Joesting, 1942 (TDM 1), p. 34 -- Abundant placer cassiterite.

Joesting, 1943 (TDM 2), p. 20 -- Rare placer scheelite.

Thorne and others, 1948 (RI 4174), p. 28 -- Quotation from Joesting, 1943 (TDM 2).

Chapman and others, 1963 (OF 239), p. 37 -- Mining in 1942 and at various times between 1946 and 1960.

p. 40-42 -- Creek drains a granite contact area. In middle and upper part of valley muck and gravel are relatively thin; increase to 80 ft 1.7 mi above mouth and postulated to be 125 ft at mouth. Pay streak 100-150 ft wide; along south side of valley adjacent to creek. Distribution of gold and cassiterite spotty. In 1917, 1,037 lb cassiterite concentrate (assay 52.2% Sn; 537 lb) recovered from 6,000 ft^2 of bedrock and shipped to Singapore. In 1940-42 mining averaged about $1.10 in gold per yd^3 [gold at $35]; about 7,320 lb cassiterite concentrate recovered (0.06 lb per yd^3). Gold and cassiterite fairly uniformly distributed vertically in gravel; richer over hard than over weathered (to clay) bedrock; Fineness of gold reported as being 883 to 885.5, but one shipment assayed only 857.5 fine.

Cobb, 1973 (B 1374), p. 170 -- Scheelite in concentrates.

Cobb, 1977 (OF 77-168B), p. 43, loc. 14 -- References to Chapman and others, 1963 (OF 239); Joesting, 1943 (TDM 2).

Eberlein and others, 1977 (OF 77-168D), p. 87, loc. 34 -- Midnight and Birch Creeks probably have greatest concentrations of cassiterite in district. Gold mining (at times cassiterite also saved) from 1911 to about 1949 (inactive some years); no total gold production figures available. In 1940-42 about 3,660 fine oz of gold and 7,320 lb cassiterite concentrate (representing 50% recovery) mined from 512,000 ft^2 of bedrock. In 1917-18, 1,037 lb concentrate containing 537 lb Sn was mined from 6,000 ft^2 of bedrock and marketed. Gold generally fine, flaky, rough with rounded edges; largest nugget about 1.25 oz; very little quartz attached to gold. Gravel and muck increase in thickness downstream from 9 ft in upper valley to more than 80 ft. Gold and cassiterite probably largely mined out in middle and upper valley; some may remain in deeper ground in lower valley. A little scheelite in concentrates has been reported. Bedrock in area is schist, some with quartz veins, slate, siliceous cherty rock, and greenstone; granite on ridge at head of valley. Lode source of placers has not been found; probably in schistose rocks around granite body.

(Monument Cr.) Gold, Silver, Tin

Ruby district Ruby (4.25 - 4.4, 4.7-4.85)
MF-405, loc. 24 64°16'-64°17'N, 155°25'-155°27'W

Summary: About 1,450 fine oz of gold and some byproduct silver produced between 1913 and 1933; probably little if any more recent mining. Pay streak irregular and spotty both vertically and horizontally (little if any gold on bedrock); about a mile long, 20-50 ft wide, and about 15 ft thick (all of gravel); overlain by about 25 ft of frozen muck. Gold both fine and coarse; largest nugget a little over an ounce. Average of 3 assays was 853 parts Au and 139 parts Ag. Only a little cassiterite in gravels. Bedrock gabbroic greenstone and siliceous schist. Granite on headwater divide to north; this is probably the source area for metals in the placer deposits.

References

Eakin, 1914 (B 592), p. 367 -- Good placer ground discovered about midway in stream's course, winter of 1912-13. Mining, summer of 1913; very satisfactory results reported. Also reported that pay dirt was struck about 2 mi farther downstream.

Brooks, 1915 (B 622), p. 57 -- Mining reported, 1914.

Mertie and Harrington, 1916 (B 642), p. 243-244 -- Mining, 1913 and 1915.
p. 260 -- Cassiterite present.
p. 265 -- Mining, 1915.

Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.

Mertie and Harrington, 1924 (B 754), p. 95, 117-118 -- Same as Mertie and Harrington, 1916 (B 642), p. 243-244, 260, plus quotation of Chapin, 1919 (B 692).

Smith, 1930 (B 810), p. 29 -- Mining, 1927.

Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.

Mertie, 1936 (B 864-C), p. 153-154 -- Gold discovered in 1912-13; creek worked until about 1933. Total production was about $30,000 [about 1,450 fine oz]. Discovery claim at mouth of Rabbit Cr. Irregular spotty pay streak (both horizontally and vertically) extends about half a mile below and above Discovery; 20-50 ft wide. One-quarter mile below Discovery section is 25 ft of muck overlying 15 ft of gravel; all frozen. Gravel runs 5-6 in; some boulders as much as 2 ft; made up of subrounded to angular quartzite, chert, slate, minor limestone, and basic greenstone. Gold in irregularly distributed streaks of fine gravel 3-6 in thick; little or no gold on bedrock. Gold both fine and coarse; largest nugget a little over an ounce. Average of 3 assays showed 853 parts Au and 139 parts Ag.

Joesting, 1942 (TDM 1), p. 34 -- Common placer cassiterite.

White and Stevens, 1953 (C 279), p. 4, 6-9 -- Concentrate sample with concentration ratio of 9,000:1 contained 0.14% eU; others with unknown, but high, concentration ratios contained 0.032% and 0.086% eU. Radioactivity probably due to uranothorite.

Chapman and others, 1963 (OF 239), p. 51 -- Only a little cassiterite in gravels.

(Monument Cr.) -- Continued

Cobb, 1977 (OF 77-168B), p. 34, loc. 16 -- References to Mertie, 1936 (B 864-C); Chapman and others, 1963 (OF 239).

Eberlein and others, 1977 (OF 77-168D), p. 87, loc. 35 -- About 1,450 fine oz gold and a little byproduct silver produced 1913-33; probably little or no production since 1933. Pay streak about 1 mi long, 20-50 ft wide; gravel about 15 ft thick. Gold distribution spotty; scattered throughout gravel; both coarse and fine; largest nugget 1+ oz. Very little cassiterite. Bedrock gabbroic greenstone and siliceous schist; granite on headwater divide to north. Lode source of gold probably in schistose rocks and peripheral to granite.

(Moose Cr.) Gold, Silver

Ruby district Ruby (1.8, 0.55)
MF-405, loc. 36 64°02'N, 155°46'W

Summary: Gold in old channels under SW valley slope; present stream along NW side of valley. Ground deep; 55 ft on one claim; mined by shafts and drifts. Pay streak 50-60 ft wide; ran about 40¢ per ft^2 of bedrock; some rich spots ran $3-$5 per ft^2 (gold at $20.67). Bedrock deeply weathered basaltic greenstone; gravel greenstone with considerable vein quartz. Gold generally fine grained and rounded; one 7-oz nugget reported. Assay of bullion showed 842.5 parts Au and 152 parts Ag. Gold discovered in 1920; pay streak located in 1931. Mining reported 1929-39.

References

Smith, 1932 (B 824), p. 37 -- Mining, 1929.
Smith, 1933 (B 836), p. 37-38 -- Mining, 1930.
Smith, 1933 (B 844-A), p. 38 -- Mining, 1931.
Smith, 1934 (B 857-A), p. 34 -- Mining, 1932.
Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.
Mertie, 1936 (B 864-C), p. 168-169 -- Valley asymmetrical, broad, and open. Stream follows northwest side. Mystery Cr. enters about a mile above mouth. Old bedrock channels under southwest valley slope; not related to present stream course. Gold discovered in 1920; pay streak located and mining begun in 1931. Bedrock at one claim being mined in 1933 is at a depth of 55 ft. Pay streak 50-60 ft wide and runs about 40¢ per ft^2 [gold at $20.67]; rich spots run $3-$5 per ft^2. Where present, gravel is greenstone with considerable vein quartz. Bedrock is deeply weathered basaltic greenstone. Gold is fairly fine-grained and well rounded, but one 7-oz nugget was recovered. One assay showed 842.5 parts Au and 152 parts Ag.
Smith, 1936 (B 868-A), p. 40 -- Mining, 1934.
Smith, 1937 (B 880-A), p. 40-41 -- Mining, 1935.
Smith, 1938 (B 897-A), p. 53 -- Mining, 1936.
Smith, 1939 (B 910-A), p. 52 -- Mining, 1937.
Smith, 1939 (B 917-A), p. 51 -- Mining, 1938.
Smith, 1941 (B 926-A), p. 50 -- Mining, 1939.
Cobb, 1973 (B 1374), p. 170 -- Placer gold discovered in 1920; pay streak not located until 1931. Old channel was extensively mined from shafts and drifts.
Cobb, 1977 (OF 77-168B), p. 44, loc. 27 -- Reference to Mertie, 1936 (B 864-C).
Eberlein and others, 1977 (OF 77-168D), p. 87, loc. 36 -- Some gold production, 1931-39; no information on later activity. Placer genesis and lode source poorly known; probably not the same type of deposits as in Poorman area. Other data from Mertie, 1936 (B 864-C).

(Nevada Cr.) Gold(?)

Ruby district Ruby (2.5, 2.1) approx.
OF 77-168D, loc. 37 64°07'N, 155°40'W approx.

Summary: Good gold prospects reported, winter of 1930-31. No later reports of mining.

References

Smith, 1933 (B 836), p. 38 -- Good gold prospects reported, winter of 1930-31.

Eberlein and others, 1977 (OF 77-168D), p. 87, loc. 37 -- Good gold prospects reported in 1930-31. No later reports of mining.

(Ophir Cr.) Gold

Ruby district Ruby (4.25-4.65, 4.05-4.45
MF-405, loc. 25 64°14'-64°15'N, 155°27'W

Summary: Rich gold discovery reported in 1913; no mining in 1915. Was some mining in 1955 and/or 1956. Apparently inactive for a number of years prior to 1976. *No activity in 1975-76; condition of airstrip on ridge and road to creek and of tailings looked as though work had been done in 1950's. Bedrock probably greenstone close to contact with schist.*

References

Eakin, 1914 (B 592), p. 367-368 -- Prospecting, 1913. Rich discovery reported.
Mertie and Harrington, 1916 (B 642), p. 244 -- Creek has been prospected, but there was no extensive mining operation; no activity in 1915.
Mertie and Harrington, 1924 (B 754), p. 95 -- About the same as in Mertie and Harrington, 1916 (B 642).
Cass, 1959 (I-289) -- Mining, 1955 and/or 1956,
Cobb, 1977 (OF 77-168B), p. 43, loc. 17 -- Reference to Cass, 1959 (I-289).
Eberlein and others, 1977 (OF 77-168D), p. 87, loc. 38 -- Rich gold discovery reported in 1913. No mining in 1915. Some mining about 1956. Apparently inactive for a number of years prior to 1976.

(Poorman Cr.) Gold, Silver, Tin

Ruby district Ruby (2.65-3.75, 1.3-1.9)
MF-405, locs. 30, 32 64°05'-64°06'N, 155°31'-155°39'W

Summary: Gold discovered in 1912 and mined on various scales through 1976. Pay streak is in old channels not related to present drainage; 2.5-3 mi long and as much as 1,000+ ft wide. Gravel largely quartz and chert; as much as 28 ft thick; overlain by about 50 ft of muck in most places. Bedrock mostly phyllite; some rhyolite porphyry (only granitic rock found in place in Poorman area). Most gold fairly fine grained and rough; that at mouth of Solomon Cr. is well worn and is at or near the western limit of the mineralized area near Poorman. Assays indicate that bullion is about 840 parts Au and 155 parts Ag. Concentrates include some cassiterite; barite and pyrite are common. Placers may not have been completely prospected; geologic conditions not fully understood. Most of placer ground, however, probably has been discovered and mined out. *No firm figures for total production; probably about 25% of the total of about 390,000 fine oz of gold from Ruby district between 1911 and 1960 was from Poorman Cr. and small tributaries.*

References

Brooks, 1914 (B 592), p. 68 -- Significant new discoveries, 1913.

Eakin, 1914 (B 592), p. 368-369 -- Bedrock in area includes probably lower Paleozoic schists, slates, and greenstones and, to the south, possibly considerably younger cherts and less altered igneous rocks. Interstream areas broad, smooth, and deeply mantled with weathered material. First prospects found in 1912. Several holes sunk to bedrock in winter of 1912-13. Pay in 3-6 ft of gravel on bedrock 53-65 ft below the surface; overburden chiefly muck. Gold mainly in fine shotlike particles. Widest crosscut of pay gravel is 125 ft in mine at mouth of Duncan Cr. Was mining in summer of 1913.

Brooks, 1915 (B 622), p. 57-58 -- Winter and summer mining, 1914.

Brooks, 1916 (B 642), p. 65 -- Mining on Poorman Cr. and tributaries, 1915.

Mertie and Harrington, 1916 (B 642), p. 247-248 -- Creek staked early in 1913; active mining since then. Most mining on bench claims over a distance of about 3 mi along north bank of creek. Depth to bedrock (45-80 ft) increases with distance from creek. Section (all frozen) is 2-12 ft of coarse gravel (largely boulders of vein quartz and rusty quartz breccia with some igneous rocks, quartzite, slate, and chert); fine-sharp, clean gravel ("chicken feed") 6 in to 12 ft thick, and muck to the surface. Pyrite most common mineral in concentrates (amount of pyrite decreases downstream), rounded and polished cassiterite pebbles, barite pebbles, and a little magnetite. Gold on or near bedrock; assays about $17.30 per oz [gold at $20.67]; commonly rather fine, but nuggets worth $25 have been found. Richest ground said to run about $5 per ft^2 of bedrock.

p. 260 -- Cassiterite in the form of wood tin.

p. 265 -- Mining, 1915.

Smith, 1917 (BMB 142), p. 25 -- Mining, 1915.

Smith, 1917 (BMB 153), p. 53 -- Mining, 1916.

(Poorman Cr.) -- Continued

Brooks, 1918 (B 662), p. 57-58 -- Mining, 1916; gold also discovered in benches.
Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.
Martin, 1919 (B 692), p. 38 -- Mining, 1917.
Brooks and Martin, 1921 (B 714), p. 91 -- New discoveries, 1919.
Brooks, 1922 (B 722), p. 54 -- Mining, 1920.
Brooks, 1923 (B 739), p. 38 -- Mining, 1921.
Brooks and Capps, 1924 (B 755), p. 43 -- Mining, 1922.
Mertie and Harrington, 1924 (B 754), p. 98-99, 118 -- Same as Mertie and Harrington, 1916 (B 642), p. 247-248, 260, plus quotation of Chapin, 1919 (B 692).
Smith, 1929 (B 797), p. 22 -- Mining, 1926.
Smith, 1930 (B 810), p. 29 -- Mining, 1927.
Smith, 1930 (B 813), p. 34 -- Mining and dead work, 1928. Promising discovery late in season reported.
Smith, 1932 (B 824), p. 37 -- Mining, 1929.
Smith, 1933 (B 836), p. 37-38 -- Mining, 1930.
Smith, 1933 (B 844-A), p. 38 -- Mining, 1931.
Smith, 1934 (B 857-A), p. 34 -- Mining, 1932.
Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.
Mertie, 1936 (B 864-C), p. 158-162, 165-166 -- Gold discovered in 1912, mining began in 1913. Upper valley wide and open; asymmetrical with south slope steeper. No well-developed benches, but the pay streak below Tenderfoot Cr. is on a "bench" 600-1,000 ft north of the creek. Still farther down valley paystreak is south of the stream. Origin of gold is quartz veins, mainly below Duncan Cr. and on Tamarack Cr. below Flat Cr. Placers contain a large percentage of vein quartz and chert, probably indicating concentrated residual deposits. Near mouth of Tenderfoot Cr. bedrock is phyllite and rhyolite porphyry beneath an average thickness of 44 ft of muck, 5 ft of fine gravel, and 6 ft of coarse gravel; most of the gold is on or in bedrock. Some of ground ran as much as $5 per ft^2 of bedrock [gold at $20.67]. Concentrates from deeper ground on "bench" contain much pyrite and barite. Much clay with gold, making good recovery difficult. Below mouth of Solomon Cr. gold has been recovered from a pay streak on weathered bedrock beneath rounded vein quartz gravel. Assays of gold from several mines showed 835-853-1/4 parts Au and 154-159 parts Ag.
Smith, 1936 (B 868-A), p. 40 -- Mining, 1934.
Smith, 1937 (B 880-A), p. 44 -- Mining, 1935.
Smith, 1938 (B 897-A), p. 53 -- Mining, 1936.
Smith, 1939 (B 910-A), p. 52 -- Mining, 1937.
Smith, 1939 (B 917-A), p. 51 -- Mining, 1938.
Smith, 1941 (B 926-A), p. 50 -- Almost all claims acquired by Vance Hitt, who plans to work them as a unit, 1939. Also preparatory work.
Joesting, 1942 (TDM 1), p. 35 -- Common placer cassiterite.
Smith, 1942 (B 933-A), p. 46-47 -- Mainly preparatory work, 1940. Dragline being transferred from Stuyahok area of Marshall district.
Cass, 1959 (I-289) -- Mining, 1955 and/or 1956.
Koschmann and Bergendahl, 1968 (P 610), p. 30 -- Gold discovered, 1912.
Cobb, 1973 (B 1374), p. 170 -- Gold discovered, 1912.

(Poorman Cr.) -- Continued

Cobb, 1977 (OF 77-168B), p. 43, locs. 22, 24 -- References to Mertie, 1936 (B 864-C); Chapin, 1919 (B 692).

Eberlein and others, 1977 (OF 77-168D), p. 88, loc. 39 -- Gold discovered in 1912 and has been mined on various scales through 1976. Pay streak mined over 2.5-3 mi; as much as 1,000+ ft wide. Gravel 2-28 ft thick; largely quartz and chert. Bedrock mostly dark-colored phyllite; some rhyolite porphyry; no other granitic rocks known in surface or subsurface exposures. Gold is rough and fine grained; some cassiterite; barite and pyrite common; gold about 840 fine with about 155 silver. Lode source probably close and gold accumulated over a long erosion interval. Fairly well-worn moderately fine-grained gold at mouth of Solomon Cr.; probably at western limit of mineralized zone in Poorman area. Placers may not have been fully prospected; geologic conditions not fully understood; major part of placer ground, however, probably has been discovered and mined out.

(Quartz Cr.) Gold(?)

Ruby district Ruby (6.0, 5.5) approx.
64°19'N, 155°10'W approx.

Summary: Prospecting in 1912 reported. Ground as much as 180 ft deep and frozen except in deepest places. No data on results; creek and tributaries are not mentioned in more recent reports. Location not given except very generally; coordinates above are for approximate center of drainage basin and are probably correct within 5 miles.

References

Eakin, 1913 (B 542), p. 291 -- Preliminary to Eakin, 1914 (B 578).
Eakin, 1914 (B 578), p. 43 -- Prospecting on main stream and tributaries in 1912 reported. Ground said to be 50 to 180 ft deep and frozen except in the deepest places.

(Root Cr.)

Gold(?)

Ruby district

Ruby (4.5, 6.6) approx.
64°22'N, 155°25'W approx.

Summary: Was prospecting before 1933. No data on results, which must not have been good as there is no more recent mention of this creek. Coordinates above accurate only within 1-1/4 mi.

Reference

Mertie, 1936 (B 864-C), p. 158 -- Has been prospecting [before 1933]; no extensive mining on this or other tributaries of Flint Cr. above Glen Gulch.

(Ruby Cr.) Gold, Tin

Ruby district Ruby (3.8-3.9, 12.8-13.0)
MF-405, loc. 2 64°44'N, 155°29'-155°30'W

Summary: Site of first gold discovery in district in 1907. Small-scale mining between 1907 and 1915 produced about 970 fine oz of flaky fine gold from ground about 15 ft deep on east side of creek near mouth. Cassiterite reported; apparently only a very small amount as none was found in pan samples taken in 1942. Bedrock schist, slate, and limestone; greenstone nearby. Includes reference to (Reeley Cr.).

References

Brooks, 1908 (B 345), p. 46-47 -- Discovery of placer gold reported, 1907. Surface prospects of 2¢ per pan reported.

Maddren, 1909 (B 379), p. 229 -- Gold discovered in 1907 in fine gravel at mouth at level of spring high water of Yukon R. In July, 1908, this creek was the only one in the area that was being worked.

p. 232-233 -- Ground averages about 25 ft deep. Bedrock limestone, slate, and schist; unconsolidated deposits are muck, loamy sand, schist and slate pebbles, diabase, cobbles, and rounded diorite boulders 12-18 in in diameter in muck several feet above bedrock. Gold fine (smaller than bird shot) and flaky; in discontinuous, thin, sandy layers in gravel. As of July, 1908, about $1,000 worth of gold [at $20.67] had been recovered from Discovery claim.

Maddren, 1910 (B 410), p. 78-80 -- Same as Maddren, 1909 (B 379).

Maddren, 1911 (B 480), p. 237 -- Placer gold has been mined from Reeley Cr. opposite mouth of the Melozitna R.

Maddren, 1912 (B 520), p. 287 -- Mining on Discovery claim for a month or so in summers of 1909 and 1910; production worth several thousand dollars.

p. 294-295 -- Essentially the same as Maddren, 1909 (B 379).

Eakin, 1913 (B 542), p. 283, 288 -- Preliminary to Eakin, 1914 (B 578).

Eakin, 1914 (B 578), p. 40 -- Site of first discovery in district. Placer deposit confined to small bench to right of stream near mouth. Alluvium 12-15 ft thick; vein quartz boulders present in it. Low production probably due to low gold tenor of gravels.

p. 43 -- Production from creek estimated at from a few hundred to 2,000 dollars [gold at $20.67].

Mertie and Harrington, 1916 (B 642), p. 239 -- Data about the same as in Eakin, 1914 (B 538). At base of deposit fine material in interstitial spaces in blocky limestone bedrock. Total production probably little over $2,000 [gold at $20.67]. A little work in 1915.

p. 260 -- Cassiterite in concentrates.

p. 265 -- Mining, 1915.

Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.

Mertie and Harrington, 1924 (B 754), p. 90-91, 118 -- Same as Mertie and Harrington, 1916 (B 642), p. 239, 260, plus quotation of Chapin, 1919 (B 692).

Mertie, 1936 (B 864-C), p. 144 -- Data entirely from older reports.

Joesting, 1942 (TDM 1), p. 34 -- Common placer cassiterite.

White and Stevens, 1953 (C 279), p. 3 -- Higher eU of 2 concentrate samples was 0.002%.

(Ruby Cr.) -- Continued

Chapman and others, 1963 (OF 239), p. 51 -- Presence of cassiterite noted on old reports; miners interviewed in 1942 did not mention any. Pan samples taken from old workings in 1942 did not yield any cassiterite.
Thomas, 1964, p. 6 -- Site of first discovery of placer gold in district.
Koschmann and Bergendahl, 1968 (P 610), p. 30 -- Gold discovered, 1907; placers soon exhausted.
Cobb, 1973 (B 1374), p. 170 -- Gold discovered, 1907.
Cobb, 1977 (OF 77-168B), p. 42, loc. 1 -- References to Mertie, 1936 (B 864-C); Mertie and Harrington, 1916 (B 642).
Eberlein and others, 1977 (OF 77-168D), p. 88, loc. 40 -- Small-scale mining between 1907 and 1915 produced about $10,000 in gold (at $104.70) from ground averaging 15 ft deep on east side of creek near mouth. Gold fine and flaky; in sandy layers in gravel. Bedrock schist, slate, and limestone; greenstone nearby. An apparently very small amount of cassiterite reported.

(Short Cr.) Gold, Tin

Ruby district
MF-405, loc. 15

Ruby (3.45, 6.4)
64°22'N, 155°33'W

Summary: Ground 10-15 ft deep; 4-6 ft of gravel beneath muck. Gold accompanied by cassiterite in a pay streak 20-40 ft wide and usually within a foot of bedrock in a poorly defined irregular channel; creeks mined by open cuts for 1-1.5 mi below head. Ground farther downstream deeper and probably leaner; string of drill holes across valley found no gold or cassiterite. Mining probably was all between 1914 or 1915 and early 1920's. No data on amount of gold production. In 1918 a few thousand pounds of cassiterite concentrate was recovered; may not have been marketed.

References

Mertie and Harrington, 1916 (B 642), p. 242 -- 4-6 ft of gravel beneath 6-8 ft of muck. Gold (accompanied by some cassiterite) in a pay streak usually within a foot of bedrock in an irregular and poorly defined channel. Was open-pit mining, 1914-15.
p. 260 -- Cassiterite in concentrates.
p. 265 -- Mining, 1915.

Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.

Martin, 1920 (B 712), p. 22 -- A few thousand lbs of byproduct cassiterite recovered, 1918.

Mertie and Harrington, 1924 (B 754), p. 93-94, 118 -- Same as Mertie and Harrington, 1916 (B 642), p. 242, 260, plus quotation of Chapin, 1919 (B 692).

Mertie, 1936 (B 864-C), p. 151 -- Data about the same as Mertie and Harrington, 1916 (B 642).

Joesting, 1942 (TDM 1), p. 34 -- Common placer cassiterite.

Chapman and others, 1963 (OF 239), p. 48-49 -- References to Mertie and Harrington, 1916 (B 642), and Martin, 1920 (B 712). Before 1942, creek had been mined for a width of 20-40 ft from winter trail to near head [1-1.5 mi]. Line of drill holes across valley below winter trail did not find gold or cassiterite. Depth to bedrock increases from 12 ft at winter trail to 75 ft near mouth of creek.

Cobb, 1977 (OF 77-168B), p. 42, loc. 10 -- References to Mertie, 1936 (B 864-C); Chapman and others, 1963 (OF 239).

Eberlein and others, 1977 (OF 77-168D), p. 88, loc. 41 -- Placer ground 10-15 ft deep worked over a width of 20-40 ft for a distance of 1-1.5 mi; open-cut mining. Gold content low; gold irregularly distributed close to bedrock. Comparatively fine-grained cassiterite common; a few thousand pounds recovered during gold mining in 1918. No mining since 1936; probably none since early 1920's.

(Shovel Cr.) Gold

Melozitna district Ruby (6.9, 15.6) approx.
64°53'N, 155°05'W approx.

Summary: Work in 1911 and 1915 on gravel deposits north of the Yukon R. did not result in finding minable placer gold deposits. Gold-bearing gravels beneath 20 or more feet of clean white quartz boulders overlain by several feet of fine sediment or muck. Creek drains granite body in contact with mafic rock, limestone, and schist. All references below may not be to the same occurrence; if not the occurrences must be close to each other.

References

Maddren, 1912 (B 520), p. 296 -- Some work reported, 1911. No valuable deposits have been found. [Location on creek not given.]

Mertie and Harrington, 1916 (B 642), p. 249 -- In 1915 there was a stampede from Ruby to a terrace across the Yukon R. and a few miles upstream. Auriferous gravels below 20 or more ft of clean white quartz boulders, which are covered by several feet of fine sediment or muck. Not enough work done to evaluate deposit. [Probably the same occurrence as that mentioned by Maddren, 1912 (B 520); if not the same, is near it.].

Mertie and Harrington, 1924 (B 754), p. 100 -- Same data as in Mertie and Harrington, 1916 (B 642). Gravel does not contain enough gold to warrant mining.

Eberlein and others, 1977 (OF 77-168D), p. 88, loc. 42 -- Claims staked in 1911-15 apparently resulted in the discovery of no minable gold. Creek drains a granite body in contact with mafic rocks, limestone, and schist (a potentially favorable setting for a mineralized zone).

(Solomon Cr.) Gold, RE, Silver, Uranium

Ruby district Ruby (2.95-3.3, 1.25-1.35
MF-405, loc. 33 64°04'N, 155°34'-155°36'W

Summary: Gold discovered in 1913-14; mining reported in several years in 1920's and 1930's. Gravel is angular and more than half vein quartz; rests on phyllite and slaty phyllite. In places gravel is 4-5 ft thick, bound by clay, and with gold distributed through it. In other places gold within a foot of bedrock surface. Pay streak 15-80 ft wide; value not consistent across whole width. Placer deposits beneath 20-60 ft of muck. Gold generally angular with attached quartz; generally fine grained; largest nugget reported was about half an ounce. At least some of bullion assayed 830 parts Au and 165 parts Ag. Radioactive minerals present; one is a uraniferous mineral of the spinel group that (on the basis of a qualitative spectrographic analysis) contains Al, Cr, Fe, Mg, Ti, and rare-earth element(s) as major constituents. Lode source of gold undoubtedly in drainage basin, but neither it nor the source of the radioactive mineral has been found.

References

Brooks, 1923 (B 739), p. 38 -- Mining, 1921.
Brooks and Capps, 1924 (B 755), p. 43 -- Mining, 1922.
Smith, 1930 (B 810), p. 29 -- Mining, 1927.
Smith, 1932 (B 824), p. 37 -- Mining, 1929.
Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.
Mertie, 1936 (B 864-C), p. 164-165 -- Headwater part of valley narrow and steep; downstream the valley becomes wide and open and marges with valley floor of Poorman Cr. Gold discovered in winter of 1913-14 in upper valley, where gold is distributed through 4-5 ft of angular wash bound by clay and overlain by 22 ft of muck; little or no gold on bedrock; paystreak about 40 ft wide. Angular gravel is phyllite and vein quartz in fragments as much as 18 in in diameter. Bedrock is phyllite. Gold is fine. This was the site of mining in 1933. Gold from here reported to assay 830 parts Au and 165 parts Ag. Farther downstream bedrock is slate; the gravels are 50%-75% vein quartz beneath 50-60 ft of muck. Paystreak 15-80 ft wide (where widest consists of several widely distributed narrow high-grade streaks); gold angular and in a layer about a foot thick immediately above bedrock; largest nugget reported was about 1/2 oz.
Smith, 1936 (B 868-A), p. 40 -- Mining, 1934.
Smith, 1939 (B 910-A), p. 52 -- Mining, 1937.
Smith, 1939 (B 917-A), p. 51 -- May have been some mining, 1938.
White and Stevens, 1953 (C 279), p. 1, 9 -- Radioactive minerals present. eU of 3 concentrate samples from 0.002% to 0.056%. Radioactivity due (at least in part) to a uraniferous mineral of the spinel group; qualitative spectrographic analysis showed Al, Cr, Fe, Mg, Ti, and rare earths as major constituents; bedrock source was not found.
Cobb, 1977 (OF 77-168B), p. 44, loc. 25 -- Reference to Mertie, 1936 (B 864-C); White and Stevens, 1953 (C 279).

(Solomon Cr.) -- Continued

Eberlein and others, 1977 (OF 77-168D), p. 88, loc. 43 -- Placer ground 27 ft to more than 60 ft deep; pay streak is 15-80 ft wide; gravel angular and at least half vein quartz. Gold is distributed through the gravel and is angular with attached quartz; largest nugget reported was 0.5 oz. Bedrock phyllite and slaty phyllite. Lode source of gold must be within basin of this creek. Ground may not have been fully prospected.

(Spangle Cr.) Gold(?)

Ruby district Ruby (3.8, 3.1) approx.
OF 77-168D , p. 44 64°11'N, 155°30'W approx.

Summary: Was unsuccessful prospecting in 1915 and earlier. Area covered by heavy vegetation; may not have been adequately prospected.

References

Mertie and Harrington, 1916 (B 642), p. 244 -- Before 1915 there was prospecting, but no mining. Claims lapsed; creek restaked in 1915 and further prospected without results.

Mertie and Harrington, 1924 (B 754), p. 95 -- Same as above.

Eberlein and others, 1977 (OF 77-168D), p. 88, loc. 44 -- Prospected unsuccessfully in 1913-15. Drainage basin and adjacent area heavily vegetated and may not have been adequately prospected.

(Spruce Cr.) Gold, Silver, Tin

Ruby district
MF-405, loc. 28

Ruby (4.05-4.35, 2.5-2.9)
64°08'-64°10'N, 155°26'-155°28'W

Summary: Prospects reported in 1913; mining until probably 1940's; inactive in 1956 and 1975; was substantial production of gold. Pay streak 55-70 ft deep and extended along creek for 2 or 3 miles. Gravel 2-5 ft thick; made up of several kinds of igneous rocks and siliceous slate; usually considerable clayey material. Gold close to bedrock; most well rounded and fine; several nuggets worth $2-$3 (gold at $20.67), some with vein quartz attached. Minable ground ran from 75¢ per ft^2 of bedrock to rich spots from which $12 pans (pan = 1/6 ft^3) were reported (gold at $20.67). Bullion ran 854 parts Au, 140 parts Ag. Cassiterite in concentrates; not produced.

References

Brooks, 1914 (B 592), p. 68 -- Good prospects reported, 1913.
Mertie and Harrington, 1916 (B 642), p. 244 -- In 1915 there were 6 outfits mining or prospecting. Pay streak follows creek and is 55-70 ft deep; mining for about 3 mi along valley. Gravel 2-5 ft thick and made up of igneous rocks and dark siliceous slates, usually with considerable clayey material. Ground generally frozen (but not in one shaft). Gold close to bedrock, well rounded and rather fine, though several $2 and $3 nuggets [gold at $20.67] have been found; some of nuggets contain vein quartz. Minable ground runs from 75¢ per ft^2 of bedrock to rich spots from which $12 pans are reported.
p. 265 -- Mining, 1915.
Smith, 1917 (BMB 142), p. 25 -- Mining, 1915.
Smith, 1917 (BMB 153), p. 53 -- Mining, 1916.
Brooks, 1918 (B 662), p. 57 -- Mining, 1916.
Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.
Martin, 1919 (B 692), p. 38 -- Mining, 1917.
Brooks and Capps, 1924 (B 755), p. 43 -- Mining, 1922.
Mertie and Harrington, 1924 (B 754), p. 95-96 -- Same as Mertie and Harrington, 1916 (B 642), p. 244.
p. 118 -- Cassiterite in the form of wood tin present. Quotation of Chapin, 1919 (B 692).
Smith, 1930 (B 813), p. 34 -- Mining, 1928.
Mertie, 1936 (B 864-C), p. 167 -- No mining in 1933. Gold recovered in 1935 had average fineness of 854 parts Au and 140 parts Ag.
Smith, 1936 (B 868-A), p. 40 -- Dead work, 1934.
Smith, 1937 (B 880-A), p. 44-45 -- Mining, 1935.
Smith, 1938 (B 897-A), p. 53 -- Mining, 1936.
Smith, 1939 (B 910-A), p. 52 -- Mining, 1937.
Smith, 1939 (B 917-A), p. 50-51 -- Has been mining; probably none in 1938; reference not clear.
Smith, 1941 (B 926-A), p. 49 -- Has been placer mining.
Joesting, 1942 (TDM 1), p. 35 -- Common placer cassiterite.
Smith, 1942 (B-933-A), p. 46 -- Has been placer mining.
Cobb, 1977 (OF 77-168B), p. 43, loc. 20 -- Reference to Mertie and Harrington, 1924 (B 754).

(Spruce Cr.) -- Continued

Eberlein and others, 1977 (OF 77-168D), p. 88, loc. 45 -- Was substantial gold production. Pay streak 55-70 ft deep and about 2 mi long; gravel 2-5 ft thick; gold close to bedrock, which is mainly slate, schist, and phyllite with some rhyolite intrusives. Gold mostly well rounded and fine, but some nuggets. Fineness gold 854, silver 140. Cassiterite reported, but not produced. Mining discontinued in 1940's; inactive in 1956 and 1975.

(Star Cr.) Gold(?)

Ruby district Ruby (4.5, 3.5) approx.
OF 77-168D , loc. 46 64°12'N, 155°24'W approx.

Summary: Unsuccessful prospecting in 1915. Creek is close to contact between greenstone and schist units. Prospecting probably was not thorough; potential mining ground, however, is relatively small.

References

Mertie and Harrington, 1916 (B 642), p. 244 -- Prospecting, 1915.

Mertie and Harrington, 1924 (B 754), p. 95 -- Prospecting in 1915 did not disclose workable deposits.

Eberlein and others, 1977 (OF 77-168D), p. 88, loc. 46 -- Data from above. Creek is close to contact between greenstone and schist units. Exploration probably was not thorough, but potential mining ground is relatively small.

(Straight Cr.) Gold, Tin

Ruby district Ruby (4.65-4.75, 8.1)
MF-405, loc. 6 64°28'N, 155°23'W

Summary: Gold and cassiterite mined near mouth from a bench deposit of Birch Cr. cut by Straight Cr. Most of mining in vicinity was on bench of Birch Cr. between Straight and Crooked Creeks. Hill drained by Straight Cr. made up of schist intruded by granitic dikes. Contact between granite and schist near mouth of creek. See also (Birch Cr.).

References

Smith, 1917 (BMB 153), p. 53 -- New deep placer mine, 1916; considerable cassiterite, which was not saved.

White and Stevens, 1953 (C 279), p. 4-5, 7 -- Creek drains area underlain by granite. Heavy-mineral fraction of placer concentrate (concentration ratio 640:1) contained 0.15% eU; similar fractions of 3 samples of granite contained an average of 0.0125% eU.

Chapman and others, 1963 (OF 239), p. 42-44 -- Deposit mined near mouth of Straight Cr. is part of bench deposit of Birch Cr. Much of work in immediate vicinity was on lower Straight Cr. and on bench between mouths of Straight and Crooked Creeks.

Cobb, 1977 (OF 77-168B), p. 42, loc. 4 -- Reference to Chapman and others, 1963 (OF 239).

Eberlein and others, 1977 (OF 77-168D), p. 89, loc. 47 -- Placer gold and cassiterite recovered in lowest part of creek, 1916-20. Gravel may have been a bench of Birch Cr. cut by Straight Cr. Schist intruded by granitic dikes form hill drained by creek. Contact between granite and schist approximately at mouth of Straight Cr.

(Sun Cr.) Gold(?)

Ruby district Ruby (19.2, 10.35)
OF 77-168D, loc. 48 64°34'N, 153°27'W

Summary: Site of small stampede in 1924; results of prospecting apparently not satisfactory. Bedrock in area is basalt, diorite, and chert; possibly near a contact with schist. Rock exposures in area very poor.

References

Cobb, 1977 (OF 77-168B), p. 44, loc. 28 -- Written communication from Chapman, 10/15/75, cited. [Data included in reference below.]

Eberlein and others, 1977 (OF 77-168D), p. 89, loc. 48 -- A small stampede in 1924 owing to report of placer gold prospects; apparently results were not encouraging. Bedrock in area is basalt, diorite, and chert; possibly near a contact with schist. Rock exposures very poor. Geologic setting may be similar to those of some of placer gold deposits in Long-Poorman area.

(Swift Cr.) Gold

Ruby district
MF-405, loc. 10

Ruby (2.95, 7.4-7.6)
64°25'-64°26'N, 155°37'W

Summary: Creek apparently drains a contact zone between schist and greenstone. Where mined bedrock is greenstone and argillite; creek gravels largely greenstone and sheared chert with minor sandy phyllite and schist and some vein quartz. Open-cut mining near head where ground is 5-9 ft deep; drift mining farther downstream where ground is 16-20 ft deep, including 6-8 ft of gravel. Gold near and in top of bedrock; some coarse; nugget worth $50 (about 2.42 fine oz) found.

References

Mertie and Harrington, 1916 (B 642), p. 243 -- Upper part of creek has been worked by open-cut mining; farther downstream work in 1915 consisted of sluicing off 10-12 ft of muck and then mining 6-8 ft of gravel, one layer of which is very carbonaceous (derived from a buried coal bed upstream?). Considerable amount of the gold is in nuggets (one valued at $50 [about 2.42 fine oz.]).

Brooks, 1918 (B 662), p. 58 -- Mining, 1916.

Mertie and Harrington, 1924 (B 754), p. 94-95 -- Same as above.

Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.

Mertie, 1936 (B 864-C), p. 145 -- Low-grade placers have been found.

p. 155 -- Open-cut mining in 1933. Pay streak is in creek bottom, is about 10 ft wide, and is said to run 25¢-30¢ per ft^2 of bedrock [gold at $20.67]. Gravel (5-9 ft thick) is largely sheared chert and greenstone with a little sandy phyllite and schist; some vein quartz. Gold in lowest foot of gravel and upper foot of bedrock; Farther downstream was drift mining in ground 16-20 ft deep; 6-8 ft of gravel beneath 10-12 ft of muck; produced some coarse gold; nugget valued at $50 [about 2.42 fine oz.].

Cobb, 1977 (OF 77-168B), p. 42, loc. 8 -- Reference to Mertie, 1936 (B 864-C).

Eberlein and others, 1977 (OF 168D), p. 89, loc. 49 -- Data of Mertie, 1936 (B 864-C). Bedrock greenstone and argillite; creek apparently drains a schist-greenstone contact zone.

(Tamarack Cr.) Gold, Silver, Tin

Ruby district Ruby (4.5-4.7, 2.0-2.75)
MF-405, loc. 29 64°07'-64°09'N, 155°23'-155°25'W

Summary: Mined over a length of about 3 mi from 1912 intermittently to about 1940; in 1975 had been long inactive. Ground averaged 60 ft deep, including 3-8 ft of gravel on 1-5 ft of soft, weathered pyritiferous slate-phyllite bedrock. Gold in lower 3 ft of gravel and top part of weathered bedrock. Cassiterite (not produced) in concentrates. Bullion ran 871 parts Au, 124 parts Ag. Gold rounded and shotty; most pieces worth 10¢ to $2 (gold at $20.67); one $50 nugget was reported. Ground worked ran 75¢ to $2.50 per ft^2 of bedrock (gold at $20.67).

References

Brooks, 1914 (B 592), p. 68 -- Pay gravel discovered, 1913.
Eakin, 1914 (B 592), p. 369 -- Prospects found in spring of 1912 and pay gravel located about 3 mi from head of creek the following winter. Small-scale mining, summer of 1913.
Brooks, 1915 (B 622), p. 57-58 -- Mining, 1914.
Mertie and Harrington, 1916 (B 642), p. 244-245 -- Staked in 1912, actively prospected in 1913, and mined since then along a stretch of creek from 2 to 3.5 mi above mouth. Bedrock about 60 ft deep. 1-5 ft of "soft" bedrock overlies true bedrock and is overlain by 3-8 ft of gravel; muck from gravel to surface. Gold in upper part of "soft" bedrock and lower 3 ft of gravel. Gold is rounded and shotty; most pieces worth 10¢ to $2 [gold at $20.67]; one $50 nugget has been found. Ground worked runs 75¢ to $2.50 per ft^2 of bedrock. Assays show gold ranges from $16.50 to $17 per oz.
Smith, 1917 (BMB 142), p. 25 -- Mining, 1915.
Smith, 1917 (BMB 153), p. 53 -- Mining, 1916.
Brooks, 1918 (B 662), p. 58 -- Mining, 1916.
Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.
Martin, 1919 (B 692), p. 38 -- Mining, 1917.
Mertie and Harrington, 1924 (B 754), p. 96 -- Same as Mertie and Harrington, 1916 (B 642), p. 244-245.
p. 118 -- Wood tin present. Chapin, 1919 (B 692) quoted.
Smith, 1932 (B 824), p. 37 -- Mining, 1929.
Smith, 1933 (B 836), p. 38 -- Mining, 1930.
Mertie, 1936 (B 864-C), p. 167 -- No mining in 1933, but resumed soon thereafter. Fineness of bullion recovered in 1935 was 871 parts Au and 124 parts Ag.
Smith, 1937 (B 880-A), p. 44-45 -- Mining, 1935.
Smith, 1941 (B 926-A), p. 50 -- A little mining, 1939.
Joesting, 1942 (TDM 1), p. 35 -- Common placer cassiterite.
Cobb, 1977 (OF 77-168B), p. 43, loc. 21 -- Reference to Mertie and Harrington, 1924 (B 754).
Eberlein and others, 1977 (OF 77-168D), p. 89, loc. 50 -- Mined over a length of about 3 mi, 1912 to 1920's and 1933 to about 1940; long inactive as of 1975. Ground averaged 60 ft deep, including 3-8 ft

(Tamarack Cr.) -- Continued

of gravel, 1-5 ft of weathered bedrock. Gold in lower 3 ft of gravel and top foot of bedrock; some cassiterite with gold. Gold fineness 871, silver 124. Gold is rounded and shotty, not flaky; mostly in pieces worth 50¢ to $10, but one $250 nugget found (gold at $104.70). Gravels mostly greenstone; bedrock dark, micaceous crenulated slate-phyllite with pyrite. Creek apparently on east edge of mineralized zone that extends southwestward through Duncan and Flat [trib. Timber Cr.] Creeks.

(Tenderfoot Cr.) Gold

Ruby district
MF-405, loc. 30

Ruby (3.5, 1.8)
64°06'N, 155°33'W

Summary: Mining about half a mile above mouth from 1913 to probably about 1930's. Similar setting to deposits on Poorman and Duncan Creeks. Ground 53-65 ft deep, including 3-6 ft of gold-bearing gravel (overburden chiefly muck). Much of gold is fine, shotty, and water worn. Bedrock near mouth is phyllite. See also (Poorman Cr.). *Hard to distinguish gravels of Tenderfoot Cr. from right-limit gravels of Poorman Cr.; mining may have been in gravels of Poorman Cr. where cut by Tenderfoot Cr.*

References

Brooks, 1914 (B 592), p. 68 -- Valuable placer ground discovered, 1913.
Eakin, 1914 (B 592), p. 368-369 -- Gold in stratum of gravel 3-6 ft thick on bedrock at depth of 53-65 ft; overburden chiefly muck. Gold mainly in fine shotlike particles. Mining in 1913 half a mile above mouth; handicapped by drought.
Smith, 1917 (BMB 142), p. 25 -- Mining, 1915.
Smith, 1917 (BMB 153), p. 53 -- Mining, 1916.
Brooks, 1918 (B 662), p. 58 -- Mining, 1916.
Smith, 1939 (B 910-A), p. 52 -- Has been mining; probably none in 1937; reference not clear.
Smith, 1939 (B 917-A), p. 51 -- Has been placer mining.
Cobb, 1977 (OF 77-168B), p. 43, loc. 22 -- Reference to Eakin, 1914 (B 592).
Eberlein and others, 1977 (OF 77-168D), p. 89, loc. 51 -- Mining in lower part of valley about half a mile above mouth from 1913 to probably about 1930's. Similar setting to deposits on Poorman and Duncan Creeks. Ground 53-65 ft deep, including 3-6 ft of gold-bearing gravel. Gold is fine, shotty, and water worn. Bedrock near mouth is phyllite.

(Timber Cr.) Gold

Ruby district
MF-405, loc. 35

Ruby (3.05, 0.95) approx.
64°03'N, 153°36'W approx.

Summary: Mining (not continuously) from 1916 to about 1939 at and just below mouth of tributary Flat Cr.; no workable gold deposits upstream from mouth of Flat Cr. May be a northeast-trending mineralized zone at Flat Cr. See also (Flat Cr., trib. Timber Cr.). *Abundant barite in concentrates from near mouth of Flat Cr.*

References

Brooks,1918 (B 662), p. 58 -- Mining, 1916.
Smith, 1929 (B 797), p. 22-23 -- Mining, 1926.
Smith, 1930 (B 810), p. 29 -- Mining, 1927.
Smith, 1933 (B 844-A), p. 38 -- Good prospects found, 1931.
Smith, 1934 (B 857-A), p. 34 -- Mining, 1932.
Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.
Smith, 1936 (B 868-A), p. 40 -- Mining, 1934.
Smith, 1939 (B 910-A), p. 52 -- Mining, 1937.
Smith, 1939 (B 917-A), p. 51 -- Has been a producing creek; may have been some mining in 1938.
Smith, 1941 (B 926-A), p. 50 -- Mining, 1939.
Cobb, 1977 (OF 77-168B), p. 44, loc. 26 -- Reference to Smith, 1941 (B 926-A).
Eberlein and others, 1977 (OF 77-168D), p. 89, loc. 52 -- Mining mainly around and just below mouth of tributary Flat Cr. Some production of gold from 1916 to about 1933. No workable deposits above mouth of Flat Cr.; downstream extent of gold not known. Possibly a northeast-trending mineralized zone is cut at Flat Cr. Area to west and southwest may not have been thoroughly prospected. Gold reported to be absent on Gentian Cr., the next creek to the south.

(Tip Cr.) Gold

Ruby district
OF 77-168D, loc. 53

Ruby (5.75, 7.5) approx.
64°25'N, 155°15'W approx.

Summary: Gold prospects rich enough to stimulate further work found. Ground is about 80 ft deep and prospecting conditions are difficult. See also (Easy Money Cr.).

References

Eakin, 1913 (B 542), p. 291 -- Preliminary to Eakin, 1914 (B 578).
Eakin, 1914 (B 578), p. 43 -- Valley broad and flat; alluvium said to be deep. "Prospects rich enough to stimulate further work has been found in a few holes near its head." [Work in or before 1912.]
Mertie, 1936 (B 864-C), p. 158 -- Has been prospecting.
Eberlein and others, 1977 (OF 77-168D), p. 89, loc. 53 -- Has been prospecting. Ground is about 80 ft deep and prospecting conditions difficult. Area poorly explored.

(Trail Cr.) Gold, Lead, Silver, Tin, Tungsten

Ruby district Ruby (5.3-5.6, 6.6-7.0)
MF-405, loc. 18 64°23'-64°24'N, 155°15'-155°18'W

Summary: Placer gold discovered in 1911; mining (probably not continuous) to at least 1975. Most mining in headward 6-7 mi (particularly uppermost 3 mi) of valley; gold reported as far downstream as 17 mi from head. Ground generally 25-35 ft deep (increases downstream), with 1-6 ft of gravel; gold at base of gravel and in top of bedrock. Gold both rough and well rounded, suggesting 2 sources; mostly fine, but about 10% is in 0.25-oz or larger nuggets; largest was about 14.5 oz. Bullion ran 838 parts Au, 152 parts Ag. Ground ran about 0.036 to 0.109 oz of gold per ft^2 of bedrock. Gold accompanied by sand-size cassiterite, much pyrite, and minor galena and scheelite. Bedrock phyllite, schist, and shaly slate; close to contact between greenstone and schist. Gravel consists of pebbles and cobbles of schist, phyllite, greenstone, quartzite, vein quartz, and rare granite.

References

Maddren, 1912 (B 520), p. 291 -- Placer gold discovery reported, 1911.
p. 296 -- Pay gravels said to run $3 per ft^2 [gold at $20.67] of bedrock reported to have been found one mi above and 2 mi below Discovery claim.
Eakin, 1913 (B 542), p. 288, 290-292 -- Preliminary to Eakin, 1914 (B 578).
Eakin, 1914 (B 578), p. 40 -- Gravels rich enough to support mining.
p. 42 -- Deposits rich enough to mine for about 2 mi along valley; prospects farther down valley for 17 mi. Depth to bedrock about 40 ft in upper valley and 70 ft 7 mi down valley; probably continues to increase farther downstream. Gold close to bedrock in several feet of gravel, which is overlain by muck; all frozen.
p. 45 -- 7 claims being worked in 1912.
Eakin, 1914 (B 592), p. 366 -- Considerable mining, 1913. All producing mines within 2 mi of head of creek; pay streak narrow and fairly continuous. Most of gold coarse; nugget worth $296 [about 14.3 fine oz] recovered.
Brooks, 1915 (B 622), p. 58 -- Mining, 1914.
Mertie and Harrington, 1916 (B 642), p. 245 -- In 2-mi stretch of creek where mining is in progress depth to bedrock is 30-40 ft, of which bottom 2-5 ft is little-rounded coarse gravel. Gold irregularly distributed in gravel; richer ground reported to be at mouths of small tributary gulches. Ground reported to average between $1 and $2 per ft^2 of bedrock [gold at $20.67]. About 10% of gold in nuggets worth more than $5; largest worth about $300 [about 14.5 fine oz.]; assay returns show gold worth about $16.85 per oz; gold to silver ratio is 5.5 to 1.
p. 160 -- Cassiterite present.
p. 265 -- Mining, 1915.
Smith, 1917 (BMB 142), p. 25 -- Mining, 1915.
Smith, 1917 (BMB 153), p. 53 -- Mining, 1916.
Chapin, 1919 (B 692), p. 337 -- Cassiterite in concentrates.
Brooks and Capps, 1924 (B 755), p. 43 -- Mining, 1922.

(Trail Cr.) -- Continued

Mertie and Harrington, 1924 (B 754), p. 96-97 -- Same as Mertie and Harrington, 1916 (B 642), p. 245.

p. 117-118 -- Cassiterite present. Chapin, 1919 (B 692) quoted.

Smith, 1930 (B 813), p. 34 -- Mining, 1928.

Smith, 1934 (B 864-A), p. 40 -- Mining, 1933.

Mertie, 1936 (B 864-C), p. 148-149 -- Cassiterite in headwater tributaries.

p. 156-157 -- Creek has been mined and prospected for several miles from headwaters and colors of gold are said to have been found for 17 mi downstream. In upper valley below headwater gulches gold is distributed erratically (no well-defined pay streak) in patches that ran 75¢ to $2.25 per ft^2 of bedrock [gold at $20.67] where mined; about 35 ft of overburden which in some places is about all muck and in others includes 2-5 ft of gravel at base. Gravel is subangular cobbles of greenstone, quartzite, carbonaceous shale, and chert and boulders of vein quartz. Bedrock shale (probably weathered slate), some of which is highly pyritiferous. Most of gold on or in bedrock; at one place 10% of gold mined was in nuggets worth $5 or more apiece (one was worth $300 [about 14.5 fine oz]); some spongy and little rounded and some well rounded; fineness about 838 parts Au and 152 parts Ag. In 1933 about 3.5 mi below head of creek there were extensive preparations for hydraulicking ground about 25 ft deep (2 ft of gravel beneath muck) that prospected as high as $1 per ft^2 of bedrock.

Smith, 1936 (B 868-A), p. 40 -- Dead work, 1934.

Smith, 1939 (B 910-A), p. 52 -- Mining, 1937.

Smith, 1939 (B 917-A), p. 50-51 -- Mining, 1938; plans to install dragline.

Smith, 1941 (B 926-A), p. 49-50 -- Has been placer mining. In 1939 there was preparatory work getting ready for dragline.

Joesting, 1942 (TDM 1), p. 34 -- Common placer cassiterite.

Smith, 1942 (B 933-A), p. 46 -- Mining, 1940; handicapped by lack of water (practically no rain by Sept. 7).

Joesting, 1943 (TDM 2), p. 20 -- Placer scheelite present.

Thorne and others, 1948 (RI 4174), p. 28 -- Quotation from Joesting, 1943 (TDM 2).

Cass, 1959 (I-289) -- Cassiterite present.

Chapman and others, 1963 (OF 239), p. 37 -- Mining in 1942 and at various times between 1946 and 1960.

p. 50 -- Very small amounts of sand-size cassiterite in placers. Gold moderately rough and fairly coarse (1/16 to 1/8 in in diameter; largest nugget reported worth $93 [gold at $35]). Much pyrite and a little galena in pay streak. 6 ft of gravel under 20-25 ft of muck. Gold in bottom 2 ft of gravel and top foot or so of bedrock. Top half foot of bedrock largely weathered to clay. Bedrock is dark-gray schist or phyllite; gravel is mainly pebbles and cobbles of bedrock and greenstone; a few granite pebbles.

Cobb, 1973 (B 1374), p. 170 -- Scheelite in concentrates.

Cobb, 1977 (OF 77-168B), p. 42, loc. 7 -- References to Mertie, 1936 (B 864-C); Chapman and others, 1963 (OF 239); Joesting, 1943 (TDM 2).

(Trail Cr.) -- Continued

Eberlein and others, 1977 (OF 77-168D), p. 98-99, loc. 54 -- Mining has been largely in upper 6-7 mi (most in uppermost 3 mi) of valley. Gold reported to occur as far as 17 mi from head. Ground generally about 25-35 ft deep; 1-6 ft of gravel; gold at base of gravel and in top of bedrock. Gold both rough and well rounded (2 sources ?); mostly fine with about 10% in 0.25-oz nuggets; largest nugget 15 oz. Reported yield was $3.75-$15.00 per ft^2 (gold at $104.70). Fineness about 838, silver 152. Pyrite abundant; minor amounts of galena and scheelite; cassiterite in sand-size grains. Bedrock phyllite, schist, and shaly slate; close to contact between greenstone and schist. Gravel is schist, phyllite, greenstone, quartzite, vein quartz, and rare granite. Some mining in 1940's; through 1975 in upper part.

(White Channel Cr.) Gold(?)

Ruby district Ruby (6.5, 6.6) approx.
64°22'N, 155°09'W approx.

Summary: Prospect shafts 150 ft deep found white quartz gravel, but apparently no workable pay streak. Known bedrock in area is gabbro. Coordinates above within 2 mi; location of prospecting on creek not given.

References

Mertie, 1936 (B 846-C), p. 157 -- Prospecting in 1914-15; holes sunk 150 ft to bedrock located a stratum of white quartz gravel, but apparently no workable pay streak.

Eberlein and others, 1977 (OF 77-168D), p. 90, loc. 54 -- Has been prospected, but apparently little or no gold was found. Known bedrock in area is gabbro. Muck and alluvium are reported to be 60 ft thick near head and more than 180 ft in lower course.

(Willow Cr.) Gold

Ruby district Ruby (3.25, 7.2)
MF-405, loc. 11 64°25'N, 155°35'W

Summary: Low-grade gold placers found about a mile from mouth of stream; bedrock 35 to more than 70 ft deep. Gold on clayey gravel false bedrock; gold fine, bright, and only slightly rounded; accompanied by considerable magnetite and few if any sulfide minerals. Bedrock in part at least, is graywacke; gravel mostly graywacke with minor amounts of quartz and diorite.

References

Mertie and Harrington, 1916 (B 642), p. 243 -- Some prospecting on headward tributaries; results not favorable. A few holes were sunk about a mile from mouth of stream; upper holes 35 ft deep; 1/2 mi downstream bedrock was not reached at 70 ft. Gold on false bedrock of clayey gravel; gold fine, bright, and only slightly rounded. Considerable magnetite; little if any sulfide.

Mertie and Harrington, 1924 (B 754), p. 94-95 -- Same as above.

Mertie, 1936 (B 864-C), p. 145-146 -- Low-grade placers have been found.
p. 154-155 -- Same data as in Mertie and Harrington, 1916 (B 642).

Cobb, 1977 (OF 77-168B), p. 42, loc. 9 -- Reference to Mertie, 1936 (B 864-C).

Eberlein and others, 1977 (OF 77-168D), p. 90, loc. 55 -- Data from Mertie and Harrington, 1916 (B 642). Probably most of mining was about 1915; none known in 1942-75. Bedrock, in part at least, graywacke; gravel is mainly graywacke with minor amounts of quartz and diorite.

(Willow Gulch) — Gold

Ruby district — Ruby (4.55, 2.2) approx.
MF-405, loc. 29 — 64°07'N, 155°24'W approx.

Summary: Tributary of Tamarack Cr. on which mining in 1914 was reported.

References

Brooks, 1915 (B 622), p. 57-58 -- Tributary of Tamarack Cr. on which there was mining in 1914.
Cobb, 1977 (OF 77-168B), p. 43, loc. 21 -- Reference to above.
Eberlein and others, 1977 (OF 77-168D), p. 89, loc. 50 -- Gold placer on head tributary of Tamarack Cr.

Synonyms, Owners, Operators, and Claim Names

Ahrens -- see (Birch Cr.)
Ahrens, Kenet & May -- see (Beaver Cr., trib. Big Cr.)
Bluebell -- see (Poorman Cr.)
Bohn -- see (Glacier Cr.)
Boland (, McFadden & Hendrickson) -- see (Beaver Cr., trib. Big Cr.)
(Boston Gulch) -- see (Boston Cr.)
Buckeye -- see (Long Cr.)
Burke -- see (Long Cr.)
Campbell -- see (Long Cr.)
Campbell & McFadden -- see (Midnight Cr.)
Charpie -- see (Birch Cr.)
Collins -- see (Tamarack Cr.)
Coyle (& Jensen) -- see (Poorman Cr.)
Dakota -- see (Long Cr.)
Deacon -- see (Long Cr.)
Eagle -- see (Monument Cr.)
Emil -- see (Long Cr.)
Erickson -- see (Flat Cr., trib. Long Cr.)
Fernander & Johnson -- see (Long Cr.)
Ferres -- see (Poorman Cr.)
Forno (& Coyle) -- see (Poorman Cr.)
Gold -- see (Poorman Cr.)
Greenstone -- see (Greenstone Cr.)
Haggstrom -- see (Straight Cr.)
Hard Times -- see (Solomon Cr.)
Hitt -- see (Moose Cr.), (Poorman Cr.)
(Irene Cr.) -- see (Glacier Cr.)
Jensen and associates -- see (Poorman Cr.)
Jones & Lundin -- see (Birch Cr.)
(Ketchum Cr.) -- see (Meketchum Cr.)
Keystone -- see (Long Cr.)
Knoll -- see (Poorman Cr.)
(Leo Gulch) -- see (Boston Cr.)
(Logger Gulch) -- see (Boston Cr.)
Lone Pine -- see (Long Cr.)
Long Creek Mining Co. -- see (Long Cr.)
Lucky -- see (Solomon Cr.)
Mascot -- see (Long Cr.)
Midnight Mining Co. -- see (Midnight Cr.)
Monaghan -- see (Poorman Cr.)
Monaghan, Stevens & Lohr -- see (Timber Cr.)
(New York Cr.) -- see (Beaver Cr., trib. Big Cr.)
Novikikat -- see (Long Cr.)
Nuamah -- see (Flint Cr.)
Odergaard & Ross -- see (Moose Cr.)
Pilbach & Pilbach -- see (Big Cr.), (Cox Pup)
Rae, Koskelo & Linn -- see (Trail Cr.)
Red Dog -- see (Meketchum Cr.)
(Reeley Cr.) -- see (Ruby Cr.)
Richardson -- see (Greenstone Cr.)

Shropshire -- see (Moose Cr.), (Poorman Cr.)
Shropshire & Pedretti -- see (Moose Cr.)
Shropshire, Gragan & Pedretti -- see (Moose Cr.)
(Snow Gulch) -- see (Long Cr.)
Stevens & Lohr -- see (Poorman Cr.)
Timber Creek Mining Co. -- see (Timber Cr.)
(Titna R. tributary) -- see (California Cr.)
Trail Creek Mining Co. -- see (Trail Cr.)
Vik & Sutro -- see (Spruce Cr.)
Vuicich -- See (Flat Cr., trib. Timber Cr.)
Walker -- see (Fifth of July Cr.)
Warner -- see (Glacier Cr.)
Washington -- see (Poorman Cr.)
Windy -- see (Long Cr.)
Yukon Gold Co. -- see (Greenstone Cr.)
Zaiser -- see (Greenstone Cr.)

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