

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUMMARY OF REFERENCES TO MINERAL OCCURRENCES
(OTHER THAN MINERAL FUELS AND CONSTRUCTION MATERIALS)
IN THE NOME QUADRANGLE, ALASKA

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By

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Open-file report 78-93

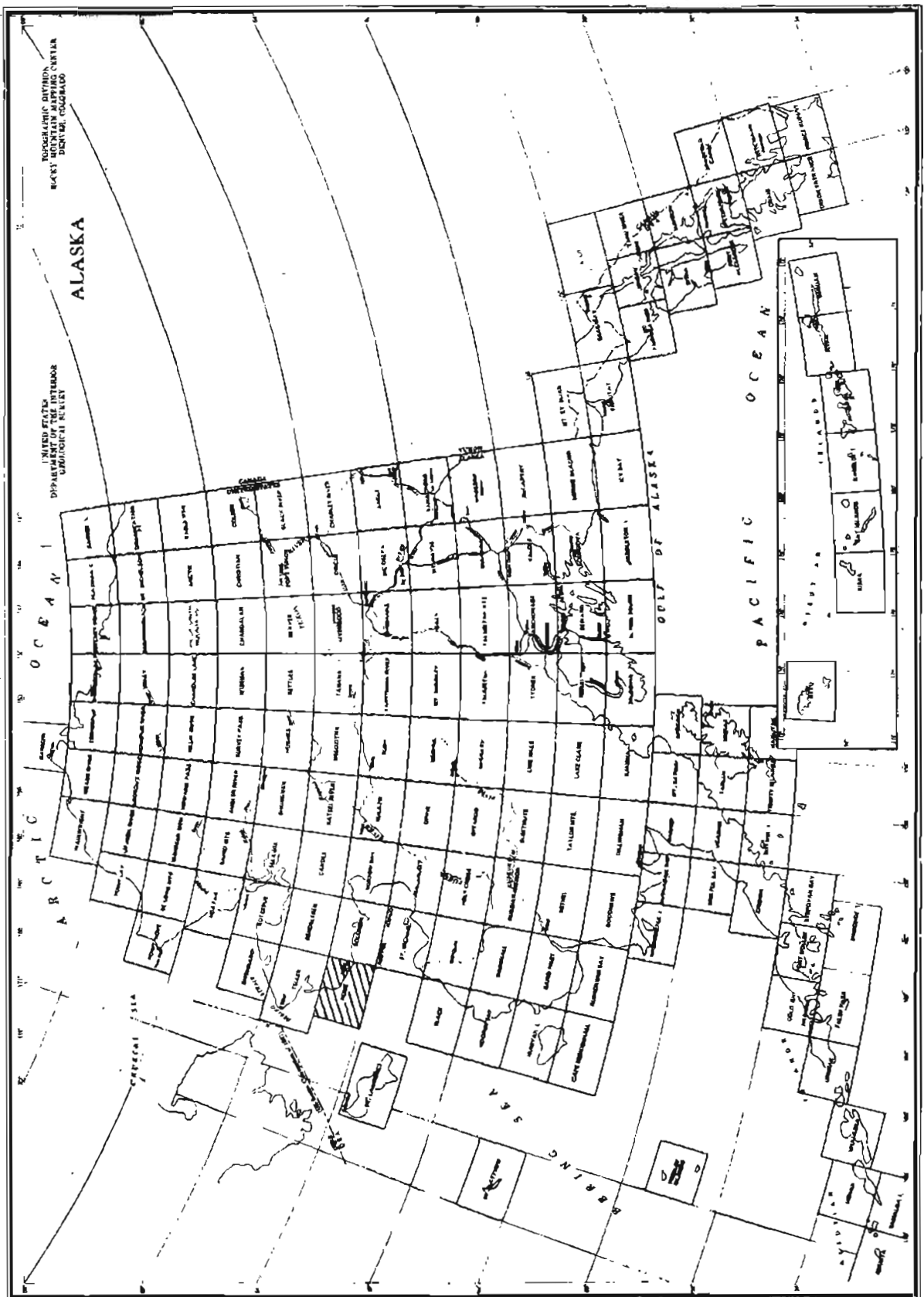
1978

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

Introduction

These summaries of references are designed to aid in library research on metallic and nonmetallic (other than mineral fuels and construction materials) mineral occurrences in the Nome quadrangle, 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 July 1, 1977, are summarized. 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 State of Alaska Division of Geological and Geophysical Surveys and its predecessor State and Territorial agencies are not included.

This report is divided into three parts: a section made up of summaries of references arranged alphabetically by occurrence name; a section that lists synonyms for names in the first section, claim names, and the names of operators and owners of mines and prospects; and a section that lists, by author, all references summarized in the first section.



Index map

Summaries of References

For each mineral occurrence there is a page that gives the name of the occurrence; the mineral commodities present (listed alphabetically for metallic commodities and then for nonmetallic commodities; the mining district (Ransome and Kerns, 1954) in which the occurrence is located; the name of the 1:250,000-scale topographic quadrangle (Nome); coordinates (as described by Cobb and Kachadoorian, 1961, p. 3-4); the metallic mineral resources map number (MF-463) and the occurrence number on that map if the occurrence is shown; and the latitude and longitude of the occurrence. These data, presented at the top of the page, are followed by a short, general summary of the published information on the occurrence. This is followed (continued on additional pages, if necessary) by more detailed summaries, arranged chronologically, of all references to the occurrence. Material in brackets is interpretive or explanatory and is not in the summarized reference.

Proper names of mines, prospects, and other mineral occurrences are given if such names appear in the reports summarized. 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 a part of a proper name is not always used in a reference, that part of the name is shown in parentheses. This is most common in company names and in place names with minor variations in spelling.

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. Abbreviations used are:

B	U.S. Geological Survey Bulletin
BMB	U.S. Bureau of Mines Bulletin
C	U.S. Geological Survey Circular
GR	Alaska Division of Geological and Geophysical Surveys (and predecessor State agencies) Geologic Report
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 Alaskan Geology Branch 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
USEM OF	U.S. Bureau of Mines Open-file Report

Summaries are as I made them while reading the cited reports. I made no attempt to use complete sentences and did not edit for grammatical consistency, although I have tried to edit out ambiguities.

References cited only in these introductory paragraphs are:

Cobb, E. H., and Kachadoorian, Reuben, 1961, Index of metallic and non-metallic mineral deposits of Alaska compiled from published reports of Federal and State agencies through 1959: U.S. Geol. Survey Bull. 1139, 363 p.

Ransome, A. L., and Kerns, W. H., 1954, Names and definitions of regions, districts, and subdistricts in Alaska (used by the Bureau of Mines in statistical and economic studies covering the mineral industry of the Territory): U.S. Bur. Mines Inf. Circ. 7679, 91 p.

(Albion Cr.)

Gold

Nome district
MF-463, loc. 42

Nome (19.5, 11.3)
64°37'N, 165°25'W

Summary: Quartz vein contained gold worth \$120 a ton (gold at \$20.67 an ounce); vein pinched out.

Cathcart, 1922 (B 722), p. 247 -- Shaft said to be 50 ft. deep was sunk on a quartz vein that pinched out; assays said to have indicated \$120 a ton in gold. Country rock is chlorite schist.

Berg and Cobb, 1967 (B 1246), p. 124 -- Vein prospected primarily for gold.
Hummel, 1975 (OF 75-2) -- Reference to Cathcart, 1922 (B 722), p. 247.

(Alpha Cr.)

Gold

Nome district
MF-463, loc. 99

Nome (18.85, 11.3)
64°37'N, 165°30'W

Summary: Placer gold has been mined. Gold probably of local derivation; possibly from mineralized schist, as quartz veins cutting schist do not seem to carry any gold.

Cathcart, 1922 (B 722), p. 249 -- Has been considerable production of placer gold. Bedrock is quartz-mica schist cut by many quartz stringers containing both fresh and decomposed sulfides; no gold in a composite sample of veins. Gold is probably of local derivation; may have come from mineralized schist rather than quartz veins.

Hummel, 1975 (OF 75-2)--Reference to Cathcart, 1922 (B 722), p. 249.

American

Gold, Iron

Nome district

Nome (16.3, 13.85)

MF-463, loc. 1

64°47'N, 165°50'W

Summary: Gossan developed along steep faults that cut marble of upper plate of a thrust that superposed marble on schist. Surface rubble contains limonite, dolomite, vein quartz, and silicified marble. Gold (about 0.6 oz. per ton) in one sample. An estimated 40,000 long tons of rubble contains 20%-40% iron.

Eakin, 1915 (B 622), p. 365 -- 4 claims at base of a limestone ridge. Said to cover an "iron-ore bed" over 50 acres in extent.

Mertie, 1918 (B 662), p. 446 -- Group of iron claims; no recent work as of 1916.

Cathcart, 1922 (B 722), p. 261 -- Quotation from Eakin, 1915 (B 622), p. 365.

Mulligan and Hess, 1965 (USBM OF 8-65), p. 17-18 -- Quotation from Eakin, 1915 (B 622), p. 365.

p. 18 -- Residual ore estimated to be 40,000 long tons of 20-40% iron.

p. 25 -- May be on an anticline parallel to the one most of the other iron deposits are on.

Berg and Cobb, 1967 (B 1246), p. 126 -- Similar to, but smaller, probably leaner, and less extensively exposed than Monarch.

Herreid, 1970 (GR 36), p. 20 -- In marble of upper plate of a thrust fault along steep fault(s).

p. 31-34 -- Patch of gossan rubble up to 300 ft. wide extends for 1,800 ft. along a contact (thrust fault) between marble (above) and schist (beneath). Steep faults have cut thrust sheet into many blocks. Surface rubble along steep faults contains concentrations of dolomite, limonite, vein quartz, and silicified marble. A sample collected as part of a geochemical traverse contained \$2.10 a ton in gold [at \$35 an ounce]. The highest gold value from any of the gossans in the Sinuk area.

Hummel, 1975 (OF 75-2) -- References to several of above descriptions.

(Anvil Cr.)

Antimony, Copper, Gold, Lead, Silver,
Tungsten

Nome district
MF-463, locs. 48, 102

Nome (19.35-19.9, 10.1-10.8)
64°33'-64°36'N, 165°22'-165°26'W

Summary: Gold discovered in creek gravels, 1898. Bedrock mainly schist; some limestone. Many quartz and calcite veins, most of which are along faults or shear zones; some carry sulfides (mainly stibnite, some of which was mined from the Widstead tunnel, pyrite, arsenopyrite, chalcopyrite, and galena) and visible gold, some of which may have been mined; some vein material contained (determined by assay) as much as \$72 in gold (at \$20.67 an ounce) and \$28 in silver (at about 1920 price) per ton. Stream placers were very rich; production during first 10 years of mining was from gravel that averaged \$5-\$6 in gold (at \$20.67 an ounce) per cubic yard. Some gold very coarse (nuggets weighing more than 100 oz. reported). Stream and bench placers in part of stream course above coastal plain; gold derived from local sources and from high gravels of Dexter Hill. Placer concentrates contained gold, magnetite, garnet, and much scheelite. Contributed gold to richest parts of beach and coastal plain deposits. Placer mining was by all methods from gold pan to dredge (1922-29). Includes references to: Banger Dredging Co., Hendrickson (, Kotovik & Stipek), McIntosh, Olsen, Widstead, Widstedt, Winsted. See also: (Dexter Hill), (Nome beaches).

Schrader and Brooks, 1900, p. 17 -- Nuggets weighing 20-25 oz. have been found (1899).

p. 19 -- Platinum reported by a placer mine manager.

p. 31-32 -- Gold discovered, July, 1898 by prospectors storm bound near mouth of Snake R. on their way to mouth of Sinrock [Sinuk] R. Anvil and neighboring creeks staked about the end of September, followed by a stampede from areas near Golovnin and St. Michael. Too late in the season for much mining.

Brooks and others, 1901, p. 25 -- Quotation from Schrader and Brooks, 1900, p. 31-32.

p. 69 -- Estimated placer gold output in 1900 was \$1,750,000 [84,664 fine oz.].

p. 71-74 -- On divide between Anvil and Glacier Creeks quartz veins in schist contain arsenopyrite, chalcopyrite, pyrite, galena, a little stibnite and visible gold. Shaft sunk 30 ft.; assays of samples showed 2.78-9.24 oz. Ag and 0.32-1.46 oz. Au per ton. Scheelite in sluice boxes. Boulders in Quartz Gulch are antimony-lead sulfide and contain as much as 14.25 oz. Ag per ton. Both creek and bench gravels contain gold; only creek gravels have been mined. Production through 1900 was estimated at \$3,000,000 [more than 145,000 fine oz.]. All of creek upstream from coastal plain has been mined; creek bottom 500 ft. wide to within a mile of head; bedrock schist; gravel 3-5 ft. thick beneath 2-3 ft. of muck and clay. Gold throughout gravel, in top 1-2 ft. of weathered bedrock; most on or in bedrock. Gold both coarse

(Anvil Cr.) -- Continued

- (nuggets up to \$300 in value) and fine; some with quartz and schist fragments attached. Concentrates contain magnetite, garnet, and scheelite.
- Brooks, 1903 (B 213), p. 45 -- Mining in bench gravels on both sides of creek, 1902.
- Brooks, 1904 (B 225), p. 53 -- One or more hydraulic lifts installed, 1903.
- Brooks, 1905 (B 259), p. 21 -- Steam shovel in use; hydraulic stripping of overburden; 1904.
- Purington, 1905 (B 263), p. 56, 86-87, 150, 191 -- Data on mining methods.
p. 209 -- Gold from bench worth \$18.90 and from creek \$18.75 an ounce.
- Moffit, 1906 (B 284), p. 134-135 -- Bench mining and reworking tailings, 1905.
- Moffit, 1907 (B 314), p. 140-141 -- Mining, 1906.
- Collier and others, 1908 (B 328), p. 169-170 -- Has been very little mining in part of creek in coastal plain; bedrock very deep.
p. 186-192 -- Upstream from coastal plain creek is entrenched 20-30 ft. in valley floor; bench on east side only. Bedrock schist with many mineralized quartz and calcite veins; none minable discovered as of 1903, though some contain sulfides and others gold. Floodplain from 50 to 300 ft. wide. Creek gravels have all been worked; present [1903] mining on benches east of creek. A nugget weighing about 170 oz. was found; contains considerable quartz. Above Specimen Gulch a galena boulder weighing about 40 lbs. was found in pay gravel.
- Smith, 1908 (B 345), p. 216 -- Mining, 1907.
p. 232 -- Work has been done on quartz lodes on west side of creek. Country rock is black schist. Most of occurrences contain only quartz (some iron stained), but a few carry pyrite and a little gold.
- Smith, 1909 (B 379), p. 279-280 -- Mining, 1908.
p. 282-283 -- Above Specimen Gulch several holes were sunk in 1908 on a vein carrying considerable undistorted bladed stibnite. In area veins are as much as 18 in. thick, but most are thinner.
- Moffit, 1913 (B 533), p. 79-83 -- During first 5 years of mining production was \$1,000,000 [about 48,400 fine oz.] per year from part of stream between Moonlight Springs and Nekula Gulch. Bedrock is various kinds of schist; gravels also contain granite cobbles and boulders. Bench on east side of creek contains old buried channels. In present channel gravels are 2-5 ft. thick and on bench as much as 25 ft. thick. Placers near head contain gold brought by Nekula Gulch from high bench gravels [Dexter Hill]; gold from near Discovery (near point where creek emerges from hills) is of local derivation; some large nuggets (one weighed 182 oz., including some quartz and was calculated to be worth \$2,660 [about 128.7 fine oz.]). Some of gold was reconcentrated from bench gravels. Auriferous gravels not only filled old channels, but also spilled over the sides, so the minable widths were much greater than the widths of the channels. Concentrates contain gold, magnetite, garnet, and scheelite; gold 0.890 fine.
- Chapin, 1914 (B 592), p. 389 -- Placer mining, 1913.

(Anvil Cr.) -- Continued

- Chapin, 1914 (B 592), p. 401-402 -- Near mouth of Quartz Gulch shallow surface cuts have been made on a crushed zone in schist with reticulating quartz and carbonate (dolomite?) veins that carry arsenopyrite and younger pyrite; [no data on possible valuable metal content]. Irregular body of quartz in schist on ridge between Anvil Cr. and Snake R. opened by shallow surface cut; no visible gold or sulfides.
- Eakin, 1915 (B 622), p. 369-370 -- Mining, 1914.
- Brooks, 1916 (B 642), p. 71 -- Antimony lodes on Anvil Cr. were prospected, 1915.
- Brooks, 1916 (B 649), p. 50 -- Quotation from Brooks and others, 1901, p. 71.
- p. 56-57 -- Reference to and quotation from Smith, 1909 (B 379), p. 282-283. Work on these or nearby prospects reported, 1915.
- Smith, 1917 (BMB 142), p. 27 -- Mining, 1915.
- Mertie, 1918 (B 662), p. 430-432 -- There has been lode exploration on several prospects between mouths of Specimen and Quartz Gulches. Most are in schist cut by calcite and quartz veins; sulfides include stibnite (some said to have been mined from Widstead tunnel), pyrite, and arsenopyrite. Assays indicate as much as \$21.60 in gold and \$2.05 in silver per ton. One prospect (McIntosh) is on a contact between schist and limestone. Deposits are along faults or shear zones in most instances. Total length of shafts and drifts was several hundred feet in 1916.
- p. 440 -- Reference to p. 430. 3 tons stibnite said to have been mined.
- Mertie, 1918 (B 662), p. 454-455 -- Placer mining, 1916.
- Cathcart, 1920 (B 712), p. 189 -- Placer mining, 1918.
- Cathcart, 1922 (B 722), p. 184 -- Stibnite with gold is present at several places on Anvil Cr.
- p. 225 -- Kidneys of stibnite with very little quartz in Winsted tunnel.
- p. 238-240 -- Several lode prospects along Anvil Cr. consist of quartz or quartz-calcite veins in schist, some with mineralized limestone also. Most contain arsenopyrite, pyrite, and stibnite (some of which has been mined). Assays indicate precious-metal contents as high as \$72 in gold and \$28 in silver to the ton, but most are much lower. References to and quotation from Mertie, 1918 (B 662), p. 430-432.
- Brooks and Capps, 1924 (B 755), p. 14 -- Dredge operated, 1922.
- Brooks, 1925 (B 773), p. 21 -- Example of buried bench placer.
- p. 27 -- Dredge operated, 1923.
- Smith, 1926 (B 783), p. 16, 18 -- Mining, including a dredge, 1924.
- Smith, 1930 (B 810), p. 34, 40 -- Dredge operated, 1927.
- Smith, 1930 (B 813), p. 39, 48 -- Dredge operated, 1928.
- Smith, 1932 (B 824), p. 44, 53 -- Dredge finished mining, 1929.
- Smith, 1937 (B 880-A), p. 52-53 -- Prospecting and mining of old high-level channels, 1935.
- Smith, 1941 (B 926-A), p. 60 -- Old channels near Specimen Gulch mined, 1939.
- Smith, 1942 (B 933-A), p. 57 -- Old channels near Specimen Gulch mined, 1940.

(Anvil Cr.) -- Continued

Anderson, 1947 (TDM 5-R), p. 11-12 -- Reference to B 379. Stibnite veins in shear zone in schist opposite mouth of Specimen Gulch, up to 18 in. wide. Stibnite in other lodes on Anvil Cr.

p. 27 -- Lead minerals in quartz veins.

Thorne and others, 1948 (RI 4174), p. 32 -- Appreciable scheelite in dredge concentrates were discarded.

Hummel, 1960 (P 400-B), p. B35 -- Lode deposits localized in and near a northeastward-striking fault zone exposed in valley of Anvil Cr. Gold in placers of Anvil Cr. (richest in district) and in the richest parts of the buried beaches was derived from similar lodes now removed by erosion.

Hummel, 1962 (MF-247), locs. 5, 12, 19, 20 -- Antimony lode prospects.

Berg and Cobb, 1967 (B 1246), p. 122 -- Veins were prospected for gold and other metals.

p. 124 -- Lodes in Anvil Cr.-Dexter Cr. area are in schist and, less commonly, in limestone; iron-stained quartz-feldspar-calcite veins containing gold and sulfides. Stibnite mined from a vein in about 1900; some gold may also have been mined. Assays (probably of selected material) indicate as much as \$72 a ton in gold, \$28 in silver, and some copper.

Koschmann and Bergendahl, 1968 (P 610), p. 18 -- Important stream placers.

Cobb, 1973 (B 1374), p. 82-82 -- Placer gold discovered, 1898. Stream and bench deposits that were worked during the first 10 years of mining probably averaged at least \$5-\$6 (gold at \$20.67 per oz.) a cubic yard and locally were 10 times as rich.

p. 86 -- High bench placers [Dexter Hill] probably contributed much of the gold in the rich stream placers. A diffuse pay streak that was once considered to be an old channel of Anvil Cr. across the coastal plain is now thought to be on a marine abrasion platform.

Sainsbury and others, 1969 (OF 377), p. 7 -- Reference to Hummel, 1960 (P 400-B), p. B35.

Hummel, 1975 (OF 75-2) -- Reference to Brooks, 1916 (B 649), p. 50, 56-57; Cathcart, 1922 (B 722), p. 238-240; Hummel, 1962 (MF-247), locs. 5, 12, 19, 20.

(Arctic Cr.)

Gold

Nome district

Nome (16.8-17.1, 11.35-11.55)

MF-463, loc. 78 in part

64°38'N, 165°43'-165°46'W

Summary: Was placer mining in 1905 and dredging from 1914 to 1922 (dredge probably did not operate every year, as no activity was reported 1915-18).

Moffit, 1906 (B 284), p. 136 -- Mining, 1905.

Eakin, 1915 (B 622), p. 367 -- New dredge operated, 1914

Harrington, 1921 (B 714), p. 233 -- Dredge operated, 1919.

Brooks, 1922 (B 722), p. 63 -- Dredge operated, 1920.

Brooks and Capps, 1924 (B 755), p. 14 -- Dredge operated, 1922.

Herreid, 1970 (GR 36), p. 20 -- Minor placer workings indicate an unknown mineralized area in drainage.

Cobb, 1973 (B 1374), p. 89 -- Has been placer mining.

Hummel, 1975 (OF 75-2) -- References to Brooks, 1922 (B 722), p. 63; and to maps in Herreid, 1968 (GR 29) and Herreid, 1970 (GR 36) that show locations of mined areas.

(Aurora Cr.)

Copper, Lead, Zinc

Nome district
MF-463, loc. 69

Nome (17.65-18.2, 12.55-13.3)
64°42'-64°45'N, 165°35'-165°39'W

Summary: Widely distributed schist float contains considerable sphalerite and a little galena and chalcopyrite. Low gold and silver contents; no more than 0.02 oz. per ton gold and 0.4 oz. per ton silver. Float seems to have been derived from mineralized schist beneath a thrust near a greenstone intrusive body. Discovered by use of stream-sediment sampling.

Herreid, 1968 (GR 29), p. 1-2 -- Float over an area 7,000 ft. long, mainly on hillside east of Aurora Cr., contains much sphalerite. Found by stream-sediment sampling. Float is dolomite-quartzite-sphalerite; schist partly replaced by quartz, dolomite, and sulfides; schist impregnated with quartz and pyrite; and schist with disseminated pyrite, chalcopyrite, and galena; and dolomite.

Herreid, 1970 (GR 36), p. 9 -- Origin of ore deposit closely related to that of dolomite.

p. 14 -- Strong stream-sediment geochemical anomaly in Aurora Cr.

p. 18 -- Large zinc anomaly in stream sediment collected at mouth of creek.

p. 20 -- Deposit is in schist below thrust contact with marble; near greenstone intrusive(s). Quartz-dolomite-sulfide replacement of calcareous layers in schist.

p. 34-36 -- Essentially the same data as Herreid, 1968 (GR 29), p. 1-2. Highest gold assay was 0.02 oz. per ton; highest silver assay was 0.4 oz. per ton.

Cobb, 1973 (B 1374), p. 89 -- Widely distributed float contains considerable sphalerite and a little galena and chalcopyrite.

(Balto Cr.)

Gold, Tungsten

Nome district
MF-463, loc. 95

Nome (19.15, 11.55)
64°38'N, 165°27'W

Summary: Narrow gulch cut in schist. Concentrates contain a little gold and scheelite. Gold mining reported in 1903 and 1913.

Collier and others, 1908 (B 328), p. 196 -- One claim being mined, 1903; small production.

Moffit, 1913 (B 533), p. 87 -- Narrow gulch cut in schist of Mt. Brynteson.

A little gold has been recovered from shallow gravels.

Chapin, 1914 (B 592), p. 389 -- Hydraulic mining, 1913.

Coats, 1944 (OF 17), p. 6 -- Negligible amounts of placer scheelite.

Thorne and others, 1948 (RI 4174), p. 33-34 -- Small amounts of gold and scheelite.

(Bangor Cr.)

Gold, Tungsten

Nome district
MF-463, loc. 92

Nome (18.85-19.15, 12.35-12.55)
64°41'-64°42'N, 165°24'-165°29'W

Summary: Narrow valley cut in schist and minor interbedded limestone. Granite boulders in creek gravels. Placer mining intermittently from as early as 1906 to as recently as 1918; dredge operated for several years. Gold generally fine, but a few nuggets worth \$10-\$15 (gold at \$20.67 per fine oz.); scheelite in concentrates.

Brooks, 1911 (B 480), p. 42 -- Mining, 1910.

Moffit, 1913 (B 533), p. 87 -- Flows in narrow V-shaped valley cut in schist and minor interbedded limestone. Gravel mainly schist and quartz; some granite boulders. Mining has been near mouth of Butterfield Canyon. Gold generally fine, but a few nuggets worth \$10-\$15 were recovered; gravel said to yield \$2.50 a cubic yard. Scheelite and hematite present.

Eakin, 1915 (B 622), p. 367 -- New dredge built, 1914.

Smith, 1917 (BMB 142), p. 27 -- Mining, 1915.

Mertie, 1918 (B 662), p. 452, 455 -- Mining, including a dredge, 1916.

Cathcart, 1920 (B 712), p. 187-188 -- Mining, including a dredge, 1918.

Coats, 1944 (OF 17), p. 6 -- Negligible amounts of placer scheelite below Butterfield Canyon.

Thorne and others, 1948 (RI 4174), p. 33 -- Was dredged for about 1-1/2 miles. Scheelite present.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 87.

(Banner Cr.)

Gold

Nome district
MF-463, loc. 113

Nome (20.1-20.25, 11.8)
64°39'N, 165°19'W

Summary: Was small-scale mining before 1905. Bedrock schistose greenstone and limestone.

Brooks and others, 1901, p. 79 -- Bedrock is schistose greenstone and limestone. Colors have been found.

Collier and others, 1908 (B 328), p. 181 -- Quotation from Brooks and others, 1901, p. 79. No mining in 1903.

Smith, 1908 (B 345), p. 234 -- Vein reported; no data on possible metallic content.

Moffit, 1913 (B 533), p. 99 -- Has been small-scale mining below Slate Cr. [as of 1905].

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 99.

(Basin Cr.)

Gold, Tungsten

Nome district
MF-463, loc. 112

Nome (20.35-20.65, 12.4-12.5)
64°41'N, 165°15'165°17'W

Summary: Bedrock mainly limestone with some interbedded schist. Gold in coarse gravel and crevices in bedrock. Concentrates contain ilmenite, hematite, and a little scheelite. Mining reported in early 1900's and 1960.

Brooks and others, 1901, p. 79 -- Limestone at mouth; greenstone and limestone upstream. Gravels 10 ft. thick. Gold present; development on one claim.

Purington, 1905 (B 263), p. 150 -- Data on mining methods.
p. 209 -- Gold worth \$18.00 an ounce.

Collier and others, 1908 (B 328), p. 174-175 -- Bedrock mainly limestone with some interbedded schist. Gold in coarse gravel and crevices in bedrock. Some of gold crystalline. Concentrates contain ilmenite, hematite, and scheelite. Pay streak about 150 ft. wide and said to extend along creek for about 2 mi. Mining, 1903.

Moffit, 1913 (B 533), p. 99-100 -- Essentially the same data as in Collier and others, 1908 (B 328), p. 174-175. Total production probably did not exceed \$30,000 [about 1,450 fine oz.].

Coats, 1944 (OF 17), p. 6 -- Negligible amounts of placer scheelite present.

Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 99-100; and to Alaska Div. Mines and Minerals Report for 1960, which reports that a home-made dredge was operated in 1960.

(Bear Cr.) (Gulch)

Gold

Nome district

Nome (20.0, 10.3)

MF-463, loc. 125

64°34'N, 165°21'W

Summary: A tributary of Dry Cr.; heads in high gravels of Dexter Hill.
Was a little mining in about 1900 and in 1918.

Brooks and others, 1901, p. 76 -- Westerly tributary of Dry Cr., head in high
gravels. Has been mining [as of 1900].

Cathcart, 1920 (B 712), p. 189 -- Open-cut mining, 1918.

(Boer Cr.)

Gold

Nome district
MF-463, loc. 81

Nome (20.15, 15.65)
64°52'N, 165°18'W

Summary: Bedrock is chloritic and graphitic schists; many glassy quartz veins. About 135 fine oz. gold recovered from a narrow pay streak in creek, 1901-02. Some gold also recovered from a residual placer in 1906.

Collier and others, 1908 (B 328), p. 182 -- Bedrock is green chloritic schist with many veins of clear glassy quartz. Narrow paystreak in creek bed. Gravel 18 in. to 8 ft. thick. Production, 1901-02, was about \$2,800 [about 135 fine oz.]. No mining in 1903.

Moffit, 1913 (B 533), p. 76 -- Hydraulic plant recovering gold from decomposed graphitic schists [1906]; residual placer.

p. 100 -- Most of data from Collier and others, 1908 (B 328), p. 182.

Cobb, 1973 (B 1374), p. 83 -- Gold has been recovered from a residual placer.
Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 76, 100.

(Bonanza Gulch)

Gold

Nome district
MF-463, loc. 101

Nome (19.4, 10.85)
64°36'N, 165°25'W

Summary: Pay streak ran into that of Glacier Cr. Gold fine and well rounded. Mined out before 1906.

Purington, 1905 (B 263), p. 209 -- Gold worth \$18.59 an ounce.
Collier and others, 1908 (B 328), p. 194-195 -- Gulch about 1/2 mi. long.
Gold fine and well rounded. Pay streak seems to run into that of
Glacier Cr. Gold in 2-1/2 ft. of gravel beneath 6-7 ft. of muck and
sandy clay. Mining, 1903.
Moffit, 1913 (B 533), p. 86 -- Same data as in Collier and others, 1908
(B 328), p. 194-195. Mined out before 1906.
Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 86.

(Bonita Cr.)

Antimony, Gold

Nome district
MF-463, loc. 40

Nome (20.9, 12.4)
64°40'N, 165°13'W

Summary: Lenses and kidneys of almost pure stibnite carry gold. 15-ft. shaft was sunk sometime before 1916. No record of more recent work. Includes references to stibnite east of Nome R. near head of Osborn Cr. drainage basin.

Smith, 1908 (B 345), p. 245 -- Near head of Osborn Cr. drainage basin.

Stibnite in lenses and kidneys. A sample was 6 in. wide, 8 in. thick, and a foot long; almost pure stibnite. Also carries gold.

Moffit, 1913 (B 533), p. 134 -- Stibnite reported from Osborn Cr.

Brooks, 1916 (B 649), p. 58-59 -- Quotation from Smith, 1908 (B 345), p. 245.

Mertie, 1918 (B 662), p. 440 -- Shaft has been sunk 15 ft. Stibnite said to be exceptionally pure and to carry abnormally large quantities of gold.

Cathcart, 1922 (B 722), p. 185 -- Reference to Brooks, 1916 (B 649), p. 58-59.

Anderson, 1947 (TDM 5-R), p. 11 -- Small lenses of gold-bearing stibnite.

Berg and Cobb, 1967 (B 1246), p. 124 -- Stibnite- and gold-bearing veins have been explored.

Hummel, 1975 (OF 75-2) -- Reference to Brooks, 1916 (B 649), p. 58-59, and Mertie, 1918 (B 662), p. 440.

Boulder

Antimony, Gold, Tungsten

Nome district

Nome (18.8, 11.7)

MF-463, loc. 37

64°39'N, 165°30'W

Summary: Tunnel driven 92 ft. on a shear zone in schist near a schist-limestone contact. Quartz veins contain pyrite, arsenopyrite, stibnite and scheelite and, by assay, gold. About 50 lbs. of stibnite was mined in about 1916 from an open cut near the mouth of the tunnel. See also (Boulder Cr., trib. Snake R.).

Mertie, 1918 (B 662), p. 427-429 -- As of November, 1916, a tunnel had been driven 92 ft. roughly parallel to cleavage in altered schist cut by numerous veins and lenses of white, opaque quartz and thin stringers of limonitic material. Scheelite crystals in quartz. Pyrite and arsenopyrite in samples from end of tunnel; about 50 lbs. of stibnite mined from an open cut near mouth of tunnel. If assay data are reliable, there seems to be a good-sized body of low-grade gold ore. Deposit seems to be in a shear zone.

p. 440 -- Reference to p. 427.

Cathcart, 1922 (B 722), p. 184 -- Reference to Mertie, 1918 (B 662), p. 440.

p. 249-252 -- Quotation from Mertie, 1918 (B 662), p. 427-429.

Schist is both underlain and overlain by limestone. Deposit is in a
- shear zone in schist near a contact between limestone and schist. Pyrite and arsenopyrite are

Coats, 1944 (OF 17), p. 5 -- Reference to Mertie, 1916 (B 662), p. 428. Use of an ultraviolet lamp underground disclosed no scheelite, 1943.

Hummel, 1962 (MF-247), loc. 2 -- Gold lode on Boulder Cr. [May not be same as Boulder lode.]

(Boulder Cr., trib. Sinuk R.)

Gold

Nome district
MF-463, loc. 60

Nome (14.95, 12.5)
64°42'N, 166°00'W

Summary: Small production of gold, 1902-03.

Collier and others, 1908 (B 328), p. 216-217 -- Small production in 1902 and 1903 reported.

Hummel, 1975 (OF 75-2) -- Reference to Collier and others, 1908 (B 328), p. 216-217.

(Boulder Cr., trib. Snake R.)

Antimony, Bismuth, Gold, Tungsten

Nome district

Nome (18.6-18.8, 11.7-11.8)

MF-463, locs. 37, 94

64°39'N, 165°30'-165°31'W

Summary: Rises in limestone and schist terrane where there are auriferous quartz veins \$3-\$4 a ton in gold (at \$20.67 per fine oz.). Near mouth of Twin Mountain Cr. tunnels were driven on quartz-calcite veins containing pyrite and arsenopyrite; scheelite reported. Some of placer gold probably immediately from lodes; some derived from older terrace gravels. Concentrates contained hematite, magnetite, ilmenite, stibnite, native bismuth, scheelite, and gold. No scheelite above mouth of Twin Mountain Cr. Placer gold mining from 1903 or earlier to as recently as 1924. See also: Boulder, Dakota.

Collier and others, 1908 (B 328), p. 196 -- Upstream from valley floor of Snake R. flows in sharp valley cut in limestone and schist. Several quartz veins as much as 5 in. wide carry as much as \$3-\$4 a ton in gold. Miners in 1903 made no more than wages. Gold coarse. Concentrates contain hematite, magnetite, ilmenite, stibnite, and native bismuth.

Brooks, 1911 (B 480), p. 42 -- Mining, 1910.

Moffit, 1913 (B 533), p. 87 -- Has been small production of placer gold.

p. 131 -- Samples from quartz veins (largest 5 in. thick) near mouth contained \$3-\$4 a ton in gold.

Chapin, 1914 (B 592), p. 389 -- Hydraulic, 1913.

Eakin, 1915 (B 622), p. 369-370 -- Mining, 1914.

Brooks, 1916 (B 642), p. 71 -- Gold-bearing vein found, 1915.

Smith, 1917 (BMB 142), p. 27 -- Mining, 1915.

Mertie, 1916 (B 662), p. 429 -- In a pit in creek bed on claim No. 1 below Discovery a vein of white quartz is in an iron-stained fault zone in schist. Material in fault zone pans gold and very rich pieces of gold-bearing quartz have been found. Another cut exposed white quartz containing pyrite and pyrrhotite.

Mertie, 1918 (B 662), p. 455 -- Placer mining, 1916.

Cathcart, 1920 (B 712), p. 188 -- Placer mining, 1918.

Cathcart, 1922 (B 722), p. 248 -- Quotation from Moffit, 1913 (B 533), p. 131.

p. 250-252 -- Quotation from Mertie, 1918 (B 662), p. 429. Tunnels near mouth of Twin Mountain Cr. were driven on quartz-calcite veins. Pyrite and arsenopyrite present; scheelite reported. Placers below Boulder lode contain rough gold thought to have been derived from Boulder lode; gold above lode is fine and thought to have been derived from terrace deposits.

Smith, 1926 (B 783), p. 16 -- Mining, 1924.

Coats, 1944 (OF 17), p. 6 -- Negligible amounts of placer scheelite below Twin Mountain Cr.; none above Twin Mountain Cr.

Anderson, 1947 (TDM 5-R), p. 12 -- Stibnite in lodes.

p. 42-43 -- Scheelite in gravels and quartz veins.

Thorne and others, 1948 (RI 4174), p. 33 -- Was hydraulic mining below mouth of Twin Mountain Cr. Scheelite present.

(Boulder Cr., trib. Snake R.) -- Continued

Berg and Cobb, 1967 (B 1246), p. 124 -- Vein(s) prospected primarily for gold.

Cobb, 1973 (B 1374), p. 89 -- Stibnite and bismuthinite in placers.

Hummel, 1975 (OF 75-2) -- References to Collier and others, 1908 (B 328), p. 196; Anderson, 1947 (TDM 5-R), p. 42.

(Bourbon Cr.)

Gold

Nome district
MF-463, loc. 128

Nome (19.55-19.95, 9.25-9.95)
64°30'-64°33'N, 165°21'-165°25'W

Summary: Short stream entirely in coastal plain. Gold concentrated from tundra gravels and from old beaches. Successful dredging began about 1909. See also (Nome beaches).

Brooks and others, 1901, p. 69 -- Production in 1900 was \$5,000 [about 240 fine oz.].

p. 83-84 -- Stream entirely in coastal plain. Gold in gravel pay streaks on clay false bedrock.

Purington, 1905 (B 263), p. 165 -- Small land dredge running on 40-ft. track; experimental work; 1904.

Moffit, 1906 (B 284), p. 135 -- Mining, 1905.

Moffit, 1907 (B 314), p. 141 -- Mining, 1906.

Collier and others, 1908 (B 328), p. 166-168 -- Flows entirely in coastal plain. Gold concentrated from tundra gravels. Total production from Bourbon Cr. and its tributary Holyoke Cr. to 1903 probably was about \$140,000 [about 1,935 fine oz.]. Attempts to use 3 small dredges in 1903 were unsuccessful (dredges too small and light).

Henshaw, 1910 (B 442), p. 357-358 -- Dredge installed in 1908 sunk, but was raised and rebuilt in 1909; not a very successful season because of shortcomings of the dredge and frozen ground. Dredge electric powered.

Smith, 1912 (B 520), p. 342 -- Dredge operated, 1911.

Moffit, 1913 (B 533), p. 77 -- Important productive stream placer.

p. 89-90 -- Gold derived from tundra gravels. Plans for dredging, 1905. Gold in marine gravels as well as creek gravels.

Chapin, 1914 (B 592), p. 387, 389 -- Dredge excavated, 1913. Deposit more than 70 ft. thick; digging 52 ft. below water level.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 89-90.

Breen

Antimony, Gold

Nome district

Nome (19.85-20.0, 13.7-13.8)

MF-463, locs. 26-27

64°45'-64°46'N, 165°20'-165°21'W

Summary: Zone of antimony-quartz mineralization extends from divide between Hobson and Manila Creeks to Cold Cr. Breen had prospects on Hobson-Manila divide and on Cold Cr. Both were on veins near a schist-limestone contact and consisted of surface cuts and pits only. Stibnite in quartz-calcite gangue. About 14 tons of float ore shipped from prospect on Cold Cr.; shipper was paid for the gold and penalized for the 10% antimony. Includes references to antimony lode between Hobson and Manila Creeks.

Cathcart, 1922 (B 722), p. 184 -- Stibnite reported from divide between Manila and Hobson Creeks.

p. 228 -- Zone of antimony-quartz mineralization appears to extend from divide between Hobson and Manila Creeks to Cold Cr.

p. 230-231 -- At both Breen prospects pits were dug on veins that carry stibnite close to a schist-limestone contact. Stibnite on dumps is associated with quartz-calcite gangue. Some stibnite in veins cutting schist.

Anderson, 1947 (TDM 5-R), p. 10 -- About 14 tons of float ore that carried gold and about 10% antimony was shipped; owner paid for gold and penalized for antimony. No underground workings. Quartz-stibnite veins (some more than 2 ft. thick) in mineralized and sheared schist. Occurrence on Cold Cr.

Hummel, 1962 (MF-248), locs. 1, 2 -- Antimony present.

Berg and Cobb, 1967 (B 1246), p. 124 -- Gold- and stibnite-bearing quartz-calcite veins cut schist and limestone. About 14 tons of float ore carrying about 10% Sb (for which the seller was penalized) was shipped [from occurrence on Cold Cr.].

Hummel, 1975 (OF 75-2) -- References to Anderson, 1947 (TDM 5-R), p. 10, and Hummel, 1962 (MF-248), locs. 1, 2.

Bursik & Kern

Gold

Nome district
MF-463, loc. 45

Nome (19.9, 10.85) approx.
64°36'N, 165°21'W approx.

Summary: On divide between Anvil and Dexter Creeks. Open cuts, shafts, and a tunnel are on or near the contact between limestone and schist. Assays from a shaft 85 ft. deep indicated a gold content of \$2.50 to \$3.25 a ton (gold at \$20.67 an ounce).

Mertie, 1918 (B 662), p. 429 -- 8 claims on divide between Anvil and Dexter Creeks. Several open cuts and shallow shafts, a shaft 85 ft. deep, and a 20-ft.-long tunnel. On and near contact between limestone and schist. More than 100 assays of material from main shaft showed gold values from \$2.50 to \$3.25 a ton.

Cathcart, 1922 (B 722), p. 238 -- Cut in limestone next to mineralized schist.

(Buster Cr.)

Gold

Nome district
MF-463, loc. 116

Nome (20.7-21.1, 10.85-11.3)
64°36'-64°37'N, 165°12'-165°15'W

Summary: Upper 3 mi. of creek in narrow canyon in schist and limestone.
Both creek and bench placers were mined from early 1900's to 1918.
Dredge reported to have mined in 1953 and/or 1954 was probably in
lower valley in flats of Nome R.

Brooks and others, 1901, p. 78 -- Creek about 3 mi. long. Coarse gold in
2-3 ft. of gravel on schist bedrock.

Moffit, 1907 (B 314), p. 140-141 -- Mining, 1906.

Collier and others, 1908 (B 328), p. 172 -- Creek about 4 mi. long; upper 3
mi. in narrow canyon. Bedrock is schist and limestone. Gravel about
3 ft. thick. Gold coarse; worth \$18.60 an ounce. Some of gold in top
1-2 ft. of bedrock. Both virgin and already-mined ground being worked
in 1903.

Smith, 1908 (B 345), p. 216 -- Mining, 1907. Ditch completed.

Moffit, 1913 (B 533), p. 93 -- Gold present in potentially important amounts.
p. 96-97 -- Essentially the same data as Collier and others, 1908

(B 328). Nugget worth \$18 was discovered; mining, 1905. Old channel
found in bench 100 ft. above stream on south side of creek near Union
Gulch. 2 pay streaks; upper leaner one on frozen muck (probably slide
material) and the lower richer one on decomposed schist bedrock.

Eakin, 1915 (B 622), p. 369-370 -- Mining, 1914.

Mertie, 1918 (B 662), p. 455 -- Mining, 1916.

Cathcart, 1920 (B 712), p. 189 -- Open-cut mining, 1918.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 96-97 and
to Alaska Territorial Dept. Mines report of 1954 (small dredge operated
1953 and/or 1954).

(Butterfield Cr.) (Canyon)

Gold, Tungsten

Nome district
MF-463, loc. 92

Nome (18.9, 12.5)
64°41'N, 165°29'W

Summary: Has been placer gold mining; a little scheelite present.

Coats, 1944 (OF 17), p. 6 -- Negligible amounts of placer scheelite.

Thorne and others, 1948 (RI 4174), p. 33 -- Has been mining; scheelite present.

Hummel, 1975 (OF 75-2)-- Reference to Thorne and others, 1948 (RI 4174), p. 33.

California

Antimony, Gold, Molybdenum, Tungsten

Nome district

Nome (19.05, 13.9)

MF-463, loc. 22

64°46'N, 165°27'W

Summary: Gold- and sulfide-bearing quartz veins in a shear zone in schist near a schist-limestone contact. Zone (reportedly traced for 3 mi.) cuts across schistosity and a system of older barren quartz veins. Pyrite and arsenopyrite are most abundant sulfides; a little free gold, but most is in sulfides. Stibnite veins as much as 2 in. thick reported. Molybdenum (probably occurs as the sulfide) and tungsten in assays. Ore reported to have run about \$50 a ton (old price of gold) was mined from an iron-stained zone of shattered quartz and schist about 4 ft. thick beneath hanging wall; mill recovery was only \$8-\$10 a ton, so most of gold was in sulfides. Workings included a 70-ft. inclined shaft, drifts, and an open cut. Most mining was before 1916; total production not known, but probably no more than 100 tons. Includes references to: lode near head of Goldbottom Cr., Connolly & Jensen, Jannsen.

Smith, 1908 (B 345), p. 233 -- Near head of Goldbottom Cr. vein near and parallel to contact between limestone and schist has been traced for a mile. [Gold] ore treated in 3-stamp mill.

p. 245 -- Auriferous antimony ore near gold lode has been reported.

Smith, 1909 (B 379), p. 280-282 -- Black graphitic slate with many joints and many small veins in what appears to be a shear zone [term not used by Smith]. Very few sulfides. A small amount of ore was mined and milled, 1908 [Smith thinks proximity to contact between limestone and schist is coincidental].

Moffit, 1913 (B 533), p. 131-132, 134 -- Essentially the same as Smith, 1908 (B 345), p. 233, 245.

Chapin, 1914 (B 592), p. 402 -- Considerable work done, 1913. Too dry a season to operate mill; ore is mined and ready to run whenever water is available.

Brooks, 1916 (B 649), p. 59 -- Quotation from Smith, 1908 (B 345), p. 245.

Mertie, 1918 (B 662), p. 427-427 -- Ore body along a shear zone; hanging wall well defined and slickensided; along footwall lode merges into schist country rock. Lode is shattered quartz and schist. Metallic minerals in lode are pyrite, arsenopyrite, stibnite, and free gold. Molybdenum and tungsten reported from assays. Along hanging wall 4 ft. of ore assayed \$50 a ton, but only \$8 to \$10 a ton was recovered by mill; much of gold probably in sulfides. Mine developed by a 70-ft. inclined shaft and an open cut. 38 tons of ore milled, 1915-16.

p. 440 -- Reference to p. 426.

Cathcart, 1922 (B 722), p. 185 -- Reference to Brooks, 1916 (B 649), p. 59.

p. 253-255 -- 70-ft. shaft sunk on an incline of 60° along the lode; left lode at a depth of 33 ft.; open cut in creek bank. No ore had been milled for several years as of 1920; shaft filled with water and mill in poor condition. Lode in a shear zone in schist about 300 ft. from contact with limestone. Description of mine quoted from Mertie, 1918 (B 662), p. 426-427. Mineralized schist nearby (probably a

California -- Continued

- continuation of the lode) contains chlorite, sillimanite, zircon, tourmaline, and abundant sulfides. Gold throughout mineralized schist of lode. Nearby 2 small tunnels and a shallow shaft (caved in 1920) seem (from material on dumps) to have been in silicified limestone with vein quartz, quartz crystals in openings, and pyrite in quartz.
- Smith, 1934 (B 857-A), p. 22 -- Development, 1932; much trouble with surface water.
- Smith, 1939 (B 917-A), p. 31 -- More than 100 ft. of drift driven and some are milled, 1938. [Reference is not definite, but probably is to this property].
- Smith, 1942 (B 926-C), p. 202 -- Reference to Mertie, 1918 (B 662), p. 426-427.
- Anderson, 1947 (TDM 5-R), p. 12 -- Stibnite present.
p. 35 -- Reference to B 722.
- Wedow and others, 1952 (OF 51), p. 35 -- Molybdenum present, presumably as the sulfide with other sulfides in quartz stringers.
p. 37 -- Hematitic gold-arsenopyrite lode.
- Hummel, 1962 (MF-248), loc. 3 -- Gold mine or prospect.
- Berg and Cobb, 1967 (B 1246), p. 122 -- Gold- and sulfide-bearing quartz veins in shear zone in graphitic quartz-mica schist. Zone (reportedly traced for 3 mi.) cuts across schistosity and a system of older barren quartz veins. Pyrite and arsenopyrite are most abundant sulfides; a little free gold, but most is in sulfides. Stibnite veins as much as 2 in. thick reported; molybdenum and tungsten in assays. Ore reported to have run about \$50 a ton [old price] in gold was mined from an iron-stained zone of shattered quartz and country rock 4 ft. thick beneath hanging wall. Workings included a shaft and open cut; mill. Most of production (total not known) was before 1916.
- Hummel, 1975 (OF 75-2) -- Citations of several of above references.

(Canyon Cr.)

Gold

Port Clarence district

Nome

NE 1/4 NW 1/4 NE 1/4 quad.(?)

Summary: Small-scale mining (essentially prospecting) in 1927. May have been on part of creek in Teller quad.

Smith, 1930 (B 810), p. 36 -- Small-scale mining (essentially prospecting), 1927. Creek flows into Imuruk Basin.

(Cape Nome)

Chromite; Fluorite

Nome district

Nome (22.65, 8.5)

MF-463, loc. 55

64°27'N, 165°01'W

Summary: Sample of granite gneiss contained chromite and fluorite in heavier-than-bromoform fraction.

White and others, 1953 (C 244), p. 7 (sample 3274) -- Sample of granite gneiss that contained chromite and fluorite in heavier-than-bromoform fraction; eU was 0.008%.

Hummel, 1975 (OF 75-2) -- Reference to above.

(Charley Cr.)

Bismuth, Gold

Nome district

Nome (18.7-18.85, 15.2-15.45)

MF-463, locs. 11, 80

64°51'N, 165°29'W

Summary: Two quartz veins 10 and 5 in. thick separated by about a foot of schist contain intergrown bismuth and bismuthinite. Veins follow joint planes in schist. Placers in creek below lode contain both minerals and gold. Mineralized lode exposed for a length of about 50 ft. and a depth of 10 ft. by open cuts. Includes reference to (Charles Cr.).

Brooks and others, 1901, p. 96 -- Placer gold has been mined.

Moffit, 1907 (B 314), p. 138 -- Bismuth in placers has been traced upstream to 2 quartz veins on east fork of creek. Veins are 12 and 8 in. thick, separated by 16-18 in. of schist; offset 8-10 in. by a small fault. Bismuth content of veins is small, but boulders in creek have higher bismuth content.

Collier and others, 1903 (B 328), p. 216 -- No mining, 1903; workings appeared to have been long abandoned. Much native bismuth reported to have been in concentrates.

Smith, 1908 (B 345), p. 247 -- Reference to Moffit, 1907 (B 314), p. 138. Development work, 1907.

Brooks, 1911 (B 480), p. 93 -- Bismuth in 2 quartz veins in schist; has been a little work.

Moffit, 1913 (B 533), p. 133 -- Same as Moffit, 1907 (B 314), p. 138.

Chapin, 1914 (B 592), p. 404-405 -- Reference to Moffit, 1913 (B 533), p. 133. Recent prospecting is reported to have uncovered a 4-ft. quartz vein that carries 15¢ Bi and gold; sample is quartz with intergrown native bismuth and bismuthinite.

Mertie, 1918 (B 662), p. 447-448 -- Quotation from Moffit, 1913 (B 533), p. 133.

Brooks, 1919 (B 666), p. 98 -- Bismuth-bearing vein has been found, but not developed.

Brooks, 1921 (B 714), p. 41 -- Reference to Moffit, 1913 (B 533), p. 133.

Cathcart, 1922 (B 722), p. 185 -- Quartz vein contains bismuthinite. Sulphide reported to carry platinum, which could not be confirmed.

p. 223-224 -- Open cuts exposed 2 parallel quartz veins (10 in. and 5 in. thick) separated by about a foot of schist; veins follow joint planes in schist that contains a little graphite and pyrite. Tiny veinlets of bismuthinite in quartz; metal content of veins probably very small. No trace of platinum in Survey assays.

Anderson, 1947 (TDM 5-R), p. 17 -- 2 parallel quartz veins 10 and 5 in. wide containing a little disseminated bismuth and bismuthinite exposed in an open cut. Reference to Chapin, 1914 (B 592).

Wedow and others, 1952 (OF 51), p. 34 -- Native bismuth and bismuthinite in quartz veins in schist. Platinum reported [probably in error].

p. 36 -- Samples not radioactive.

White and others, 1952 (C 196), p. 4 -- Hydrothermal enrichment of early Paleozoic schist and white quartz veins; native bismuth, bismuthinite, and small amounts of iron sulfides. eU less than 0.002%.

(Charley Cr.) -- Continued

- Hummel and Chapman, 1960 (B 400-B), p. B32 -- Lode containing native bismuth and bismuthinite crops out; both minerals in placer deposits for at least half a mile downstream.
- Hummel, 1962 (MF-248), loc. 4 -- Bismuth mine or prospect.
- Berg and Cobb, 1967 (B 1246), p. 125 -- Quartz veins containing a little bismuthinite crop out in creek channel up to 10 in. thick; strike westward, dip moderately to north, and are separated by a foot or more of schist. Bismuthinite forms minute veinlets in the quartz; mineralized material probably contains less than 2% sulfides. Open cuts exposed veins for a length of about 50 ft. and a depth of 10 ft.; covered by talus and moss on valley sides.
- Cobb, 1973 (B 1374), p. 89 -- Native bismuth and rutile identified in concentrates.
- Hasler and others, 1973 (P 820), p. 98 -- Vein deposit with native bismuth and bismuthinite.
- Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 133; Cathcart, 1922 (B 722), p. 223-224; White and others, 1952 (C 196), p. 4; Hummel, 1962 (MF-248), loc. 4.
- Sainsbury, 1975 (USBM OF 73-75), p. 97 -- Native bismuth present.

(Christian Cr.)

Gold

Nome district
MF-463, loc. 106

Nome (20.95, 14.4)
64°48'N, 165°12'W

Summary: Placer gold mine or occurrence.

Hummel, 1975 (OF 75-2) -- Placer gold occurrence or mine.

Christophosen (Oregon Cr.)

Copper, Gold, Lead, Zinc

Nome district
MF-463, loc. 10

Nome (17.85, 12.75) approx.
64°42'N, 165°37'W approx.

Summary: Prospect is on a thin layer of limestone or dolomite intercalated in schist. No well-defined lode; iron-stained zone carries sphalerite, pyrite, quartz, and reportedly a little gold. Shallow shaft (caved by 1916) was sunk, but no ore mined. In 1968 Herreid also reported chalcopyrite and galena. Includes references to old prospect between Oregon Cr. and Penny R.

Mertie, 1918 (B 662), p. 447 -- Prospect in a small saddle in a ridge in a narrow band of limestone in schist. Ore is sphalerite with a little pyrite in a quartz gangue; said to carry a little gold. Shallow shaft had caved by 1916. No well-defined vein; iron-stained zone that trends about S 8° E; country rock strikes N 30° E.

Cathcart, 1922 (B 722), p. 183 -- Reference to Mertie, 1918 (B 662), p. 447. p. 232-233 -- Quotation from Mertie, 1918 (B 662), p. 447.

Anderson, 1947 (TDM 5-R), p. 27 -- Reference to B 722.

Berg and Cobb, 1967 (B 1246), p. 122 -- Lode prospected mainly for zinc, but also reported to carry some gold is in thin layer of limestone intercalated in schist. No well-defined lode; northwestward-trending iron-stained zone carrying sphalerite, pyrite, and quartz. Shallow shaft sunk, but no ore mined.

Herreid, 1968 (GR 29), p. 2 -- Dolomite lenses veined with quartz and banded porous siliceous rock contain sparse sphalerite, galena, and chalcopyrite.

Herreid, 1970 (GR 36), p. 36 -- Same data as in Herreid, 1968 (GR 29), p. 2.

Hummel, 1975 (OF 75-2) -- Reference to Mertie, 1918 (B 662), p. 447 [other references cited probably are not to this prospect].

(Coal Cr.)

Gold

Nome district
MF-463, loc. 59

Nome (15.6, 13.2)
64°42'N, 165°55'W

Summary: A little gold has been mined from creek gravels. At least some was derived from Tertiary coal-bearing rocks.

Collier and others, 1908 (B 328), p. 216-217 -- Bedrock is coal-bearing rocks.

Gold in creek gravels probably reconcentrated from coal-bearing sedimentary rocks. Small amount of gold reported to have been mined.

Cobb, 1973 (B 1374), p. 89 -- Very little gold was produced. At least some of gold was derived from Tertiary coal-bearing rocks.

(Cooper Gulch)

Gold

Nome district
MF-463, loc. 103

Nome (19.75, 10.15)
64°33'N, 165°23'W

Summary: Small gulch in south slope of Anvil Mtn. Bedrock mainly limestone and schist. Greenstone and granite in gravel. Small-scale placer gold mining, 1900, 1903, 1913, and 1916. Exploration of calcite vein in schist evidently did not find any ore.

Brooks and others, 1901, p. 84 -- Rocker operation, 1900; 4 men barely making wages. At inland edge of coastal plain.

Collier and others, 1908 (B 328), p. 186 -- Small gulch cut in south slope of Anvil Cr. Small-scale mining, 1900, 1903; creek abandoned late in 1903. Boulders in tailings mainly limestone; some greenstone and granite.

Moffit, 1913 (B 533), p. 89 -- Bedrock mainly limestone; some schist. Small area near a bench near mouth yielded good returns in gold, but most mining yielded little profit. No work for several years [as of 1906].

Chapin, 1914 (B 592), p. 389 -- Hydraulic mining, 1913.

Chapin, 1914 (B 592), p. 402-403 -- Work has been done on calcite veins in schist. No visible gold or sulfides.

Martie, 1918 (B 662), p. 431 -- Caved shaft in iron-stained limestone. No data on mineralization, if any.

Martie, 1918 (B 662), p. 454 -- Placer mining, 1916.

(Copper Cr.)

Copper

Nome district
MF-463, loc. 17

Nome (21.0, 15.95)
64°53'N, 165°11'W

Summary: Schist cut by granitic sills. Copper minerals (bornite and carbonates) in a bleached, coarsely crystalline limestone bed with silicified zones. Some sulfide-bearing quartz-calcite veins. No record of development. See also (Copper Mtn.).

Cathcart, 1922 (B 722), p. 219-220 -- Limestone bed in schist country rock. Limestone bleached and coarsely crystalline; banded appearance; some zones silicified and carry a little bornite and copper carbonates. Some quartz-calcite veins carry sulfides.

Hummel, 1962 (MF-248), loc. 5 -- Copper mineral(s) present.

Berg and Cobb, 1967 (B 1246), p. 118 -- Copper minerals in schist cut by granitic sills.

Hummel, 1975 (OF 75-2) -- Reference to Cathcart, 1922 (B 722), p. 219-220;
Hummel, 1962 (MF-248), loc. 5.

Copper King

Copper, Lead

Nome district
MF-463, loc. 16

Nome (20.75, 15.9)
64°53'N, 165°13'W

Summary: Copper and lead minerals reported. No other information.

Hummel, 1962 (MF-248), loc. 6 -- Copper and lead minerals present.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248), loc. 6. _

(Copper Mtn.)

Copper, Gold, Lead, Silver

Nome district
MF-463, loc. 16

Nome (20.75, 15.75)
64°52'N, 165°13'W

Summary: Old workings (early 1900's) on quartz-calcite veins as much as 8 in. thick that contain bornite, chalcopyrite, copper carbonates, and galena; same minerals also sparsely disseminated in silicified zones in limestone near a contact with schist. Assays of vein material were reported to show 15% copper, 20% lead, and high silver and low gold content. Includes references to: (Dickens Cr.), occurrence on ridge between Copper and Dickens Creeks. See also (Copper Cr.)

Smith, 1908 (B 345), p. 240-242 -- On ridge between Copper and Dickens Creeks are a 10-ft.-deep vertical shaft and an incline. Limestone overlies schists of sedimentary and igneous origin. Blocks of limestone are malachite stained; galena present. Assay of picked material showed 15% Cu, 20% Pb, rather high silver content, and low gold content. In workings are bornite, galena, chalcopyrite, and copper carbonates. All workings in limestone or rock that seems to be limestone replaced by quartz. Nearby another occurrence of copper minerals near limestone-schist contact was explored by an adit 20-25 ft. long.

Moffit, 1913 (B 533), p. 134-135 -- Reference to and quotation from Smith, 1908 (B 345), p. 240-242.

Cathcart, 1922 (B 722), p. 181-182 -- Copper minerals associated with altered limestone; small quantities of galena also present.

p. 217-221 -- Broad belt of schist with interbedded limestone. Mineralization in bleached, silicified limestone beds; small quartz veinlets and muscovite oriented parallel to bedding planes. Sulfides are pyrite, chalcopyrite, bornite, and galena; malachite and azurite in surface oxidized zone. Pits, trenches and shallow shafts on divide between Dickens and Copper Creeks were caved or filled with water in 1920.

Anderson, 1947 (TDM 5-R), p. 18-19 -- Narrow, irregular veins form a replacement deposit in limestone near a limestone-schist contact. Sulfides are chalcopyrite, bornite, and galena.

p. 27 -- Lead mineral(s) in quartz veins.

Hummel, 1962 (MF-248), loc. 7 -- Copper mineral(s) present.

Berg and Cobb, 1967 (B 1246), p. 125 -- Bornite, chalcopyrite, copper carbonates, and galena in quartz-calcite veins up to 8 in. thick; also in sparsely disseminated grains in partly silicified limestone. Assays of samples from veins reportedly showed 15% Cu, 20% Pb, and high Ag and low Au content.

Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 134-135; Cathcart, 1922 (B 722), p. 217-221; and Hummel, 1962 (MF-248), loc. 7.

(Cripple R.)

Gold

Nome district

Nome (15.9-16.75, 11.65-12.05)

MF-463, locs. 64-66

64°39'N-64°40'N, 165°46'W-165°53'W

Summary: Colors of gold found in many places. Sluicing at mouth of Stella Cr. in an old bedrock channel 10 ft. above present river bed probably did not make a profit. Dredge reported to be under construction, 1911-13, was never reported to have operated. Most of mining in basin was on Oregon Cr. See: (Arctic Cr.), (Oregon Cr.).

Brooks, 1904 (B 225), p. 53 -- Ditch planned, 1903.

Brooks, 1905 (B 259), p. 21 -- Operations as usual; water shortage; 1904.

Collier and others, 1908 (B 328), p. 210-211 -- Almost no successful mining as of 1903, but colors were found in many places. Ditch built in 1903 to bring water for hydraulicking below mouth of Elizabeth Cr. leaked badly because of melting ground ice. Sluicing at mouth of Stella Cr. yielded no more than wages; deposit is in old channel cut in schist 10 ft. above present river bed; no mining in 1903 (ditch failed).

Smith, 1912 (B 520), p. 342 -- Dredge under construction, 1911.

Chapin, 1914 (B 592), p. 387, 390 -- Dredge under construction, 1913; expected to be in operation in 1914.

Hummel, 1975 (OF 75-2) -- References to Collier and others, 1908 (B 328), p. 210-211, and Chapin, 1914 (B 592), p. 390.

Cub Bear

Iron, Manganese, Silver

Nome district
MF-463, loc. 7

Nome (16.9, 12.95)
64°54'N, 165°46'W

Summary: Gossan developed along steep faults in marble above thrust contact with schist. Limonite is principal mineral of possible economic value in surface rubble; estimated to be about 10,000 long tons of material containing 10%-45% iron. A little manganese oxide. Some samples contained as much as 1.3 oz. silver per ton.

Eakin, 1915 (B 622), p. 365 -- 4 claims along iron-ore veins cutting across a limestone ridge. Surface rubble and material in shallow pits is limonite with possibly a little hematite; some botryoidal and mammillary forms.

Mertle, 1918 (B 662), p. 446 -- Group of iron claims. No recent work as of 1916.

Cathcart, 1922 (B 722), p. 183 -- No sulfides observed; iron-ore zone is 50-100 ft. wide extending several thousand feet along crest of an anticlinal fold in limestone. Some botryoidal limonite with manganese oxides.

p. 237 -- Circulating ground water in shattered zone may have formed the iron ore.

p. 261 -- Development is 12 trenches 20-30 ft. long and 3 ft. deep. Country rock is limestone with a little interbedded schist. Deposit is in a saddle between 2 knolls on ridge. No ore in place was found. Mineralized material is essentially iron-stained limestone; a little botryoidal limonite; some cellular limonite with minor manganese oxides. Deposit may be result of circulating ground water along a shattered zone in limestone.

Mulligan and Hess, 1965 (USBM OF 8-65), p. 16-19 -- Quotations from Eakin, 1915 (B 622), p. 365, and Cathcart, 1922 (B 722), p. 261. Residual ore estimated to be 100 long tons of 30-45% iron and 10,000 long tons of 10-20% iron.

p. 25 -- One of 5 prospects aligned along anticline whose axis strikes N 10° W.

Herreid, 1966 (GR 24), p. 2-3 -- Gossan in which mainly ferruginous rubble is exposed. Dolomite associated with the deposit.

p. 5 -- Dolomite complexly folded; structures formed during regional deformation.

p. 7-8 -- Ferruginous zone 4,400 ft. long and 100-260 ft. wide. Rubble is largely marble and dolomite. Some of limonite is pseudomorphous after cubic pyrite. In richest sections limonite makes up an estimated 40% of the surface material. Deposit is too small and too low grade to be an economic iron deposit. Dolomite breccia in ferruginous zone and as a barren envelope around it.

p. 10 -- One geochemical sample moderately anomalous in lead. [Not confirmed by later sampling.]

Cub Bear -- Continued

Berg and Cobb, 1967 (B 1246), p. 126 -- Similar to Monarch, but smaller, probably leaner, and less well explored.

Herreid, 1970 (GR 36), p. 20 -- Gossan along steep faults that cut marble above a thrust.

p. 28, 30-31 -- Most other data essentially as in Herreid, 1966 (GR 24), p. 7-8. Older sample high in lead could not be duplicated. Highest Ag. in any sample was 1.3 oz. per ton.

Hummel, 1975 (OF 75-2) -- References to several of above descriptions.

(Daisy Gulch)

Gold

Nome district

Nome (20.0, 10.55) approx.

64°24'N, 165°21'W approx.

Summary: Mining reported, 1914.

Eakin, 1915 (B 622), p. 369-370 -- Open-cut mining reported, 1914.

Dakota

Gold(?)

Nome district

Nome (18.8, 11.7)

64°39'N, 165°30'W

Summary: Quartz and calcite veins in limestone carry practically no sulfides. Explored by tunnel 35 ft. long. See also (Boulder Cr., trib. Snake R.)

Mertie, 1918 (B 662), p. 429 -- Tunnel 35 ft. long. Country rock is limestone; veins of white, opaque quartz and of calcite. Practically no sulfides. No indication of much mineralization.

Cathcart, 1922 (B 722), p. 250 -- Quotation from Mertie, 1918 (B 662), p. 429.

(Darling Cr.)

Gold

Nome district
MF-463, loc. 109

Nome (20.9, 13.45)
64°44'N, 165°13'W

Summary: Gold placer mine.

Hummel, 1975 (OF 75-2) -- Gold placer mine; reported by Alaska Territorial
Dept. Mines.

(Derby Cr.)

Gold

Nome district

Nome (21.6, 8.65)

MF-463, loc. 136

64°28'N, 165°09'W

Summary: Open-cut mine operated in 1916. Probably in deposits of second beach. See also (Nome beaches).

Mertie, 1918 (B 662), p. 455 -- Open-cut mine operated, 1916. [Probably at second beach].

(Dewey Cr.)

Gold, Tungsten

Nome district

Nome (20.6, 11.6)

MF-463, loc. 114

64°38'N, 165°15'W

Summary: Gold in gravel on clay false bedrock. Concentrates contain considerable scheelite and garnet.

Brooks and others, 1901, p. 78-79 -- Gold in gravel on clay false bedrock. Concentrates contain considerable scheelite and garnet; not much magnetite.

Collier and others, 1908 (B 328), p. 174 -- Quotation from Brooks and others, 1901, p. 78-79. Very little mining in 1903.

Hummel, 1975 (OF 75-2) -- Reference to Brooks and others, 1901, p. 78-79.

(Dexter Cr.)

Copper, Gold

Nome district

Nome (20.0-20.5, 10.4-10.75)

MF-463, locs. 49, 118

64°34'-64°35'N, 165°17'-165°21'W

Summary: Rises in area of high bench gravels (Dexter Hill); most of bedrock is limestone; some schist. Quartz veins contain gold and as much as 4% copper. Placer gold discovered in 1899; mining from 1900 to as recently as 1936; dredge operated 1918-26. Near mouth gold on false bedrock. In areas where bedrock is limestone cracks and fissures contained very rich material; much of water (both from stream and from ditches) was lost to underground flow. Includes references to (Dexter Cr., Left Fork). See also: (Dexter Hill), (King Mtn.).

Schrader and Brooks, 1900, p. 29 -- Plan to use pumped water to work rich claims [1899].

Brooks and others, 1901, p. 69 -- Production in 1900 was \$300,000 [about 14,500 fine oz.].

p. 75-76 -- Stream rises in area of high bench gravels [see (Dexter Hill)] and then flows on limestone and mica schist to Nome River. Near mouth fine gold is on blue clay false bedrock. Farther upstream coarse gold is on true bedrock. Some of lower claims rich enough to use water brought 2 mi. in barrels (at \$2.50 per barrel).

Brooks, 1905 (B 259), p. 21 -- Mining, 1904.

Purington, 1905 (B 263), p. 209 -- Gold worth \$18.60 an ounce.

Moffit, 1906 (B 284), p. 135 -- Little or no mining, 1905.

Collier and others, 1908 (B 328), p. 165-181 -- Heads in area of high bench gravels [Dexter Hill]. Most of bedrock is limestone; some schist. Gold in gravel 2-20 ft. thick and in deep solution-enlarged cracks in limestone. Gold discovered as early as 1899; mining in progress in 1900 along entire creek and its tributaries. Very little work in 1901-02. With completion of Miocene ditch mining resumed in 1903. Gold ranges in size from fine dust to large nuggets. Both creek and bench gravels mined.

Smith, 1908 (B 345), p. 216 -- Has been a major producing creek.

p. 240 -- Lode mainly for gold contains as much as 4% Cu.

Smith, 1909 (B 379), p. 279 -- Mining, 1908 [Reference probably includes Dexter Hill.].

Moffit, 1913 (B 533), p. 77 -- Economically important stream placer.

p. 93-95 -- Data similar to those in Collier and others; 1903 (B 328), p. 176-181. Deposits in fissures in limestone bedrock very rich, but difficult to recover. Much of water (both in stream and from ditches) is lost to underground passages in limestone. Gold found in old bedrock channel 200 ft. from creek and 75 ft. above it. Only 1 or 2 claims being worked in 1905. Left Fork cut in schist and limestone; nugget worth more than \$50 was found.

p. 109 -- Much of gold probably derived from high bench gravels [Dexter Hill].

p. 135 -- Same as Smith, 1908 (B 345), p. 240.

(Dexter Cr.) -- Continued

- Chapin, 1914 (B 592), p. 389 -- Drift mining, winter of 1912-13.
Chapin, 1914 (B 592), p. 403 -- Prospect tunnel driven 400 ft. in decomposed mica schist. No evidence of mineralization is apparent, but rock is said to contain gold.
Eakin, 1915 (B 622), p. 369-370 -- Mining, 1914.
Smith, 1917 (BMB 142), p. 27 -- Mining, 1915.
Mertie, 1918 (B 662), p. 442-443 -- Reference to Smith, 1908 (B 345), p. 240.
Mertie, 1918 (B 662), p. 454-455 -- Placer mining, 1916.
Cathcart, 1920 (B 712), p. 187-188 -- Placer mining, including a dredge, 1918.
Harrington, 1921 (B 714), p. 233 -- Dredge operated, 1919.
Brooks, 1922 (B 722), p. 63 -- Dredge operated, 1920.
Cathcart, 1922 (B 722), p. 181 -- Reference to Smith, 1908 (B 345), p. 243 [should be p. 240].
p. 233 -- One of richest placer creeks on Seward Peninsula.
Brooks, 1923 (B 739), p. 9 -- Dredge operated, 1921.
Brooks and Capps, 1924 (B 755), p. 14 -- Dredge operated, 1922.
Brooks, 1925 (B 773), p. 27 -- Dredge operated, 1923.
Smith, 1926 (B 783), p. 18 -- Dredge operated, 1924.
Moffit, 1927 (B 792), p. 24 -- Dredge operated, 1925.
Smith, 1929 (B 797), p. 30 -- Dredge operated, 1926.
Smith, 1938 (B 897-A), p. 61 -- Mining near head, 1936.
Anderson, 1947 (TDM 5-R), p. 18 -- Lode contains copper minerals and gold in quartz.
Berg and Cobb, 1967 (B 1246), p. 124-125 -- Veins prospected primarily for gold; some carry copper minerals also.
Koschmann and Bergendahl, 1968 (P 610), p. 18 -- Stream and bench placers have been mined.
Cobb, 1973 (B 1374), p. 86 -- Much of gold in rich stream placers derived from high bench placers [Dexter Hill].
p. 89 -- Cassiterite reported from Left Fork. [In original reference (Collier, 1905 (B 259), p. 127) location is divide between Dry and Dexter Creeks; Dexter Hill.]
Hummel, 1975 (OF 75-a) -- References cited (Moffit, 1913 (B 533), p. 93-95, 107-109; Collier, 1905 (B 259), p. 127) include data on (Dexter Hill).

(Dexter Hill)

Gold, Lead, Tin(?)

Nome district

Nome (19.65-20.1, 10.55-10.8)

MF-463, locs. 102, 117, 118

64°35'N, 165°20'-165°24'W

Summary: High gravels near and between heads of Anvil, Dexter, and Dry Creeks and their headwater gulches are gold-bearing; in some cases very rich. Moffit and other workers before World War II considered them to be remnants of benches related to an old drainage system. D. M. Hopkins and other more recent workers consider them to be deposits in glacier-margin channels and spillways. These deposits provided much of the gold in rich stream and low bench placers, either through stream or mass-wasting transport. It was so difficult to get water to high gravels that material had to carry \$6 or more in gold (at \$20.67 a fine oz.) to be mined. Caribou Bill deposit in a limestone south on collapsed cavern ran about \$1,000 [48 oz.] per cubic yard. Includes references to: high bench gravels, (Deer Gulch), Gambrinus, (Grass Gulch), (Grouse Gulch), Honey, Lena, Madeline, Mattie, (Nekula Gulch), (Nicola Gulch), Snowflake, (Specimen Gulch), Sugar, Summit. See also: (Anvil Cr.), (Dexter Cr.), (Dry Cr.).

Brooks and others, 1901, p. 69 -- In 1900 production from high bench placers was \$145,000 [about 7,000 fine oz.].

p. 72 -- High gravels probably old beach deposits.

p. 74-78 -- Headwater tributaries of Anvil Cr. (Specimen and Nikolai [Nekula] Gulches) very rich. Gold higher fineness than that from farther down Anvil Cr. Headwater tributaries of Dexter Cr. also contain rich placers in area of high gravels; nugget worth \$67 [old price of gold] found in Grouse Gulch. High bench gravels of variable thickness; top surface is a plain, but underlying bedrock is very uneven. Gravel from only a few to 150 ft. thick. Rich pay streaks near bedrock; gold also in disintegrated top few feet of bedrock.

Brooks, 1904 (B 225), p. 52-53 -- By end of 1903 there were about 20 shafts and several miles of drifts in high gravels. Large returns reported.

Collier, 1905 (B 259), p. 127 -- Cassiterite (one specimen) reported, 1904.

Purington, 1905 (B 263), p. 209 -- Gold worth \$18.60-\$18.70 an ounce.

Brooks, 1905 (B 259), p. 20 -- Production by drift mining, winter of 1903-04, was more than \$500,000.

Moffit, 1906 (B 284), p. 135 -- Large elevators installed, 1905.

Moffit, 1907 (B 314), p. 140-141 -- Mining on Grass Gulch, 1906.

Collier and others, 1908 (B 328), p. 178-181 -- One of richest mines in Dexter Cr. drainage on Grass Gulch; pit 150 ft. x 300 or 400 ft. worked out by 1903; gravel (at least 15 ft. thick) all auriferous. Bedrock mainly fissured limestone with gold in fissures as far down as they could be followed. Gold in other headwater tributaries of Dexter Cr.

(Dexter Hill) -- Continued

p. 191 -- In Specimen Gulch (tributary of Anvil Cr.) gold was concentrated in coarse gravel on a clay bed. Gulch cuts old channel of Anvil Cr.

p. 198-209 -- Gravel deposited on bedrock of much decomposed chlorite-mica schist and limestone. On Caribou Bill claim gold-bearing gravel filled what appeared to be a cavern 90 ft. deep; material mined estimated to have run about \$1,000 per cubic yard; gold coarse and angular; probably nearly in place. Most mining in high bench gravels by drifting; some hydraulicking with water pumped from Snake R. At Snowflake mine base of permafrost is at depth of about 90 ft.; deeper workings dry except for seepage along shaft. In some mines bedrock contains small auriferous quartz veins. Deposits probably were old stream channel deposits formed not far above sea level, then covered by slide material from hills, followed by subsidence and ice rafting of granite and other exotic boulders. Production probably has been about \$2,000,000 in gold [about 96,750 fine oz.] as of 1903.

Henshaw, 1910 (B 442), p. 359 -- Grass Gulch mined, 1909. Nearly worked out.

Moffit, 1913 (B 533), p. 76-77 -- Nekula Gulch deposits on border line between residual and stream placers. Stream placer in Grass Gulch economically important.

p. 83-84 -- Deposits in Specimen and Nekula Gulches largely or wholly derived from high-bench deposits.

p. 101-109 -- Essentially the same basic data as in Collier and others, 1908 (B 328), p. 198-209, with a few added details. Pay streaks represent beds of old streams which in places cut channels in bedrock. Old drainage system considerably different from the present one. Exotic rock types found only in near-surface gravels and, at Grass Gulch only, in some of the lower gravels.

Chapin, 1914 (B 592), p. 389 -- Hydraulicking on Specimen Gulch, 1913.

Eakin, 1915 (B 622), p. 369-370 -- Mining, Nicola Gulch, 1914.

Mertie, 1918 (B 662), p. 454 -- Mining, 1916.

Cathcart, 1920 (B 712), p. 188-189 -- Mining, 1918.

Cathcart, 1922 (B 722), p. 238 -- Reference to Collier and others, 1908 (B 328), p. 200.

Berg and Cobb, 1967 (B 1246), p. 124 -- Quartz-feldspar-calcite veins carry gold and various sulfides. [Described under names of individual prospects.]

Koschmann and Bergendahl, 1968 (P 610), p. 18 -- High bench placers are remnants of an older drainage system; have been profitably mined near head of Dexter Cr.

Cobb, 1973 (B 1374), p. 83, 85-86 -- D. M. Hopkins considers that what others have called "high benches" represent deposits in glacier-margin channels and spillways. Reconcentration of gold from these deposits formed some very rich stream and other placers. A hole in limestone (probably a sink or collapsed cavern) on Caribou Bill claim was 90 ft. deep and contained coarse angular gold; material

(Dexter Hill) -- Continued

probably was worth about \$1,000 a cubic yard (gold at \$20.67 per fine oz.). High bench remnants are so far from a good water supply that only material as rich as \$6 a yard could be mined.

Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 84, 94-96, 103, 106-108. Many references to nearby creeks are also applicable to (Dexter Hill).

(Divide Cr.)

Gold

Nome district
MP-463, loc. 104

Nome (20.3, 15.5)
64°50'N, 165°17'W

Summary: Mixed fragments of quartz and gold found in gravel on divide between Stewart and Nome Rivers encountered during ditch construction. No systematic mining.

Collier and others, 1908 (B 328), p. 182 -- Rises in broad divide at head of Stewart R. and flows east to Nome R. A small stream flowing over deep gravel deposits that may be in part glacial. Some sluicing in 1903.

Moffit, 1913 (B 533), p. 100 -- Small stream in gravel in saddle between Stewart and Nome Rivers. During ditch construction quartz with free gold was found; one nugget weighed nearly 3/4 lb. Gold thought to have come from Boer Mtn.; deposit may be residual. No attempt at systematic development.

{Divining Cr.)

Gold, Tungsten

Nome district
MF-463, loc. 93

Nome (19.3, 12.0)
64°40'N, 165°25'W

Summary: Small amounts of placer gold and scheelite; has been no mining.

Thorne and others, 1948 (RI 4174), p. 33-34 -- Creek has not been mined.
Reported to contain small amounts of gold and scheelite.

(Dorothy Cr.)

Antimony, Gold, Tungsten

Nome district
MF-463, loc. 105

Nome (20.6, 14.9)
64°49'N, 165°14'W

Summary: Bedrock is limestone, schist, and a little greenstone; many mineralized quartz veins. Sporadic placer mining in early 1900's and in 1940. Large, bladed stibnite crystals common in placers; also a little scheelite. It is doubtful that gold production exceeded 2,500 fine oz.

Brooks and others, 1901, p. 79 -- Bedrock is limestone with greenstone intrusives; many mineralized quartz veins. Some of gravel on bedrock runs \$1 per pan.

Brooks, 1905 (B 259), p. 21 -- Hydraulic operations, 1904.

Collier and others, 1908 (B 328), p. 181 -- Bedrock mainly limestone with greenstone intrusives; many mineralized quartz veins. Mined since 1900; production as of 1903 was \$44,000 [about 2,125 fine oz.], but without much profit. Gold said to assay \$14-\$15 an ounce.

Moffit, 1913 (B 533), p. 77 -- A stream placer.

p. 93 -- Possibly is an important placer.

p. 98 -- Bedrock is schist, limestone, and a little greenstone; granite in gravels. All mining has been in lower mile of creek; very expensive and only small profit.

Smith, 1942 (B 933-A), p. 57 -- Mining near junction of Dorothy Cr. and Nome R., 1940.

Coats, 1944 (OF 17), p. 6 -- Negligible amount of placer scheelite.

Anderson, 1947 (TDM 5-R), p. 11 -- Large bladed stibnite crystals common in placer concentrates.

Cobb, 1973 (B 1374), p. 89 -- Placer stibnite present.

Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 98; Anderson, 1947 (TDM 5-R), p. 11.

(Dry Cr.)

Gold, Tungsten

Nome district

Nome (19.8-20.15, 9.4-10.35)

MF-463, locs. 125-127

64°31'-64°34'N, 165°20'-165°23'W

Summary: Heads in high gravel area of Dexter Hill. Bedrock mainly schist. Lower part of course in coastal plain; crosses old beach lines. In coastal plain gold is on clay false bedrock. Mining began in 1900 (about 1,200 fine oz. of gold) and continued to 1938; most was by dredges (1920-38) in coastal plain. Above coastal plain both creek and bench placers were worked. Concentrates contained gold, magnetite, garnet, ilmenite, and scheelite. Seemingly barren quartz veins along upper part of creek were explored in a small way; a few promising gold assays were reported by prospectors, but no lode mine was developed. See also: (Dexter Hill), (Nome beaches).

Brooks and others, 1901, p. 69 -- Production in 1900 was \$25,000 [about 1,200 fine oz.].

p. 76 -- Source in high gravel terrace [Dexter Hill]. Half a mile below head bedrock is chloritic schist; gold in 2 ft. of gravel on bedrock.

p. 81-82 -- Lower part of course in coastal plain. Gold on clay false bedrock. Scheelite in concentrates.

Purington, 1905 (B 263), p. 209 -- Gold from creek worth \$18.39 and from benches \$17.20.

Moffit, 1906 (B 284), p. 135 -- Mining, 1905.

Moffit, 1907 (B 314), p. 141 -- Mining, 1906.

Collier and others, 1908 (B 328), p. 168-169 -- Heads in bedrock between Anvil and Newton Peaks, then flows across coastal plain to Snake R. At least some of gold reconcentrated from coastal plain gravels. Scheelite and much black sand in sluice boxes. Mining began in 1900.

p. 184-186 -- Heads against Left Fork of Dexter Cr. in high gravels. Creek placers in part of course in hills not very productive; most mining in old channel on east side of creek and 50 ft. above it upstream from Newton Gulch; pay streak 20-60 ft. wide; gravel like that of present stream; bedrock schist. Gravel mined from pay streak in 1902-03 (4 ft. thick and 20-50 ft. wide) ran \$9-\$12 a cubic yard; some places it was as rich as \$50 a cubic yard. Magnetite, garnet, ilmenite, and scheelite in concentrates.

Smith, 1908 (B 345), p. 216 -- Gold production from upper branches, 1907.

p. 231 -- Veins on upper Dry Cr. have been explored; most seem to have been barren, but a prospector reported ore carrying \$5-\$15 a ton in gold.

Moffit, 1913 (B 533), p. 77 -- Stream placer economically important.

p. 90-91 -- About the same data as Collier and others, 1908 (B 328), p. 184-186.

p. 108 -- Gold in old channel probably derived from high-bench gravels [Dexter Hill].

Smith, 1917 (BMB 142), p. 27 -- Mining, 1915.

(Dry Cr.) -- Continued

- Mertie, 1918 (B 662), p. 431 -- 2 short tunnels driven in crystalline limestone with a foot or more of calcite along a fault. Rock is iron stained, but no sulfides were seen.
- Mertie, 1918 (B 662), p. 454 -- Mining, 1916.
- Cathcart, 1920 (B 712), p. 188-189 -- Mining, 1918.
- Brooks, 1922 (B 722), p. 63 -- Dredge operated, 1920.
- Cathcart, 1922 (B 722), p. 237 -- Open cut at elevation of 770 ft. on east side of creek exposes iron-stained limestone; pyritiferous greenstone on dump.
- Brooks, 1923 (B 739), p. 9 -- Dredge operated, 1921.
- Moffit, 1927 (B 792), p. 24 -- Dredge operated, 1925.
- Smith, 1929 (B 797), p. 30 -- Dredge operated, 1926.
- Smith, 1930 (B 810), p. 34, 40 -- Dredge operated, 1927.
- Smith, 1930 (B 813), p. 39, 48 -- Dredge operated, 1928.
- Smith, 1932 (B 824), p. 44, 53 -- Dredge operated, 1929.
- Smith, 1934 (B 864-A), p. 57 -- Dredge operated, 1933.
- Smith, 1936 (B 868-A), p. 49, 59 -- Dredge operated, 1934.
- Smith, 1937 (B 880-A), p. 52, 62 -- Dredge operated, 1935.
- Smith, 1938 (B 897-A), p. 61, 71 -- Dredge operated, 1936.
- Smith, 1939 (B 910-A), p. 64-65, 77 -- Dredge operated, 1937.
- Smith, 1939 (B 917-A), p. 63-64, 75 -- Dredge operated, 1938.
- Smith, 1941 (B 926-A), p. 72 -- Dredge did not operate, 1939.
- Cobb, 1973 (B 1374), p. 86 -- Gold in rich stream placers probably derived from high bench gravels [Dexter Hill].
- Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 90-91.

(Extra Dry Cr.)

Gold

Nome district

Nome (20.4-20.5, 10.35-10.45)

MF-364, loc. 119

64°30'N, 165°16'-165°17'W

Summary: Heads in canyon cut in mica schist. Mining, all from 1900 to possibly 1903, was very small scale and probably returned no more than wages to the miners. Total was probably no more than \$20,000 (about 967 fine oz.) in gold.

Brooks and others, 1901, p. 69 -- Estimated production in 1900 was \$15,000 [about 725 fine oz.].

p. 76-77 -- Most of course in flat valley of Nome R. Richest placers 1/2 mi. below head; lower 2 ft. of 6 ft. of gravel worked with rockers; largest nugget worth \$13.

Collier and others, 1908 (B 328), p. 175-176 -- Heads in narrow canyon and then is trenched in valley floor of Nome R. About half a mile below head 2 ft. of pay gravel rests on mica schist bedrock. As of 1903 total production of creek was probably no more than \$20,000 [about 967 fine oz.]; miners probably did no better than make wages.

Moffit, 1913 (B 533), p. 98-99 -- Creek apparently mined out, 1905.

Hummel, 1975 (OF 75-2)-- Reference to Moffit, 1913 (B 533), p. 98-99.

(Fairview Cr.)

Gold.

Nome district
MF-463, loc. 57

Nome (13.0, 14.4) approx.
64°48'N, 166°15'W approx.

Summary: Colors of gold, but no pay streak. Bedrock schist and limestone;
granite boulders in stream bed.

Collier and others, 1908 (B 328), p. 218-219 -- Bedrock is graphitic and
feldspathic schists and some massive limestone. Part of course in
trench cut in coastal plain. Creek bed contains many granite bould-
ers. Colors of gold reported, but no pay streak has been found.

(Flambeau R.)

Gold(?)

Nome district

Nome

NE 1/4 SE 1/4 NE 1/4 quad. (?)

Summary: Ditch building and mining reported, 1908. Probably refers to mining on Hazel Cr.

Smith, 1909 (B 379), p. 280 -- Ditch building and mining, 1908.

(Fluorite Cr.)

Fluorite

Nome district

Nome (15.0, 16.25)

64°55'N, 165°59'W

Summary: Fluorite in 2 breccia pipes and in jasperoid along a fault. Country rock is Precambrian schist and gneiss with interbedded calcareous subunits and small intrusive bodies of Cretaceous granite. Includes reference to (Lake Cr. tributaries).

Sainsbury and others, 1970 (OF 399) -- Precambrian schist and gneiss with interbedded calcareous subunits were intruded by Cretaceous stocks, sills, and other small bodies. Fluorspar deposits are spatially associated with small bodies of tourmaline-bearing granite. Normal faults displace the rocks and are marked by large amounts of quartz and jasperoid that commonly are brecciated. Along many faults the wall rocks contain pyrrhotite, pyrite, and traces of other sulfide minerals. Fluorite is in pipes in the calcareous unit. In one exposure the pipe is at least 20 ft. wide and consists of a central porous mass of crystalline to coarsely crystalline fluorite surrounded by margin in which banded silica and fluorite with pyrite occur. Iron-stained veinlets cut fluorite in central mass. A second pipe is smaller, contains more siliceous breccia, and is more heavily pyritized. A little fluorite is also in jasperoid along a large fault west of the pipes.

Hummel, 1975 (OF 75-2) -- Reference to above description.

Sainsbury, 1975 (USBM OF 73-75), p. 89-90 -- Summary of above description.

(Fox Cr.)

Gold(?)

Nome district

Nome

SE 1/4 NE 1/4 NE 1/4 quad. (?)

~~Summary~~: Mining reported, 1900, or earlier; not confirmed. Tributary of Eldorado R.

Brooks and others, 1901, p. 99 -- Headwater tributary of Eldorado R. Sluicing has been reported.

Collier and others, 1908 (B 328), p. 221 -- Some mining said to have been done before 1903.

(Fred Gulch)

Gold, Tin

Nome district
MP-463, loc. 84

Nome (19.25, 14.15)
64°47'N, 165°26'W

Summary: Upper part of creek in limestone, lower part in schist. A little placer gold was mined downstream from contact. Cassiterite reported.

Hess, 1906 (B 284), p. 157 -- Reported to carry a small amount of stream tin.

Moffit, 1913 (B 533), p. 101 -- Upper portion in limestone of Mt. Distin; lower part in schist and in gravel floor of Stewart R. valley. A little gold (probably not much more than wages) was mined from gravels downstream from main limestone mass.

Harrington, 1919 (B 692), p. 353 -- Reference to Hess, 1906 (B 284), p. 157.

Cobb, 1973 (B 1374), p. 89 -- Cassiterite reported.

Hummel, 1975 (OF 75-a) -- References to Hess, 1906 (B 284), p. 157, and Moffit, 1913 (B 533), p. 101.

Galena

Gold, Iron, Lead, Zinc; Fluorite

Nome district
MF-463, loc. 5

Nome (16.2, 13.0)
64°44'N, 165°50'W

Summary: Small gossan developed on a sulfide deposit. Sulfides, mainly galena and pyrite with smaller amounts of sphalerite in quartz veins and silicified marble near contact (probably a thrust) with schist. Fluorite reported. Considerable gold reported from a galena-quartz vein; no more than 0.02 oz. per ton in recently collected samples that probably were from different places. Gossan material estimated to be about 10,100 long tons containing 10%-45% iron. Deposit was opened by a few short drifts and open cuts.

Eakin, 1915 (B 622), p. 364-365 -- 9 claims. Several open cuts, short drifts said to have uncovered veins and small stockworks bearing limonite and galena.

Mertie, 1918 (B 662), p. 445 -- 9 claims. Bedrock crystalline limestone with well-developed joint systems. Sulfides present are galena, pyrite, and sphalerite; considerable gold reported in galena-quartz vein on Sunrise claim. Botryoidal limonite on dump on Kentucky claim. Lilac-colored fluorite also present.

Cathcart, 1922 (B 722), p. 260 -- Quotation from Mertie, 1918 (B 662), p. 445.

Mulligan and Hess, 1965 (USBM OF 8-65), p. 14-16 -- Quotations from Eakin, 1915 (B 622), p. 364-365; and Mertie, 1918 (B 662), p. 445.

p. 18 -- Residual ore estimated to be 100 long tons of 30-45% iron and 10,000 long tons of 10-20% iron.

p. 25 -- Galena and sphalerite have been found; fluorite reported. Prospect is on an anticline parallel to the one most of the iron deposits are on.

p. 27-31 -- Detailed petrographic descriptions of 15 specimens.

p. 32 -- Samples showed "distinctive evidence of sulfide mineralization." Some of samples contained lead and zinc.

Herreid, 1966 (GR 24), p. 2-3 -- Deposit is at a marble-schist contact, has bedrock exposures, and little gossan.

p. 8-10 -- Many old prospect pits. Marble near contact with schist contains zinc and lead minerals in silicified and(or) quartz-veined zones. Ore minerals seen were galena, hemimorphite [hydrous zinc silicate], and sphalerite(?). Limonite in small lumps and as stain in marble. Analyzed samples contained little or no gold and silver (0.02 oz. Au and no more than 0.85 oz. Ag per ton). Deposits not of ore grade or size for zinc-lead.

Berg and Cobb, 1967 (B 1246), p. 126 -- Similar to Monarch; in addition contains galena and sphalerite. Galena in quartz along vertical joint in limestone; sphalerite and pyrite disseminated in limestone. Fluorite found near sphalerite.

Herreid, 1970 (GR 36), p. 20 -- Calcareous rocks at or near base of mainly marble thrust sheet replaced by sulfides and other minerals.

Hummel, 1975 (OF 75-2) -- References to most of above descriptions.

(Glacier Cr.)

Antimony, Gold, Tin, Tungsten

Nome district

Nome (19.25-19.6, 10.85-10.95)

MF-463, locs. 42, 101

64°36'N, 165°24'-165°26'W

Summary: Bedrock mainly schist; a little limestone. Quartz veins contain gold and scheelite; stibnite also reported; schist near veins iron stained and contains pyrite and in places gold. Both bench and stream placers; some very rich in gold. Enough scheelite in some to have been saved during World War I. Residual material on a scheelite lode on Lynx claim was mined from a shaft and sluiced in 1916; 600 lbs. scheelite recovered. Mining from 1900 to early 1920's; dredge operated 1916-22. Concentrates contained gold, scheelite, and cassiterite. See also: (Hot Air Bench), (Snow Gulch).

Brooks and others, 1901, p. 69 -- Estimated production in 1900 from Glacier Cr. and Snow Gulch was \$750,000 [about 36,260 fine oz.].

p. 71 -- Schists contain mineralized quartz stringers.

p. 75 -- Creek and bench placers; bench opposite Snow Gulch carries coarse gold from moss cover downward. Development all near mouth of Snow Gulch; 6 ft. of gravel on mica schist bedrock; lowest 2 ft. are richest. Garnets and scheelite in concentrates.

Brooks, 1904 (B 225), p. 53 -- One or more hydraulic elevators installed, 1903.

Brooks, 1905 (B 259), p. 21 -- Hydraulic mining, 1904.

Purington, 1905 (B 263), p. 209 -- Gold worth \$18.60 an ounce.

Moffit, 1906 (B 284), p. 134-135 -- Mining below Snow Gulch, 1905.

Moffit, 1907 (B 314), p. 140-141 -- Mining, 1906.

Collier and others, 1908 (B 328), p. 170 -- Placer gold has been mined.

p. 192-194 -- Bedrock mainly schist and some interbedded limestone. Opposite mouth of Snow Gulch mineralized quartz veins as much as 6 in. thick and separated by sulfide-impregnated schist; picked specimen contained 1/2 oz. Au per ton. Mining above and below Snow Gulch; most of creek gravel probably has been handled more than once. Fine gold in part of course in Snake R. valley bottom. A mile from mouth of creek gold occurs throughout a thickness of 10-15 ft. of gravel and 1-3 ft. into crevices in chloritic schist bedrock; pay streak said to be 300 ft. wide.

Smith, 1908 (B 345), p. 216 -- Mining, 1907.

p. 232 -- Near Snow Gulch are numerous quartz veins; picked specimens yielded \$9 a ton in gold. Schist near veins impregnated with pyrite.

Smith, 1909 (B 379), p. 279-280 -- Mining, 1908.

Henshaw, 1910 (B 442), p. 359 -- Hydraulic elevator used for part of year, 1909.

Moffit, 1913 (B 533), p. 77 -- Economically important stream placers.

p. 84-85 -- About the same data as Collier and others, 1908 (B 328), p. 192-194.

p. 130-131 -- Same data as Smith, 1908 (B 345), p. 232.

Eakin, 1915 (B 622), p. 369-370 -- Mining, 1914.

Smith, 1917 (BMB 153), p. 55 -- New dredge installed, 1916.

(Glacier Cr.) -- Continued

- Mertie, 1918 (B 662), p. 437 -- Tungsten lode deposit on Lynx claim has been worked by placer methods.
- Mertie, 1918 (B 662), p. 452, 455 -- Mining, including a dredge, 1916.
p. 457 -- 600 lbs. scheelite recovered from shaft on Lynx claim; material (scheelite, quartz, and iron-stained schist) was sluiced, 1916. Scheelite in dredge concentrates also was saved.
- Cathcart, 1920 (B 712), p. 187 -- Dredge operated, 1918.
- Harrington, 1921 (B 714), p. 233 -- Dredge operated, 1919.
- Cathcart, 1922 (B 722), p. 182 -- Reference to Mertie, 1918 (B 662), p. 437.
p. 233-234 -- One of richest placer creeks on Seward Peninsula.
Tungsten found in lodes on north side of creek. Quartz stringers in schist form stockworks.
- Brooks, 1923 (B 739), p. 9 -- Dredge operated, 1921.
- Brooks and Capps, 1924 (B 755), p. 14 -- Dredge operated, 1922.
- Coats, 1944 (OF 17), p. 5-6 -- Reference to Mertie, 1918 (B 662), p. 457.
Stream possibly important for placer scheelite.
- Anderson, 1947 (TDM 5-R), p. 12 -- Stibnite in lodes.
p. 40 -- Cassiterite in concentrates.
p. 42-43 -- Scheelite in placer concentrates. Scheelite in quartz veins.
- Berg and Cobb, 1967 (B 1246), p. 121-122 -- About 600 lbs. of scheelite recovered by sluicing lode material from a 60-ft. shaft; deposit similar to that on Sophie Gulch.
p. 125 -- Copper-bearing quartz veins carry a little gold.
[Source of this information not cited; probably not correct, as no other reference mentions copper minerals here.]
- Koschmann and Bergendahl, 1968 (P 610), p. 18 -- One of first streams staked in Nome area.
- Cobb, 1973 (B 1374), p. 83 -- Scheelite has been recovered from a residual placer like that on Sophie Gulch.
p. 89 -- Cassiterite reported.
- Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 84-85, 130-131; Mertie, 1918 (B 662), p. 457; Anderson, 1947 (TDM 5-R), p. 40.

(Goldbottom Cr.)

Gold, Tin

Nome district

Nome (19.1-19.6, 13.1-13.7)

MF-463, locs. 85, 87

64°43'N, 165°23'-165°27'W

Summary: Bedrock is schist and limestone. Many granitic boulders in gravel. A little placer gold has been mined. Cassiterite in placers. See also California.

Brooks and others, 1901, p. 80 -- Sluicing reported [as of 1900].

Collier, 1904 (B 229), p. 36 -- Bedrock is limestones and schists of the Nome Gp. Hess was given a specimen of cassiterite said to have come from Gold Bottom Cr.

Collier, 1905 (B 259), p. 127 -- Cassiterite has been found.

Hess, 1906 (B 284), p. 157 -- Stream tin present.

Collier and others, 1908 (B 328), p. 197 -- Small-scale mining, 1903; results not encouraging. Stream tin in concentrate sample.

Smith, 1909 (B 379), p. 280 -- Mining, 1908.

Hess, 1912 (B 520), p. 89 -- Small quantities of stream tin have been found.

Moffit, 1912 (B 533), p. 25-26 -- Presence of cassiterite near pegmatite suggests that some of the pegmatite may carry tin.

p. 87 -- Bedrock schist and limestone; many granite boulders in gravel. A small amount of gold has been mined. Small hydraulic plant set up in 1905; results not known. Stream tin in gravel at several places.

Harrington, 1919 (B 692), p. 353 -- Reference to Hess, 1906 (B 284), p. 157.

Wedge and others, 1952 (OF 51), p. 36-37 -- Cassiterite in placers.

Cobb, 1973 (B 1374), p. 89 -- Placer cassiterite reported.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 87.

(Gold Hill)

Gold

Nome district
MF-463, loc. 44

Nome (18.95, 11.0) approx.
64°36'N, 165°29'W approx.

Summary: Gold reported in quartz-feldspar vein and enclosing schist.

Cathcart, 1922 (B 722), p. 247 -- Quartz-feldspar vein in contorted quartz-chlorite schist said to assay \$3.50 a ton in gold; schist near vein reported to pan free gold. Vein 2 ft. thick and follows structure of schist. Exposed in trenches.

(Goodluck Gulch)

Gold, Tungsten

Nome district
MF-463, loc. 38

Nome (19.15, 11.7)
64°39'N, 165°27'W

Summary: Crushed quartz veins in decomposed, iron-stained schist. Principal sulfides are arsenopyrite and pyrite. Trace of scheelite in quartz; gold in altered schist.

Moffit, 1913 (B 533), p. 131 -- Crushed highly mineralized quartz stringers in schist; a little pyrite and much iron staining; presence of gold indicated by panning.

Cathcart, 1922 (B 722), p. 247-248 -- Vein quartz and decomposed and iron-stained schist. Arsenopyrite and pyrite in quartz-calcite gangue; one small scheelite crystal found in a thin section. No bedrock visible in 1920.

Hummel, 1962 (MF-247), loc. 4 -- Gold and scheelite present.

Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 131; Cathcart, 1922 (B 722), p. 247-248.

(Grace Gulch)

Gold

Nome district
MF-463, loc. 116

Nome (21.05, 11.15)
64°37'N, 165°12'W

Summary: Small-scale mining of bench gravels in 1902-03. Production about 60 oz. of gold; fineness not known.

Collier and others, 1908 (B 328), p. 173 -- Mining, 1902-03, yielded about 60 oz. of gold from a bench that may be a continuation of one mined south of Buster Cr.

Moffit, 1913 (B 533), p. 97 -- Bench deposit may be a continuation of one mined on Buster Cr.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 97.

(Grouse Cr.)

Gold, Lead

Nome district

Nome (19.55-19.75, 13.1-13.65)

MF-463, locs. 25, 86, 87

64°43'-64°45'N, 165°22'-165°23'W

Summary: Valley cut in limestone near head and in schist near mouth.
Placer mining in creek gravels near contact between limestone and schist, 1908 and earlier. Concentrates mainly hematite. Quartz-feldspar veins carry some galena.

Collier and others, 1908 (B 328), p. 197-198 -- Valley V-shaped; gradient about 200 ft./mi. Bedrock schist at mouth and limestone in headwaters. Mining about a mile from mouth in 1903. Pay streak about 40 ft. wide and 1-3 ft. thick; mainly limestone pebbles. Concentrates mainly hematite.

Smith, 1909 (B 379), p. 280 -- Mining, 1908.

Moffit, 1913 (B 533), p. 88 -- Most mining near contact between schist and limestone, where gravel is about 5 ft. thick. Results of prospecting bench gravels were not very encouraging.

Anderson, 1947 (TDM 5-R), p. 27 -- Lead mineral(s) in quartz veins.

Berg and Cobb, 1967 (B 1246), p. 124 -- Quartz-feldspar veins carry galena.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 88.

(Grub Gulch)

Gold

Nome district
MF-463, loc. 88

Nome (12.55-12.65, 13.05)
64°43'N, 165°23'W

Summary: Narrow valley cut in schist. Gravels schist, quartz, and granite boulders. Pay streak ran \$3.75 (old price) per cubic yard. Mined out before 1905.

Collier and others, 1908 (B 328), p. 197 -- Narrow valley cut in schist. Gravels are schist and vein-quartz pebbles. On claim worked in 1903 pay streak is said to average 40 ft. wide and was 5-6 ft. thick. Gold rough and coarse.

Moffit, 1913 (B 533), p. 88 -- Gravel made up of schist and quartz; many granite boulders. Gold coarse and rough. Pay streak ran \$3.75 a cubic yard. Worked out before 1905.

Hummel, 1975 (OF 75-2), loc. 86 -- Reference to Moffit, 1913 (B 533), p. 88.

(Hastings Cr.)

Gold

Nome district
MF-463, loc. 133

Nome (21.9-22.0, 8.65-8.95)
64°28'-64°29'N, 165°05'-165°06'W

Summary: Most of mining was on second beach; a little near head and between second beach and coast. Stream entirely within coastal plain. Dredge operated 1916-18, 1930. See also (Nome beaches).

Brooks, 1904 (B 225), p. 53 -- Ditch to bring water from Flambeau R. to be built, 1903.

Brooks, 1905 (B 259), p. 22 -- Ditch from Flambeau R. under construction, 1904.

Purington, 1905 (B 263), p. 209 -- Gold worth \$18.19 an ounce.

Collier and others, 1908 (B 328), p. 167 -- A little gold has been mined about 4 mi. from the coast.

Moffit, 1913 (B 533), p. 77 -- Has been mining.

p. 100-101 -- Important placers part of second beach. Other mining near head and between second beach and coast. Stream entirely within coastal plain.

Smith, 1917 (BMB 142), p. 27 -- Mining, 1915.

Mertie, 1918 (B 662), p. 452 -- Dredge operated, 1916.

Cathcart, 1920 (B 712), p. 187 -- Dredge operated, 1918.

Smith, 1930 (B 813), p. 39 -- Work on rehabilitating old dredge, 1928.

Smith, 1932 (B 824), p. 44 -- Rehabilitation of old dredge continued, 1929.

Smith, 1933 (B 836), p. 45, 54-55 -- Dredge operated part of season, 1930.

Smith, 1933 (B 844-A), p. 55 -- Dredge did not operate, 1931.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 100-101.

(Hazel Cr.)

Gold

Nome district
MF-463, loc. 144

Nome (21.65-21.75, 12.85-12.95)
64°42'N, 165°06'-165°07'W

Summary: Upper valley narrow and steep; last half mile crosses valley floor of Flambeau R. Has been mining (probably not much) near place where creek leaves hills.

Moffit, 1913 (B 533), p. 101 -- Tributary of upper Flambeau R. Upper valley narrow and steep; last half mile crosses valley floor of Flambeau R. Gold near place where creek leaves hills. -Ditch being built to run a hydraulic plant, 1905.

Cobb, 1973 (B 1374), p. 89 -- Was placer mining in at least one year.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 101.

(Hazel Gulch)

Gold, Tungsten

Nome district

Nome (18.9, 13.0) approx.
64°43'N, 165°29'W approx.

Summary: Was small-scale placer mining in 1916. Placers contain a small amount of scheelite.

Mertie, 1918 (B 662), p. 455 -- Open-cut mine operated, 1916.

Coats, 1944 (OF 17), p. 6 -- Placers contain negligible amount of placer scheelite.

Hed & Strand

Antimony, Gold

Nome district

Nome (20.15, 14.3)

MF-463, loc. 30

64°48'N, 165°18'W

Summary: Developed by about 1,200 ft. of underground workings. 106 tons of antimony ore shipped in 1915-16. Near a schist-limestone contact close to a sheared granite body that caused contact metamorphism. Lode is a quartz vein as much as 4 ft. thick that pinches, swells, and is affected slightly by small faults; stibnite in masses as much as 2 ft. thick along footwall; some stibnite in acicular crystals. Other lower grade veins contain stibnite, pyrite, arsenopyrite, and a little gold. Some metallic minerals also probably disseminated in schist wall rock. Includes references to: Head & Strand, Hed & Strang, Hed & Strom.

Brooks, 1916 (B 642), p. 30 -- Some stibnite mined, 1915.

p. 71 -- Antimony ore shipped, 1915.

Brooks, 1916 (B 649), p. 54-56 -- Claim located, 1909. Some ore shipped, 1915. About 600 ft. of underground workings. Near a schist-limestone contact near a granite intrusive. Two parallel veins. Ore is in kidneys and shoots of almost pure stibnite; some acicular crystals. Lower grade ore also contains quartz and pyrite. One specimen consists of mineralized quartz-mica schist that contains some calcite; pyrite, arsenopyrite, and stibnite in a vitreous quartz gangue; stibnite is youngest mineral, as it replaces older sulfides and quartz.

Smith, 1917 (BMB 142), p. 27 -- Stibnite mined, 1915.

Brooks, 1918 (B 662), p. 62 -- Antimony ore mined; some shipped, 1916.

Mertie, 1918 (B 662), p. 437-438 -- About 660 ft. of tunnel and drifts.

In tunnel the vein is about 4 ft. thick; quartz and stibnite; stibnite in body 2 ft. thick along footwall; strikes N45°E and dips 48°NW. Vein irregular and offset by many small faults. No gold reported from stibnite, but a little is in quartz and schist in vein and in schist wall rock. In 1915-16 106 tons of stibnite was mined and shipped. Nearby quartz-stibnite material said to assay as high as \$6 in gold a ton in the quartz and as high as \$2 in gold a ton in the stibnite.

Cathcart, 1922 (B 722), p. 184 -- Stibnite present.

p. 224 -- Reference to Mertie, 1918 (B 662), p. 436 [should be p. 437-438].

p. 226-230 -- Near a sheared granite body which caused development of contact-metamorphic minerals in limestone; stibnite apparently unrelated to and younger than contact metamorphism. More than 1,100 ft. of underground workings and many pits and trenches. 106 tons of ore shipped in 1915-16; a few tons on dump in 1920. Data on ore deposit from Mertie, 1918 (B 662), p. 436-438. Mineralization similar to that at Sliscovich mine.

Smith, 1930 (B 813), p. 19 -- Development work, but no production, 1928.

Smith, 1932 (B 824), p. 23 -- Development continuing, 1929.

Smith, 1933 (B 836), p. 23 -- Development continuing, 1930.

Hed & Strand -- Continued

Smith, 1934 (B 857-A), p. 22 -- Development work, 1932.

Anderson, 1947 (TDM 5-R), p. 9-10 -- 106 tons of antimony ore shipped during World War I. In 1943(?) about 10 tons of about 30% ore was on dump and possibly 30-40 tons more in lenses in sight in the mine. Average gold content low. Over 1,000 ft. of workings accessible [in 1943(?)].

White and others, 1952 (C 196), p. 4 -- Quartz veins in early Paleozoic schist; stibnite pyrite, and arsenopyrite; eU is 0.001%.

Hummel, 1962 (MF-248), loc. 8 -- Antimony mine or prospect.

Berg and Cobb, 1967 (B 1246), p. 122-123 -- Discovered in 1909, developed by about 1,200 ft. of underground workings. 106 tons of antimony ore shipped, 1915-16. Lode, near a schist-limestone contact close to a granitic intrusive, consists of stibnite-bearing quartz veins in fractures transverse to foliation of enclosing schist. Principal vein contains masses of almost pure stibnite up to 2 ft. thick and is as much as 4 ft. thick. Vein pinches and swells and is offset slightly by numerous small faults. Lower grade quartz veins contain stibnite, pyrite, arsenopyrite, and a little gold; same minerals probably disseminated in schist.

Hummel, 1975 (OF 75-2) -- References to Cathcart, 1922 (B 722), p. 226-230; Hummel, 1962 (MF-248), loc. 8

(Hickey Cr.)

Gold

Nome district

Nome

SE 1/4 NE 1/4 NE 1/4 quad.

Summary: Hydraulicking, 1904. Creek name not in current use.

Brooks, 1905 (B 259), p. 21 -- A little hydraulicking, 1904. Creek in same general area as Dorothy Cr.

(Hobson Cr.)

Gold

Nome district
MF-463, loc. 111

Nome (20.3-20.4, 13.55-13.75)
64°45'N, 165°17'W

Summary: Bedrock is massive limestone with greenstone schist near head.
Was mining, including a dredge at least part of the time, 1913-16.

Brooks and others, 1901, p. 79 -- Prospecting and some development [as of 1900].
Collier and others, 1908 (B 328), p. 181 -- Bedrock is massive limestone with
greenstone schist near head. Prospecting in 1900; very little gold produced.

Chapin, 1914 (B 592), p. 387, 390 -- Dredge operated, 1913.

Smith, 1917 (BMB 142), p. 27 -- Mining, 1915.

Mertie, 1918 (B 662), p. 452 -- Dredge operated, 1916.

Hummel, 1975 (OF 75-2) -- Reference to Collier and others, 1908 (B 328), p.
181.

Holmason & Helde

Copper

Nome district
MF-463, loc. 34

Nome (19,8, 13,1)
69°44'N, 165°22'W

Summary: Copper and iron-sulfide minerals present.

Hummel, 1962 (MF-247), loc. 6 -- Copper and iron-sulfide minerals present.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-247), loc. 6.

(Holyoke Cr.)

Gold

Nome district

Nome (19.8, 9.55-9.65)

MF-463, locs. 128, 138

64°32'N, 165°23'W

Summary: Creek wholly in coastal plain. Gold derived from tundra gravel and in old beach deposits. Includes references to Bessie; see also (Nome beaches).

Brooks and others, 1901, p. 84 -- In coastal plain. Gold in gravel on clay false bedrock.

Moffit, 1907 (B 314), p. 136 -- Ground not frozen where Holyoke Cr. crosses Third Beach.

p. 142 -- Richness of Bessie Bench may be due to proximity to source of gold or to stream that carried it to Third Beach.

Collier and others, 1908 (B 328), p. 165 -- Shaft sunk 118 ft.; a layer of beach sand carried fine gold and fragments of sea shells.

p. 167 -- Output of Bourbon and Holyoke Creeks through 1903 was probably about \$140,000 [about 1,935 fine oz.], most of which was from Bourbon Cr.

Henshaw, 1910 (B 442), p. 356 -- Bessie mine flooded out, but saved by using cold-storage plant machinery to freeze a bulkhead across the drift through which the water was entering.

Moffit, 1913 (B 533), p. 89-90 -- Creek wholly in coastal plain. Plans for dredging stream and coastal-plain gravels.

Chapin, 1914 (B 592), p. 387, 390 -- Dredge under construction, 1913.

Hummel, 1957 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 89-90.

(Hot Air Bench)

Gold

Nome district
MF-463, loc. 101

Nome (19.45, 10.95)
64°36'N, 165°25'W

Summary: Quartz-albite schist cut by quartz veins; principal sulfide mineral is arsenopyrite. Old channel of Glacier Cr. in bench 100 ft. above creek was a large producer of placer gold, probably at least 29,000 fine oz. by 1903.

Collier and others, 1908 (B 328), p. 194 -- Old channel of Glacier Cr. on north bank 100 ft. above stream; opposite Snow Gulch. Gravel of schist, limestone, and a little granite in channel about 100 ft. wide and 400-500 ft. long cut in schist. Total production was probably not less than \$600,000 [about 29,000 fine oz.]; or more than \$50 a cubic yard.

Moffit, 1913 (B 533), p. 85-86 -- Data about the same as in Collier and others, 1908 (B 328), p. 194. Schist bedrock is pyritiferous and cut by pyritiferous quartz veins. Gold believed to have been locally derived.

Cathcart, 1922 (B 722), p. 243 -- Was a large producer of placer gold. Bedrock is quartz-albite schist with chlorite, muscovite, and accessory sillimanite and sphene; sulfide is arsenopyrite. Local bedrock not a likely source for placer gold.

Hummel, 1962 (MF-247), loc. 7 -- Iron-sulfide mineral(s) present.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 85-86.

(Hume Cr.)

Gold

Nome district
MF-463, loc. 56

Nome (13, 15, 16, 2)
64°55'N, 166°14'W

Summary: Small-scale mining, 1901. Chloritic schist bedrock.

Collier and others, 1908 (B 328), p. 220 -- Two men working with rockers in 1901 said to have made \$2-\$3 a day. Workings abandoned by 1903. Chloritic mica schist bedrock.

(Hungry Cr.) (Gulch)

Bismuth, Gold

Nome district
MF-463, loc. 76

Nome (17.1-17.4, 11.95-12.2)
64°40'-64°41'N, 165°41'-165°43'W

Summary: Bedrock schist that strikes across creek and dips downstream. Gold in 4 ft. of gravel on decomposed schist. Concentrates contain gold, bismuth nuggets, magnetite, ilmenite, garnet, limonite, pyrite, and rutile.

Brooks and others, 1901, p. 69 -- Estimated production in 1900 from Oregon, Hungry, and Mountain Creeks was \$50,000 [about 2,400 fine oz.].

p. 92 -- 2 claims being mined, 1900.

p. 94-95 -- Creek entrenched about 20 ft. in valley floor. Where exposed bedrock is schist that strikes across stream course and dips downstream. An area of 5,000 sq. ft. yielded about \$4,000 in coarse gold. Gold in 4 ft. of gravel on decomposed schist. Concentrates contain bismuth nuggets, magnetite, garnet, limonite, pyrite, ilmenite, rutile, and gold.

Collier and others, 1908 (B 328), p. 214 -- Most of data same as in Brooks and others, 1901, p. 94-95, 3 mines operating in 1903.

Anderson, 1947 (TDM 5-R), p. 17 -- Bismuth reported in placer concentrates.

Herreid, 1970 (GR 36), p. 4-5 -- Placer deposit could have resulted from concentration of material from a quartz-rich linear belt in schist on ridge south of creek.

p. 20 -- Placer deposits may be related to a possible minor gold content in schist with quartz veins or to a mineral deposit along a fault that offsets marble at head of Hungry Gulch.

Hummel, 1975 (OF 75-2) -- References to Collier and others, 1908 (B 328), p. 214; Herreid, 1970 (GR 36), fig. 1 [placer tailings symbol on map].

(Igloo Cr.)

Gold

Nome district

Nome

SW 1/4 NW 1/4 NE 1/4 quad.

Summary: Colors of gold reported.

Collier and others, 1908 (B 328), p. 218 -- Colors of gold reported, but no commercial production. Creek deserted in 1903.

(Independence Cr.)

Gold

Nome district

Nome

SE 1/4 SW 1/4 NE 1/4 quad.

Summary: Bedrock limestone. Small production before 1903 was reported.

Collier and others, 1908 (B 328), p. 216-217 -- Small production reported;
no work in 1903, but many evidences of past prospecting or mining.
Bedrock limestone.

Hummel, 1975 (OF 75-2), loc. 4 -- Reference to Collier and others, 1908
(B 328), p. 217.

(Irene Cr.)

Gold

Nome district
MF-463, loc. 123

Nome (21.1, 9.05)
64°29'N, 165°13'W

Summary: Placer mining reported in 1916 and 1939 and(or) 1940. Gold may have come from an old beach. See also (Nome beaches).

Mertie, 1918 (B 662), p. 454 -- Placer mining, 1916.
Hummel, 1975 (OF 75-2) -- References to Mertie, 1918 (B 662), p. 454, and to a biennial report of Alaska Territorial Dept. Mines that reported nonfloat mining in 1939 and(or) 1940.

(Iron Cr.)

Iron

Nome district
MF-463, loc. 6

Nome (16.9, 13.2)
64°44'N, 165°25'W

Summary: Small gossan with a little limonite and no visible sulfide minerals.

Mulligan and Hess, 1965 (USBM OF 8-65), p. 18 -- Residual ore estimates are 12,000 long tons of 20-40% iron and 20,000 long tons of 10-20% iron.

p. 25-26 -- Float specimen in chlorite schist containing unevenly distributed limonite. Outcrop specimens are finely crystalline limestone with a small amount of disseminated limonite and compacted limonite cavity fillings and sericite schist containing a small amount of limonite. No sulfides observed; compacted limonite in cavities was probably precipitated from iron-bearing acidic solutions.

Herreid, 1970 (GR 36), p. 20 -- Deposits not visibly associated with steep faults.

Hummel, 1975 (OF 75-2) -- References to above and to various maps showing location of deposit.

(Jess Cr.)

Gold

Nome district
MF-463, loc. 134

Nome (17.45, 9.75)
64°32'N, 165°41'W

Summary: Small creek that cuts second beach near its western end. Mining reported in a few years (most recently in 1918) probably was all in old beach deposits. See also (Nome beaches).

Moffit, 1906 (B 284), p. 133-134 -- Gold discovered, 1905. Gravels are 1,200 ft. from beach and resemble those of old beach near Nome [second beach].
Eakin, 1915 (B 592), p. 369-370 -- Hydraulic mining, 1914.
Cathcart, 1920 (B 712), p. 189 -- Open-cut mining, 1918.
Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1906 (B 284), p. 133-134.

(Johnston Cr.)

Gold (?)

Nome district

Nome

SE 1/4 NW 1/4 SE 1/4 quad.

Summary: Rises in Kigluaik Mts. Headwater fork of Feather R. Unconfirmed report that colors of gold were found.

Collier and others, 1908 (B 328), p. 219 -- Headwater fork of Feather R. Colors of gold reported. Gravels largely granite and other rocks from Kigluaik Mts.

Jorgensen

Gold, Lead, Tungsten

Nome district

Nome (19.4, 10.65)

MF-463, loc. 47

64°35'N, 165°25'W

Summary: Quartz-feldspar veins in schist and marmorized limestone are cut by a fault zone about a foot thick. Wall rock most altered next to fault zone. Sulfides in veins are pyrite, arsenopyrite, and galena; in wall rock pyrite and arsenopyrite. Gold, both free and in sulfides, in veins and wall rock. Scheelite in veins. Scheelite and gold introduced with quartz, which was then shattered by movement along veins; sulfides (contemporaneously or soon thereafter) filled fissures in veins and impregnated wall rock. Little, if any, development. Includes references to lodes at head of Mountain Cr.

Mertie, 1918 (B 662), p. 434-435 -- At head of Mountain Cr. Country rock is schist cut by veins and stringers of white quartz. Fault zone about 1 ft. thick cuts both schist and quartz. Schist more iron stained near fault; much arsenopyrite and lesser amounts of pyrite. Some free gold, but most believed to be in sulfides. Scheelite in and along a shattered, iron-stained quartz vein.

Cathcart, 1922 (B 722), p. 240-241 -- Pyrite, arsenopyrite, and galena in quartz veins in mica schist and marmorized limestone; scheelite also reported. Gold in altered wall rock and in sulfides. Apparent paragenesis is: (1) quartz, with a little gold and scheelite; (2) movement and shattering of quartz with contemporaneous or slightly later introduction of sulfides carrying gold into fissures in quartz and impregnation of schist wall rock. Nearby quartz veins in limestone carry some galena.

Coats, 1944 (OF 17), p. 5 -- Coats could not find vein with scheelite in 1943.

Anderson, 1947 (TDM 5-R), p. 27 -- Lead mineral(s) in quartz veins.

p. 43 -- Scheelite in quartz veins.

Hummel, 1962 (MF-247), loc. 8 -- Gold and scheelite present.

Berg and Cobb, 1967 (B 1246), p. 124 -- Quartz-feldspar veins; galena associated with pyrite, arsenopyrite, scheelite and gold.

Hummel, 1975. (OF 72-2) -- References to most of above descriptions.

(King Mtn.)

Gold, Molybdenum

Nome district
MF-463, loc. 45

Nome (19.9, 10.85) approx.
64°36'N, 165°21'W approx.

Summary: Calcite and quartz veins in alternating schist and limestone carry gold; quartz veins also carry a little molybdenite. Altered schist also carries \$3 to \$24 a ton in gold (at \$20.67 per fine oz.). Several shafts sunk in early 1900's failed to find minable ore. Report of the presence of platinum was probably in error.

Moffit, 1913 (B 533), p. 130-131 -- On divide between Anvil and Glacier Creeks calcite veins carry gold. Sinking several shafts failed to find an ore body. Quartz veins nearby carry a little gold and a little molybdenite. One vein that can be traced for about 100 ft. along the surface is 1 to 2-1/2 ft. thick between schist and a thin overlying bed of limestone.

Mertie, 1918 (B 662), p. 430 -- Prospecting, 1916.

Cathcart, 1922 (B 722), p. 237 -- Shafts sunk in alternating limestone and decomposed schist; little quartz visible; decomposed schist is said to assay \$3-\$24 a ton in gold. Owners make the unlikely claim that platinum is also present.

Smith, 1942 (B 926-C), p. 202-203 -- Reference to and quotation from Moffit, 1913 (B 533), p. 130-131.

Anderson, 1947 (TDM 5-R), p. 35 -- Molybdenum in quartz stringers on divide between Anvil and Glacier Creeks.

(Last Chance Cr.)

Antimony, Gold, Lead, Silver, Tungsten

Nome district

Nome (18.65-18.9, 13.0-13.05)

MF-463, locs. 19, 89

64°43'-64°44'N, 165°29'-165°31'W

Summary: Country rock is schist with graphitic and calcareous beds and interbedded limestone. A tunnel was driven 70 ft. on a lode said to be 4 ft. thick consisting of galena, pyrite, and stibnite; sulfides carry some gold and silver. Placer gold discovered in 1900; has been a little sluicing. Concentrates contain a little coarse rough gold, scheelite, hematite, magnetite, and pyrite. Includes references to Christophosen (Last Chance Cr.). See also (Waterfall Cr.); creeks are confused in several references.

Brooks and others, 1901, p. 80 -- A little sluicing has been done [as of 1900].
Collier and others, 1908 (B 328), p. 197 -- Country rocks are various kinds of schist. Gold discovered in 1900. Mining, 1903. The small amount of gold recovered was coarse, rather rough, and bright.

Smith, 1908 (B 345), p. 245 -- Picked samples of vein said to be 5 ft. wide reported to yield high assays in antimony and gold.

Moffit, 1913 (B 533), p. 87 -- Bedrock is schist with graphitic and calcareous beds and interbedded limestone. A little gold has been found, but mining was not very profitable. Gold rough and iron stained. Concentrates contained gold, scheelite, hematite, magnetite, and pyrite.

p. 134 -- Stibnite reported, but occurrence not confirmed.

Eakin, 1915 (B 622), p. 369-370 -- Mining, 1914.

Mertie, 1918 (B 662), p. 446 -- 2 lode claims. Tunnel driven 70 ft. on a lode said to be 4 ft. thick consisting of galena and some pyrite in quartz gangue. Sulfides carry gold and silver. Stibnite also reported.

Cathcart, 1922 (B 722), p. 183 -- Reference to Mertie, 1918 (B 662), p. 446 [incorrectly called Waterfall Cr. by Cathcart].

p. 253 -- Scheelite in concentrates.

Smith, 1926 (B 783), p. 16 -- Mining, 1924.

Coats, 1944 (OF 17), p. 6 -- Negligible amounts of placer scheelite.

Berg and Cobb, 1967 (B 1246), p. 124-125 -- 5-ft. vein reported to contain argentiferous galena, pyrite, stibnite, and gold.

Herreid, 1970 (GR 36), p. 3 -- Quotation from Mertie, 1918 (B 662), p. 446.

Sainsbury and others, 1972 (OF 506), p. 6 -- Creek has been mined. Lodes near head contain quartz, gold, and sulfide minerals including stibnite and galena. [Name of creek not used in reference.]

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 87.

(Lillian Cr.)

Gold

Nome district
MF-463, loc. 116

Nome (20.7-20.75, 11.05-11.4)
64°36'-64°37'N; 165°14'-165°15'W

Summary: Shallow channel in schist and interbedded limestone contains 3-10 ft. of gravel from which a little gold was mined (probably not very profitably) in early 1900's.

Brooks and others, 1901, p. 78 -- 4 claims mined in 1900. Gold coarse and rough; mined from bottom 8 in. of 3-5 ft. of schist and quartz gravel on schist bedrock.

Collier and others, 1908 (B 328), p. 172-173 -- North fork of Buster Cr. Country rock schist and limestone. Gravels contain schist, quartz, greenstone, and granite, 3-10 ft. thick covered by as much as 5 ft. of overburden. Much of gold heavily coated with iron oxide. Small-scale mining, 1903; probably made little more than wages.

Moffit, 1913 (B 533), p. 96-97 -- Fork of Buster Cr. Shallow channel in broad valley. Bedrock is schist and interbedded limestone. Gold unevenly distributed; total production small.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 97.

Lilly

Copper, Gold

Nome district
MF-463, loc. 36

Nome (18.95, 12.3)
64°41'N, 165°29'W

Summary: At limestone-schist contact decomposed pyrite is in somewhat silicified limestone cut by quartz veinlets. In Hummel, 1962 (MF-247), this occurrence is called a copper prospect; mineralogy not given.

Cathcart, 1922 (B 722), p. 252 -- Shallow trench at limestone-schist contact exposed limestone cut by quartz veinlets and iron-stained graphitic quartz schist. Only sulfide seen was decomposed pyrite in somewhat silicified limestone.

Hummel, 1962 (MF-247), loc. 9 -- Copper prospect.

Hummel, 1975 (OF 75-2) -- References to Cathcart, 1922 (B 722), p. 252, and Hummel, 1962 (MF-247).

(Lindblom Cr.)

Gold, Tungsten

Nome district
MF-463, loc. 97

Nome (19.3, 11.35)
64°37'N, 165°26'W

Summary: Heads in a gulch in schist; crosses floor of valley of Snake R. Shallow gravel contains a little gold and scheelite. Minor production of gold in 1903. Quartz veins carrying scheelite reported.

Collier and others, 1908 (B 328), p. 196 -- Small stream trenched across floor of Snake R. valley. Small production from one claim, 1903.

Moffit, 1913 (B 533), p. 86-87 -- Rises on west slope of Mt. Brynteson, where it has cut a narrow gulch in schist; further downstream flows in gravel of Snake R. valley. Stream gravel shallow; only a little gold has been found.

Coats, 1944 (OF 17), p. 6 -- Negligible amounts of placer scheelite.
Anderson, 1947 (TDM 5-R), p. 42-43 -- Scheelite has been found in placers and quartz veins.

Thorne and others, 1948 (RI 4174), p. 33-34 -- Small amounts of placer gold and scheelite.

Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 86-87; Anderson, 1947 (TDM 5-R), p. 42.

Lindfors

Antimony

Nome district
MF-463, loc. 32

Nome (21.0, 14.1)
64°47'N, 165°11'W

Summary: Antimony mineral(s) reported.

Hummel, 1962 (MF-248), loc. 9 -- Antimony mineral(s) present.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248), loc. 9.

(Livingston Cr.)

Gold (?)

Nome district

Nome

SE 1/4 NW 1/4 NE 1/4 quad.

Summary: Headwater tributary of Feather R. Colors of gold have been reported, but not confirmed.

Collier and others, 1908 (B 328), p. 219 -- Colors of gold reported; headwater tributary of Feather R. Gravels mainly derived from Kigluaik Mts. No mining has been done, but colors of gold were reported.

(May Gulch)

Gold

Nome district
MF-463, loc. 77

Nome (17.6, 11.8)
64°39'N, 165°39'W

Summary: South fork of Hungry Cr. Near head holes sunk 20 ft. in gravel did not reach bedrock. Colors found from surface all the way down.

Brooks and others, 1901, p. 95 -- South fork of Hungry Cr. Near head holes sunk 20 ft. through washed gravel did not reach bedrock; colors from surface on down.

Collier and others, 1908 (B 328), p. 215 -- Same data as Brooks and others, 1901, p. 95.

McAllister

Gold(?)

Nome district

Nome

NE 1/4 NE 1/4 quad.

Summary: Work reported, 1909. No data other than that it was a lode gold prospect near the head of Nome R. Prospect probably also had another name.

Brooks, 1910 (B 442), p. 38 -- Work continued on McAllister auriferous lode prospect at head of Nome R., 1909.

McDuffee

Antimony, Gold

Nome district
MF-463, loc. 23

Nome (19.65, 13.75)
64°45'N, 165°23'W

Summary: Stibnite lens in sheared schist near a schist-limestone contact and stibnite float. Gold-bearing veins.

Anderson, 1947 (TDM 5-R), p. 10-11 -- Stibnite lens no more than 6 in. thick where visible; in sheared schist at a schist-limestone contact. 100 lbs. stibnite on dump. Float stibnite elsewhere in vicinity. -

Hummel, 1962 (MF-248), locs. 10, 11 -- Gold and iron sulfide mineral(s) present.

Berg and Cobb, 1967 (B 1246), p. 124 -- Stibnite and gold-bearing veins.

Hummel, 1975 (OF 75-2) -- References to Anderson, 1947 (TDM 5-R), p. 10-11; Hummel, 1962 (MF-248), locs. 10, 11.

(Manila Cr.)

Copper, Gold

Nome district

Nome (20.1-20.15, 3.65-3.75)

MF-463, locs. 29, 110

64°45'N, 165°18'-165°19'W

Summary: Copper reported on ridge at head of creek. Placer gold found in 1913; mining reported in 1916.

Chapin, 1914 (B 592), p. 389 -- Promising placer gold strike, 1913.

Mertie, 1918 (B 662), p. 454 -- Mining, 1916.

Cathcart, 1922 (B 722), p. 182 -- Copper reported on ridge at head of creek.

Anderson, 1947 (TDM 5-R), p. 19 -- Reference to B 722.

Moffit

Graphite

Nome district

Nome (19.25, 17.2)
64°58'N, 165°21'W

Summary: Graphite occurrence. See also (Windy Cr.).

Hummel, 1962 (MF-248), loc. 12 -- Graphite occurrence.

Hummel, 1975 (OF 75-2) -- [References cited are general descriptions of graphite occurrences in the Kigluaik Mts. Map shows that occurrence 101, Nome D-1 quad., here called Mt. Osburn, is the same as loc. 12, MF-248.].

Mogul

Iron

Nome district
MF-463, loc. 4

Nome (17.1, 13.75)
64°46'N, 165°43'W

Summary: Ferruginous limestone rubble making up a small gossan was estimated to contain about 5,000 long tons of material containing 10%-20% iron. Bedrock not exposed.

Eakin, 1915 (B 622), p. 364 -- 4 claims. No development as of 1914. Iron-stained limestone detritus with a few limonite nodules and fragments.

Mertie, 1918 (B 662), p. 446 -- Iron claims; no recent work as of 1916.

Cathcart, 1922 (B 722), p. 183' -- Reference to Mertie, 1918 (B 662), p. 444 [reference is in error; cited page refers to Monarch].

p. 261 -- Quotation from Eakin, 1915 (B 622), p. 364-365. [statement that Mertie reported sulfides and thought iron deposit might be a gossan is really to Monarch.].

Mulligan and Hess, 1965 (USBM OF 8-65), p. 17 -- Quotation from Eakin, 1915 (B 622), p. 364.

p. 18 -- Residual iron ore estimated to be 5,000 long tons of 10-20% iron.

Herreid, 1966 (GR 24), p. 2-3 -- Gossan deposit in which mainly ferruginous rubble is exposed.

p. 10 -- None of geochemical samples anomalous in Cu, Pb, Zn, or Mo.

Berg and Cobb, 1967 (B 1246), p. 126 -- Similar to Monarch, but smaller, probably leaner, and less well explored.

Hummel, 1975 (OF 75-2) -- References to most of above descriptions.

Monarch

Iron, Manganese

Nome district

Nome (16.9, 13.75)

MF-463, loc. 3

64°46'N, 165°44'W

Summary: Patented claims on 2 gossans in saddles in a limestone- or marble-capped ridge southeast of Sinuk R. Calcareous rocks separated from underlying schist and related rocks by a thrust fault. Gossans apparently localized along steep faults. Development consisted of open cuts, a shallow shaft, and a short adit. Gossan material is mainly limonite (some botryoidal) in surface rubble and limestone (or marble) bedrock; some pyrolusite. Ferruginous material estimated to be 550,000 long tons containing 10%-45% iron. No sulfide minerals reported.

- Chapin, 1914 (B 592), p. 406-407 -- Limonite, generally massive, except along open spaces where there are botryoidal and mammillary forms with fibrous texture. A little hematite. Bedrock is schist cut by greenstone sills and dikes and overlain by limestone. Shaft and 30 trenches. Samples contained as much as 59.86% Fe and 11.22% Mn. Gold reported, but not supported by available assay returns.
- Eakin, 1915 (B 622), p. 362-364 -- 14 claims on limestone ridge. Iron ore mainly at two gaps in ridge. At east gap is a heavy residual deposit of limonite and hematite; veins in bedrock are numerous and from a few inches to 30 ft. wide. At west gap limestone is cut by a stockwork of limonite and pyrolusite veinlets. Developments (most at east gap) consist of open cuts, a shallow shaft, and a short drift; uncovered a mass of undisturbed limonite, apparently a vein 30 ft. wide, cutting limestone country rock. Analysis of sample of residual material indicated 54.81% Fe, 1.06% Mn, 0.057% P, and a trace of S. Residual material apparently covers an area 600 by 800 ft. to a depth of several feet.
- Mertie, 1918 (B 662), p. 444-445 -- 15 patented and 3 unpatented claims. Probably an "iron hat" [gossan]; cannot judge iron content of underlying material. Rest of data same as Eakin, 1915 (B 622), p. 362-364.
- Brooks, 1921 (B 714), p. 42 -- Reference to Eakin, 1915 (B 622), p. 361-365. [Reference is to all iron deposits in area; name Monarch not used.]
- Cathcart, 1922 (B 722), p. 256-260 -- Quotations from Eakin, 1914 (B 592), p. 362-364, and Mertie, 1918 (B 662), p. 444.
- Mulligan and Hess, 1965 (USBM OF 8-65), p. 6-7 -- Data on names and ownership of patented claims.
- p. 11-15 -- Quotations from Eakin, 1915 (B 622), p. 362-364;
 - Mertie, 1918 (B 662), p. 444-445; Chapin, 1914 (B 592), p. 406.
 - p. 18 -- Estimated residual iron ore is 50,000 long tons of 30-45% iron and 500,000 long tons of 15-25% iron.
 - p. 21 -- Minerals identified in specimens included goethite, limonite, and manganese oxide.
 - p. 25 -- One of 5 iron deposits aligned along an anticline whose axis strikes N 10° W.
 - p. 31-32 -- Petrographic descriptions of specimens.
- Herreid, 1966 (GR 24), p. 2-3 -- Gossan deposit in which mainly ferruginous rubble is exposed.

Monarch - Continued

p. 5-7 -- Gossan area of 85 acres contains float of gray marble, ferruginous marble, and 1-50% limonite. In saddles in ridge at head of Washington Cr. Fine-grained dolomite occurs as fracture fillings or irregular replacement masses in gray marble and a barren area around limonite-bearing areas. Limonite veins cut gray marble; a little dusting of pyrolusite on goethite and crystalline marble in open-space fillings in brecciated marble.

p. 10-11 -- Gossan probably represents a pyritic deposit; in geochemical samples zinc and possibly lead are anomalous. Might be a buried sulfide body.

Berg and Cobb, 1967 (B 1246), p. 125-126 -- Data from Eakin, 1915 (B 622), p. 363.

Herreid, 1970 (GR 36), p. 20-24 -- Gossans along steep faults in marble above a thrust fault; phyllite, slate, and schist below thrust. Two gossans in saddles in ridge SE of Sinuk R. Rubble covers area of about 85 acres. Main gossan localized along steep fault that can be traced to Quarry prospect. Gossan is limonite and goethite, limonitic marble, dolomite, and some marble without limonite. Pyrolusite on some joint surfaces; some samples contain up to 10% Mn.

Hummel, 1975 (OF 75-2) -- References to several of above descriptions.

(Monument Cr.)

Gold, Tin

Nome district
MF-463, loc. 100

Nome (18.65-18.9, 10.8-10.95)
64°36'N, 165°30'-165°31'W

Summary: Bench gravels mined in 1918 carried gold worth \$32 (old price of gold) per cubic yard. Mined from 1928 to 1940; dredge operated 1938-40 and was then moved to Beaver Cr. (Solomon quad.). Placer cassiterite present.

Martin, 1920 (B 712), p. 51 -- Bench gravels carrying \$32 per cubic yard discovered, 1918.

Cathcart, 1920 (B 712), p. 188 -- Hydraulic mining, 1918.

p. 190 -- Old stream channel in Poorman bench north of Monument Cr. was opened by a hydraulic pit 40 x 60 x 6 feet. Gravel mainly schist. Pay in lower 4 ft. of gravel, which is overlain by 4 ft. of gravel and 2 ft. of muck.

Smith, 1930 (B 813), p. 39 -- Mining, 1928.

Smith, 1932 (B 824), p. 44 -- Mining, 1929.

Smith, 1933 (B 836), p. 45-46 -- Mining, 1930.

Smith, 1933 (B 844-A), p. 46 -- Mining, 1931.

Smith, 1934 (B 857-A), p. 43 -- Mining, 1932.

Smith, 1934 (B 864-A), p. 48 -- Mining, 1933.

Smith, 1936 (B 868-A), p. 49-50 -- Mining, 1934.

Smith, 1937 (B 880-A), p. 52 -- Mining, 1935.

Smith, 1939 (B 917-A), p. 63, 75-76 -- Dredge moved from Casadepaga R. [Solomon quad.] began operating, 1938.

Smith, 1941 (B 926-A), p. 59-60, 71 -- Dredge operated, 1939; dredging ground about worked out; dredge to be moved to Beaver Cr. [Solomon quad.].

Smith, 1942 (B 933-A), p. 56 -- Dredge moved to Beaver Cr. [Solomon quad.], 1940.

Anderson, 1947 (TDM 5-R), p. 40 -- Placer cassiterite has been found.

Cobb, 1973 (B 1374), p. 89 -- Cassiterite reported.

Hummel, 1975 (OF 75-2) -- References to Cathcart, 1920 (B 712), p. 190;

Anderson, 1947 (TDM 5-R), p. 40.

(Moss Gulch) (Cr.)

Gold

Nome district
MF-463, loc. 122

Nome (21.15, 9.4)
64°31'N, 165°12'W

Summary: Mining reported in 1911 (dredge) and 1916 (open cut). Gold may have come from an old beach. See also (Nome beaches).

Smith, 1912 (B 520), p. 342 -- Dredge in operation, 1911.

Chapin, 1914 (B 592), p. 387, 390 -- Dredge idle, 1913.

Mertie, 1918 (B 662), p. 455 -- Open-cut mine operated, 1916.

Hummel, 1975 (OF 75-2) -- Reference to Mertie, 1918 (B 662), p. 455.

(Mountain Cr.)

Gold, Tungsten

Nome district
MF-463, loc. 70

Nome (17.65, 12.6)
64°42'N, 165°39'W

Summary: Creek heads in limestone. Schist gravel in lower part of course. A little gold mining in about 1900. A little placer scheelite. Reference to Mountain Cr. in Anderson, 1947 (TDM S-R), p. 27 is in error as creek is identified as in Snake R. basin. See also Jorgensen.

Brooks and others, 1901, p. 69 -- Combined estimated production in 1900 from Oregon, Hungry, and Mountain Creeks was \$50,000 [about 2,400 fine oz.].

p. 95 -- No active mining when Collier was in area; creek not visited.

Collier and others, 1908 (B 328), p. 214 -- Heads in limestone; schist gravel in lower part of creek reported to carry gold. Preparations to work on claim in 1904.

Coats, 1944 (OF 17), p. 6 -- Negligible amounts of placer scheelite.

Nelson (Skookum Cr.)

Antimony

Nome district
MF-463, loc. 40

Nome (20.9, 12.4)
64°40'N, 165°13'W

Summary: Stibnite present.

Hummel, 1962 (MF-247), loc. 11 -- Stibnite present.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-247).

Nelson (Steep Cr.)

Lead, Silver(?), Zinc

Nome district

Nome (19.55, 13.8)

MF-463, loc. 23

64°46'N, 165°23'W

Summary: On south slope of Mt. Distin. Limestone near contact with schist replaced by irregular stringers and disseminated particles of sphalerite, galena, and pyrite; commonly along bedding. Presence of silver mentioned in only one reference. Developed by a 40-ft. tunnel, an open cut, and several pits. No evidence that any ore was shipped. Includes references to lode at head of Steep Cr.

Mertie, 1918 (B 662), p. 447 -- Tunnel driven 55 ft. in jointed limestone.

Above tunnel small stringer in limestone contains galena, sphalerite, and a little pyrite.

Cathcart, 1922 (B 722), p. 182-183 -- Galena and sphalerite near head of Steep Cr.

p. 232 -- Development is 40-ft. tunnel, open cut, and several pits. Country rock is interbedded limestone and quartz-mica schist. Limestone along a contact with schist is bleached over a width of 30 ft. and contains galena, sphalerite, and pyrite. Veinlets of sulfides generally are parallel to bedding in limestone; some sulfide veins cut across bedding.

Anderson, 1947 (TDM 5-R), p. 27 -- Data from B 722.

Wedge and others, 1952 (OF 51), p. 37 -- Silver-lead-zinc deposit.

Hummel and Chapman, 1960 (P 400-B), p. B32 -- Sphalerite is abundant in a lode cropping out at head of Steep Cr.

Hummel, 1962 (MF-248), loc. 13 -- Lead-zinc mine or prospect.

Berg and Cobb, 1967 (B 1246), p. 122 -- On south slope of Mt. Distin; consists of abundant irregular stringers and disseminated particles of sphalerite, galena, and pyrite in bleached limestone near its contact with quartz-mica schist. Formed by replacement of limestone, commonly parallel to bedding. Development work consisted of tunnel, open cut, and several pits; no evidence that any ore was shipped.

Hummel, 1975 (OF 75-2) -- References to Cathcart, 1922 (B 722), p. 232;

Hummel, 1962 (MF-248), loc. 14 [should be loc. 13].

(Nelson Cr.)(Gulch)

Gold, Tungsten

Nome district

Nome (21.2, 14.0)

MF-463, locs. 33, 108

64°46'N, 165°10'W

Summary: Zone of scheelite in quartz veins probably extends from a point a few hundred feet south of Nelson Cr. to Rocky Mountain Cr. Has been desultory gold placer mining; placer scheelite present. See also (Rocky Mountain Cr.).

Coats, 1944 (OF 17), p. 4-6 -- Has been desultory gold placer mining. Placer scheelite present in possibly important amounts. Scheelite-bearing vein-quartz float can be traced southeastward from creek up to the top of a small knoll. Float indicates that vein is about 1-1/2 ft. wide. Zone of scheelite-bearing veins probably extends from a point a few hundred feet south of Nelson Cr. to Rocky Mountain Cr.

Hummel, 1962 (MF-248), loc. 14 -- Scheelite prospect.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248), loc. 14.

New Era (Mining Co.)

Gold

Nome district
MF-463, loc. 46

Nome (19,65, 10,8)
64°35'N, 165°23'W

Summary: Several hundred feet of underground workings on quartz veins in a zone about 60 ft. wide near a schist-limestone contact. Sulfides are arsenopyrite and pyrite. Gold both free and in sulfides in veins and altered wall rock. Mill test recovered less than the gold indicated by assay to be in ore. Probably has been little or no work since about 1913. Includes references to Big Four; see also (Snow Gulch).

Brooks, 1913 (B 542), p. 41 -- Small prospecting mill installed at Snow Gulch to test an auriferous lode, 1912.

Chapin, 1914 (B 592), p. 400-401 -- Several claims on or near Snow Gulch. Near or at contact between schist and limestone. Tunnel driven 315 ft. on a quartz vein that carries arsenopyrite and younger pyrite, which are also in wall rock. Gold in sulfides. Free gold in sulfide-bearing quartz lenses nearby. A mineralized zone in schist contains pyrite and gold (by assay); mill test of 150 tons showed that all of gold is not free; less than half recovered; surface material may be enriched.

Mertie, 1918 (B 662), p. 433-434 -- For data on tunnel see Chapin, 1914 (B 592), p. 400-401. On Big Four claim quartz veins and stringers strike N 65° E in a zone about 60 ft. wide. Shaft sunk 60 ft. and drifts run on 30-ft. level; crystalline gold in unshattered quartz with many open spaces. Schist a short distance downhill from shaft has iron-stained quartz along joints; said to be commercial ore.

Cathcart, 1922 (B 722), p. 243-244 -- Quotation from Eakin, 1914 (B 592), p. 400, for data on New Era tunnel. On east side of Snow Gulch shaft and open cuts exposed quartz-calcite veins containing a little sulfide material and free gold at contact between one vein and limestone. Limestone underlain by highly mineralized schist.

Hummel, 1962 (MF-247), loc. 1 -- Gold prospect.

Berg and Cobb, 1967 (B 1246), p. 124 -- Vein(s) prospected primarily for gold.

Hummel, 1975 (OF 75-2) -- References to Cathcart, 1922 (B 722), p. 243-244, and Hummel, 1962 (MF-247).

(Newton Gulch) (Cr.)

Gold

Nome district

Nome (20.15-20.2, 9.7-10.05)

MF-463, locs. 53, 127

64°32'-64°33'N, 165°19'-165°20'W

Summary: Rises on Newton Peak; most of course is in coastal plain. Near head quartz stringers in schist with interbedded limestone; some greenstone. Schist contains pyrite; explored by about a dozen shafts and 2 churn-drill holes; assays indicated gold content of about \$5 a ton (gold at \$20.67 per fine oz.). Most placer mining was where gulch emerges from hills and farther downstream where gold was on clay false bedrock. Mining from 1900 to as recently as 1932; dredge operated, 1930-32.

Brooks and others, 1901, p. 69 -- Estimated production in 1900 was \$10,000 [about 485 fine oz.].

p. 83 -- Tributary of Dry Cr. where creek emerges from hills to coastal plain. Auriferous schist gravel is on schist bedrock; downstream in coastal plain pay streak is 3 ft. of gravel on clay false bedrock.

Moffit, 1906 (B 284), p. 135 -- Mining, 1905.

Collier and others, 1908 (B 328), p. 168-169 -- Rises on south slope of Newton Peak, but flows on coastal plain for most of its length. Considerable gold has been mined, but best material is mined out.

p. 183-184 -- At edge of coastal plain stream is only slightly incised. Gravels 30-150 ft. wide and 6-27 ft. deep. Deepest pay streak is on clay false bedrock 10 ft. beneath surface. Much of pay streak mined near mouth must have run more than \$15 per cubic yard. A gravel deposit on a hillside (possibly formed by creep from a higher bench deposit) was being mined in 1904.

Smith, 1909 (B 379), p. 282 -- Several holes were put down (some nearly 100 ft. deep) in decomposed rock near contact between limestone and schist.

Many sulfides now altered to limonite. Gold content probably low.

Henshaw, 1910 (B 442), p. 359 -- Mining, 1909.

Moffit, 1913 (B 533), p. 77 -- Economically important stream placer.

p. 91-92 -- Data less complete than Collier and others, 1908 (B 328), p. 183-184.

p. 132 -- Mineralized veins "have received some attention with a view to development." [Probably the same veins referred to in Smith, 1909 (B 379), p. 282.].

Mertie, 1918 (B 662), p. 431 -- Country rock schist with beds of limestone and greenstone. Some pyrite mineralization; quartz stringers. About a dozen shafts and 2 churn-drill holes were put down; sampling indicated a mean value of \$5 a ton in gold.

Cathcart, 1922 (B 722), p. 237 -- At head of gulch veinlets of quartz and a little pyrite in schist are only evidence of mineralization. Assays of composite samples indicated an average value of \$5 a ton in gold.

Smith, 1933 (B 836), p. 45, 54 -- Dredge operated, 1930.

Smith, 1933 (B 844-A), p. 46, 55 -- Dredge operated, 1931.

Smith, 1934 (B 857-A), p. 43, 51 -- Dredge operated, 1932.

Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 91-92; Smith, 1934 (B 857-A), p. 43.

(Nome beaches)

Copper, Gold, Tungsten

Nome district

Nome (17.1-22.4, 8.3-10.2)

MF-463, locs. 129, 135, 137-139,
141-143

64°27'-64°33'N, 165°02'-165°45'W

Summary: Glacial erosion of lodes and stream placers in hills north of Nome coastal plain distributed gold in glacial drift on coastal plain and on sea bottom offshore of present beach. Gold was concentrated by wave action during pauses in eustatic changes in sea level during late Pliocene and Pleistocene. Gold also on old marine abrasion platforms (particularly along what was once thought to be an old channel of Anvil Cr.). 6 beaches at or above and 6 beaches below present sea level. Gold first discovered and mined at present beach in 1899. Since then gold has been mined from second, third, intermediate, and Monroeville beaches above sea level and from inner and outer submarine beaches below sea level; submarine beaches are landward from present shoreline. Offshore beaches may contain gold; have not been adequately explored. Fourth beach (at base of hills) is too low grade to be mined, but has contributed gold to minable stream placers in coastal plain. Offshore are probable buried stream channels that may contain gold and thin auriferous relict gravels from which fine and light material has been winnowed by currents; mining would present technological problems because of thinness (about 1 ft.) of gravels. Beach deposits have been mined by rockers (present beach), much drift mining, and (since about 1909) dredges that also worked auriferous glacial drift, particularly near Anvil and Little Creeks. For economic reasons dredging ceased in 1962; resumed in 1975. Most creeks in coastal plain concentrated gold from glacial drift and(or) old beaches. Only metallic minerals found in beach and coastal plain deposits are scheelite (Saturday Cr.) and sulfides (including chalcopyrite and arsenopyrite probably locally derived from as yet undiscovered lodes (submarine beaches). Includes references to: (Center Cr.), (Flat Cr.), Golden Cow, Hammon Consolidated Gold Fields, (Intermediate Beach), (Lake Cr.), (Little Cr.), (McDougall Cr.), (Monroeville Beach), (Pioneer Mining Co.), (Rocker Gulch), (Saturday Cr.), (Second beach), (Submarine beach), (Third beach), (Wonder Cr.), and to U.S. Smelting, Refining & Mining Co. unless to another specific occurrence. See also: (Anvil Cr.), (Bourbon Cr.), (Dry Cr.), (Jess Cr.), (Snake R.).

Schrader and Brooks, 1900, p. 18-19 -- Gold mainly fine; a few nuggets worth as much as \$1.50; bright and irregular in shape. Placers in belt 100-150 yds. wide in fine gravel and sand; on blue clay "bedrock;" pay streaks thin, patchy, and generally normal to shoreline; much garnet and magnetite; found from grass roots in tundra to low-tide line. Derived from wave erosion of tundra.

p. 21-23 -- General discussion of placer formation and prediction that old beach placers will be found in tundra.

p. 29-30 -- Beach mining mainly with rockers; gold caught on blankets or amalgamated on copper plates or silver coins.

(Nome beaches) -- Continued

- p. 33-34 -- No claims allowed in 60-ft.-wide strip measured from high-tide line. A "poor man's proposition" with total beach production from late July to freezeup estimated at \$900,000 to \$1,000,000.
- Brooks and others, 1901, p. 26 -- Quotation from Schrader and Brooks, 1900, p. 33-34.
- p. 69 -- Estimated production in 1900 was \$350,000 [about 16,900 fine oz.].
- p. 84-91 -- On Saturday Gulch in coastal plain coarse gold was being mined in 1900. Concentrates contain magnetite, garnet, and some scheelite. [Production was from third beach.]. Data on present beach are essentially as given by Schrader and Brooks, 1900. Average fineness of gold is about 0.890.
- Brooks, 1905 (B 259), p. 20 -- Drift mining near head of Little Cr. and along old beach line from mouth of Hastings Cr. westward to Nome [second beach], 1903-04.
- Purington, 1905 (B 263), p. 209 -- Beach gold worth \$17.98 an ounce.
- Moffit, 1906 (B 284), p. 133-134 -- During winter of 1904-05 many holes were sunk on old beach line between Hastings Cr. and Nome [second beach]. Gold-bearing gravels generally less than 3 ft. thick on clay or gravel "bedrock" 20-35 ft. below surface; 20-100 ft. (average 35-40 ft.) wide. Marine shells, driftwood, and broken walrus tusks in deposits. Beach may extend west to Jess Cr.
- Moffit, 1907 (B 314), p. 134-137 -- Three beach lines: present (first) beach; second beach (marked by a moss-covered gravel bank behind it and traceable from Hastings Cr. to Nome and probably to Jess Cr. at an elevation of 37 ft. above present sea level); third beach (at the base of the hills and traceable from Little Cr. to McDonald Cr. at an elevation of 79 ft. above present sea level). Gold-bearing gravels on schist bedrock or on clay or sandy clay and gravel false bedrock. Beach lines interrupted by Snake and Nome Rivers and Anvil Cr. Deposits generally frozen; overlain by frozen muck.
- p. 141-144 -- In 1906 most mining in Nome area was on third beach, where there were some very rich claims, and on second beach; very little work on present beach. Richest parts of beaches are on east sides of reentrants, suggesting transport by east-flowing currents.
- Collier and others, 1908 (B 328), p. 151-156 -- Quotation from Brooks and others, 1901, p. 85-91.
- p. 166-168 -- Gold in placers in coastal plain concentrated from gravels of coastal plain. Concentrates from Saturday Cr. contain magnetite, garnet, and some scheelite.
- p. 170 -- Wonderfully rich gold deposits have been discovered on Little Cr.
- Smith, 1908 (B 345), p. 213-216 -- Third beach traced farther, 1907. Probably includes placers near Sunset Cr. East of Nome R. pay gravel is 100-200 ft. deep; in places on false bedrock. Intermediate beach (between second and third beaches) was discovered; lower than second beach. About half of production in Nome area in 1907 was from third beach.

(Nome beaches) -- Continued

- Smith, 1909 (B 379), p. 271-279 -- Submarine beaches discovered, 1908. Inner submarine beach is a quarter mile inland from present beach near Snake R. Pay about 20 ft. below sea level. Pay streak about 3 ft. thick; on schist bedrock at west end of claim being worked and on clay false bedrock at east end of claim. Gravel contains granite fragments and large blocks of quartz. Marine shells in gravels much more decomposed than similar material in other old beaches; probably as old as Pliocene. Concentrates contain only a little magnetite and ilmenite, garnet, pyrite, and arsenopyrite. Gold does not amalgamate well; caused by presence of arsenic. Outer submarine beach is 300-1,000 ft. inland from present beach and is 34 ft. below sea level. Gold on clay false bedrock. No production yet. Sulfides common in concentrates; include arsenopyrite crystals, pyrite, and chalcopyrite. Of old beaches outer submarine is oldest, second beach is youngest, and third beach represents longest still stand of sea level.
- Henshaw, 1910 (B 442), p. 356-358 -- In 1909 production was less than in 1908. Dredge operated (with difficulty) on Wonder Cr.
- Smith, 1912 (B 520), p. 342-343 -- Dredge operated, 1911. A new one being built for Wonder Cr.
- Moffit, 1913 (B 533), p. 40-49 -- Quotations from Smith, 1909 (B 379), p. 271-279 and data on fossil collections (all considered by Dall to be Pliocene or, in the case of the submarine beaches, possibly Miocene; about 1/3 of fossils are of living species).
- p. 88-89 -- Center Cr. and its tributaries are all in coastal plain; production from them has been small [as of 1905]. Scheelite in concentrates from Saturday Cr.
- p. 109-123 -- Minerals found in present beach include garnet, magnetite, ilmenite, scheelite, and pyrite, but bulk of the material is quartz. Most of beach gold found in 1905 was amalgamated with mercury lost from sluice boxes. In third beach stream gravels are mixed with beach deposits in some places; some of gold is on schist bedrock and some on clay false bedrock. Some of third beach ground was exceedingly rich; \$330,000 [almost 16,000 fine oz.] was taken from 1,500 square feet of bedrock (90% from bottom 3 in. of the pay streak). Intermediate beach rests on bedrock. In outer submarine beach pyrite and chalcopyrite are abundant. Monroeville beach is atypical and has much more stream material mixed with beach material; on schist bedrock; gold in top 2-3 ft. of bedrock, which is mined with the gravel. Gold in beaches probably came both from wave erosion of coastal plain and from streams flowing across coastal plain from bedrock areas.
- Chapin, 1914 (B 592), p. 387, 389-390 -- One dredge operated and another under construction on Wonder Cr., 1913. Other dredges worked present beach near Rocker Gulch and Peluk Cr.
- Eakin, 1915 (B 622), p. 369-370 -- Hydraulic mining at Center Cr., drift mining at third beach, and small-scale mining on present beach, 1914.
- Smith, 1917 (BMB 142), p. 27 -- Mining on Center and Little Creeks and present beach, 1915.
- Smith, 1917 (BMB 153), p. 56 -- Dredge working on third beach was dismantled in 1916.
- Mertie, 1918 (B 662), p. 452 -- Dredges on Center Cr. and present beach, 1916.

(Nome beaches) -- Continued

- p. 454-455 -- Mining other than dredging, 1916.
- Cathcart, 1920 (B 712), p. 187-189 -- Mining, including dredging, 1918.
- Harrington, 1921 (B 714), p. 232-233 -- Dredge operated on Flat Cr., 1919.
- Brooks, 1922 (B 722), p. 63 -- Dredges on Center and Flat Creeks, 1920.
- Brooks and Capps, 1924 (B 755), p. 48 -- 2 new dredges to be installed on third beach; on order, 1922.
- Brooks, 1925 (B 773), p. 27 -- Hammon Consol. Gold Fields operated dredges, 1923.
- p. 49 -- 2 large dredges installed and dredging of coastal plain deposits begun.
- Smith, 1926 (B 783), p. 16, 18-19 -- Non-dredge mining on Little Cr. and second beach; dredges operated near Little Cr.; 1924.
- Moffit, 1927 (B 792), p. 21 -- Present and old beaches were "some of the most notable gold placers ever discovered."
- p. 24 -- 4 dredges operated, 1925. One on Wonder Cr. and 3 on or near Little Cr.
- Smith, 1929 (B 797), p. 25, 29-30 -- Dredges operated near Little and Wonder Creeks. New discovery west and a little north of Nome.
- Smith, 1930 (B 810), p. 33-34, 39-40 -- 3 dredges operated, 1927.
- Smith, 1930 (B 813), p. 38-39, 47-48 -- 3 dredges operated, 1928.
- Smith, 1932 (B 824), p. 44, 52-53 -- 3 dredges operated, 1929.
- Smith, 1933 (B 836), p. 45, 53-54 -- 3 dredges operated, 1930.
- Smith, 1933 (B 844-A), p. 46, 53-55 -- 4 dredges operated, 1931.
- Smith, 1934 (B 857-A), p. 42-43, 58-59 -- 4 dredges operated, 1932.
- Smith, 1934 (B 864-A), p. 47-48, 56-57 -- 3 dredges operated, 1933.
- Smith, 1936 (B 868-A), p. 47-49, 58-59 -- 2 dredges operated, 1934.
- Smith, 1937 (B 880-A), p. 51-52, 60, 62 -- 3 dredges operated, 1935.
- Smith, 1938 (B 897-A), p. 60-61, 70-71 -- 3 dredges operated, 1936.
- Smith, 1939 (B 910-A), p. 64, 75, 77 -- 3 dredges operated, 1937. Hammon Consolidated Gold Fields became Nome department of U.S. Smelting, Refining & Mining Co.
- Smith, 1939 (B 917-A), p. 63, 74-75 -- 3 dredges operated, 1938.
- Smith, 1941 (B 926-A), p. 59, 70-71 -- 3 dredges operated, 1939.
- Smith, 1942 (B 933-A), p. 55-56, 67-68 -- 3 dredges operated, 1940. Another dredge under construction.
- Koschmann and Bergendahl, 1968 (P 610), p. 18 -- Rich placers in present and old beaches. Second and third beaches have been most productive.
- Greene, 1970 (OF 414), p. 7-11 -- Beach placers extend from Cape Nome to Cape Rodney (36 mi.). Historical data from Collier and others, 1908 (B 328), p. 151. Total production from present beach was more than \$2,000,000 (about 100,000 fine oz.); total from all of Nome area estimated at about 5,000,000 ounces. Old beaches are 4 marine units, each representing different sea-level stands during late Pliocene and Pleistocene time. Data on Submarine beaches from Brooks and others, 1901, p. 85-91.
- Sheth, 1971 (OF 464) -- Historical and geologic data from older reports. Detailed data on heavy minerals in 74 samples of sand-size material. No apparent correlation between amount of gold and total heavy minerals except in "ruby sand" of present beach, where there was winnowing by wind as well as by water. Lack of correlation elsewhere due to hydraulic properties of gold which was not moved by longshore currents; other heavy minerals were moved.

(Nome beaches) -- Continued

- Nelson and Hopkins, 1972 (P 689), p. 7-18 — Glacial ice overrode coastal plain and extended seaward for several miles at least twice; eroded lode sources and older placer deposits, spreading small quantities of gold in glacial drift. Changes in sea level permitted the formation of 6 beaches at or above and 6 below present sea level. Action of longshore currents (predominantly eastward) redistributed offshore sand and gravel. Till contains about 70 parts per billion gold (\$0.11 per cu. yd.; gold at \$35 an ounce). Offshore surface sediment contains more gold than does till; largest particles of gold are in relict gravels, some of which contain as much as \$4 in gold per cu. yd. (2,500 ppb); relict gravels in places only a few inches thick (average probably about a foot); gold probably derived from underlying till. Gold content of submerged beaches greatest where they cross glacial drift. Very fine gold moved by currents into sandy and muddy sediments. Relict gravels might be minable if a method to skim only the top thin rich zone were developed. Beaches near shore and resting on glacial drift might be attractive exploration targets.
- Cobb, 1973 (B 1374), p. 86-89 -- What was once thought to be an old channel of Anvil Cr. is now believed to be a deposit on a marine abrasion platform; some of deposit was very rich; one drift mine operated 1904-06 made the operator a millionaire. Deposits of the present beach were found to be auriferous in 1899; other buried old beaches were soon found and mining was begun. Some were very rich. Eustatic fluctuations of sea level during Pliocene and Pleistocene shifted strandline as far inland as the base of the hills (fourth beach) and as far offshore as the "75-foot beach". A deeply buried beach a short distance offshore and the Inner and Outer Submarine Beaches are Pliocene and the others probably Pleistocene. Fourth beach is generally too lean to mine; it contributed gold to minable stream placers. The offshore beaches have not been mined; gold possibly may be found in their basal parts. The onshore beaches were first drift mined and later dredged, as was intervening auriferous glacial drift. Unfavorable economic conditions caused cessation of dredging in 1962. Offshore, thin auriferous deposits not associated with old beach lines are in places where wave action during marine transgressions winnowed fine material from glacial drift, leaving relict gravel resting on till, outwash, and alluvium. Some deposits contain gold worth \$4 (gold at \$35 an ounce) a cubic yard; would be difficult to mine because gravels average only a foot in thickness. Offshore seismic profiling located features that may be old buried stream channels that could be inviting exploration targets. Submarine beach contains considerable pyrite, chalcopyrite, and arsenopyrite, which suggests an undercovered nearby lode source.
- Simons and Prinz, 1973 (P 820), p. 268 -- Young placers, including beach.
- Tagg and Greene, 1973 (P 759-A) -- Regional onshore data from older reports. Offshore are old stream channels, beach ridges, fans, and areas underlain by glacial drift; any or all could be targets for exploration for minable submarine placers. Onshore placer gold production from Nome area between 1897 and 1964 was about 5 million ounces of gold, the greater part of which was derived from placers on the coastal plain.

(Nome beaches) -- Continued

Hummel, 1975 (OF 75-2) -- References to many of above descriptions.

Sainsbury, 1975 (USBM OF 73-75), p. 71-72 -- Gold-bearing faults in York slate were source of placer gold. Beach placers are largely confined to beaches on belt of York slate between Penny River and Osborn faults (about 15 miles).

(Nome R.)

Gold

Nome district

Nome (20.3, 11.25)

MF-463, loc. 115 in part

64°37'N, 165°18'W

Summary: Fine gold in river bars. Attempts at dredging not successful.
Most of mining in basin was on tributaries. See also: (Banner Cr.), (Dexter Cr.), (Nome beaches), (Osborn Cr.).

Brooks and others, 1901, p. 80 -- Fine gold in bars. Attempt at dredging was abandoned without a fair trial.

Moffit, 1906 (B 284), p. 135 -- Dredge built, but did not operate, 1905.

Collier and others, 1908 (B 328), p. 165 -- Hydraulicking on east side of Nome R. about 2 mi. below Osborn Cr., 1903. [Probably means on Washington Cr.].

p. 170-171 -- Colors have been found on bars for 20 mi. from mouth; attempts at mining them have not been successful.

Smith, 1909 (B 379), p. 279-280 -- Small outfits mining above Osborn Cr., 1908.

Moffit, 1913 (B 533), p. 93 -- Fine gold in river bars. Attempt at dredging below mouth of Banner Cr. failed.

Cathcart, 1920 (B 712), p. 189 -- Open-cut mining, 1918.

(North Fork)

Copper

Nome district
MF-463, loc. 21

Nome (18.65, 13.55)
64°45'N, 165°30'W

Summary: Copper minerals reported from near head of creek.

Cathcart, 1922 (B 722), p. 182 -- Copper minerals reported from near head of North Fork, a tributary of Last Chance Cr.

Anderson, 1947 (TDM 5-R), p. 19 -- Reference to B 722.

Berg and Cobb, 1967 (B 1246), p. 125 -- Copper-bearing quartz vein.

Nugent

Gold

Nome district
MF-463, loc. 43

Nome (19.4, 11.25)
64°37'N, 165°25'W

Summary: Tunnel driven (well before 1916) in iron-stained schist cut by many quartz veins said to carry considerable gold. See also (Rock Cr.).

Mertie, 1918 (B 662), p. 433 -- Tunnel driven 150 ft. in iron-stained schist cut by many quartz veins said to carry considerable gold. Veins strike N 45° E and dip steeply SE. No recent work as of 1916.
Berg and Cobb, 1967 (B 1246), p. 124 -- Vein(s) prospected mainly for gold.
Hummel, 1975 (OF 75-2) -- Reference to Mertie, 1918 (B 662), p. 433.

(Nugget Cr.) (Gulch)

Bismuth, Gold, Tungsten

Nome district

Nome (17.5-17.7, 12.2-12.3)

MF-463, locs. 73-74

64°41'N, 165°38'-165°40'W

Summary: Country rock is limestone cut by greenstone dikes. Mining in early 1900's and 1914, mainly near mouth in narrow pay streak 6-20 ft. deep. Concentrates contained garnet, hematite, rutile, scheelite, bismuth (a piece with embedded gold), gold, and pyrite.

Brooks and others, 1901, p. 92 -- One claim mined, 1900.

p. 95 -- Tributary of Oregon Cr. Mining half a mile above mouth.

Moffit, 1906 (B 284), p. 136 -- Mining, 1905.

Collier and others, 1908 (B 328), p. 213-214 -- Bedrock mainly limestone; 2 greenstone dikes, one of which is pyritiferous. At mouth pay gravel is in a channel no more than 25 ft. wide and 6-20 ft. deep. Concentrates contain garnet, hematite, rutile, scheelite, bismuth (one piece with a piece of gold embedded in it), and pyrite. Mining, 1903, at mouth and for part of season a mile upstream.

Eakin, 1915 (B 622), p. 369-370 -- Mining, 1914.

Cobb, 1973 (B 1374), p. 89 -- Scheelite reported.

Hummel, 1975 (OF 75-2) -- Reference to Collier and others, 1908 (B 328), p. 213-214.

(Oregon Cr.)

Bismuth, Gold, Lead, Tungsten, Zinc

Nome district

Nome (17.25-17.7, 12.25-12.55)

MF-463, locs. 71-72

64°41'-64°42'N, 165°39'-165°42'W

Summary: Much bedrock (exposed only in upper part of course) is limestone; much of low-water flow is underground. No bedrock exposed in lower 2 mi. of course. Placer gold mined from creek and bench gravels and in top foot of bedrock. No gold upstream from a small greenstone intrusive. Concentrates contain magnetite, hematite, scheelite, bismuth, garnet, and gold. Float boulders and cobbles contain sphalerite, galena, and quartz. Sporadic placer mining from 1900 to as recently as 1940.

Brooks and others, 1901, p. 69 -- Estimated combined production in 1900 from Oregon, Hungry, and Mountain Creeks was \$50,000 (about 2,400 fine oz.).

p. 92-94 -- Creek 5 mi. long; bedrock not exposed in lower 2 mi. of course. Much of bedrock farther upstream is limestone; in places low-water flow is nearly all underground. Where being mined in 1900 (first year of active mining) gravel is 2-5 ft. thick; gold in gravel and top foot of bedrock (schist in some places, limestone in others); in several places paystreak is on a clay layer that may be close to bedrock. Nugget worth \$130 was recovered.

Moffit, 1905 (B 284), p. 136 -- Mining, 1905.

Collier and others, 1908 (B 328), p. 211-213 -- General data same as in Brooks and others, 1901, p. 92-94. Concentrates contain much octahedral magnetite, hematite, scheelite, bismuth, and garnet. Bench on east side of creek between Short Cr. and Nugget Gulch has been productive in a small way. Pay streak is 70 ft. wide and about 65 ft. above bed of Oregon Cr. Concentrates contain magnetite, hematite, bismuth, garnet, rutile, and scheelite.

Eakin, 1915 (B 622), p. 369-370 -- Mining, 1914.

Mertie, 1918 (B 662), p. 455 -- Mining, 1916.

Cathcart, 1920 (B 712), p. 189 -- Mining, 1918.

Smith, 1942 (B 933-A), p. 57 -- Nonfloat mining, 1940.

Anderson, 1947 (TDM 5-R), p. 17 -- Bismuth in placer concentrates.

Herreid, 1970 (GR 36), p. 9 -- Dolomite in ore.

p. 14, 17-18 -- Probably is a buried lode deposit in south side of creek near Greenstone Gulch. In old open cut are a few rounded gossan float boulders containing sphalerite and galena and some rounded white quartz boulders.

p. 20-21 -- Numerous gossan cobbles and boulders of partially silicified marble containing quartz-sphalerite-galena ore in open cut within 150 ft. of a small greenstone intrusive that is one of a number in a belt of reverse faults extending across a marble belt from Penny R. to Tub Mtn. All placer gold mining was downstream from intrusive.

Cobb, 1973 (B 137+), p. 89 -- Has been placer gold mining; scheelite reported.

Hummel, 1975 (OF 75-2) -- References to Collier and others, 1908 (B 328), p. 211-213; Sainsbury and others, 1972 (OF 506) [map shows area where there has been placer mining; no text data].

(Osborn(e) Cr.)

Copper, Gold

Nome district

Nome (21.4-21.85, 10.05-10.75)

MF-463, locs. 54, 120

64°33'-64°35'N, 165°06'-165°10'W

Summary: Upper part of valley cut in schist and limestone cut by greenstone intrusives. A quartz vein in schist near a greenstone intrusive contains gold (\$4 to more than \$40 a ton in gold at old price), copper sulfides, and their oxidation products. Stream is entrenched in coastal plain; has cut down into schist bedrock in lower part of course. Placer mining from about 1903 until World War II. Dredges operated on Osborn and(or) St. Michaels Creeks, 1913-23, 1928-40, with a few interruptions. Includes reference to (Osborn Cr.). See also: (Bonita Cr.), (St. Michaels Cr.).

Brooks, 1905 (B 259), p. 22 -- Considerable small-scale mining, 1904.

Collier and others, 1908 (B 328), p. 171-172 -- Upper part of valley in schist and limestone. Mountain to north is almost all greenstone; boulders (up to 10 ft. in diameter) have rolled into creek. In 1903 about 40 men were working from 5 to 6-1/2 mi. above mouth. Gravels about 100 ft. wide and 4-6 ft. thick above a clay false bedrock. Gold coarse and bright; both rounded and angular pieces.

Smith, 1908 (B 345), p. 233-234 -- Has been slight development of quartz vein near contact between greenstone and mica schist. Assays show from \$4 to over \$40 a ton in gold. Also present is a little copper sulfide and its oxidation products.

Smith, 1909 (B 379), p. 279 -- Mining, 1908.

Smith, 1912 (B 520), p. 342 -- 2 dredges operated, 1911.

Moffit, 1913 (B 533), p. 77 -- Economically important stream placers, 1905.

p. 93 -- Productive or potentially productive tributary of Nome R.

p. 97-98 -- Stream entrenched in valley floor; gravel banks in upper part of course, but has cut down into schist bedrock in lower part of course. Much greenstone and some granite in gravels. What little mining has been done was in middle part of stream course. Gold well rounded; nuggets worth \$1 to \$20 common; yield was \$2.50 to \$4 per cubic yard.

p. 132 -- Quartz vein near a greenstone intrusive contains gold and iron and copper sulfides.

Chapin, 1914 (B 592), p. 387, 390 -- One dredge operated, 1913.

Eakin, 1915 (B 622), p. 369-370 -- Hydraulic mine, 1914. [probably was dredging also.]

Mertie, 1918 (B 662), p. 452, 455 -- Mining, including a dredge, 1916.

Cathcart, 1920 (B 712), p. 187-188 -- Mining, including a dredge, 1918.

Harrington, 1921 (B 714), p. 233 -- Dredge operated, 1919.

Brooks, 1922 (B 722), p. 63 -- Dredge operated, 1920.

Brooks, 1923 (B 739), p. 9 -- Dredge operated, 1921.

Brooks and Capps, 1924 (B 755), p. 14 -- Dredge operated, 1922.

Brooks, 1925 (B 773), p. 27 -- Dredge operated, 1923.

Smith, 1926 (B 783), p. 16, 18 -- Mining, including a dredge, 1924.

Smith, 1930 (B 813), p. 39, 48 -- Dredge moved in from Solomon R., 1928.

Smith, 1932 (B 824), p. 44, 53 -- Dredge operated, 1929.

Smith, 1933 (B 836), p. 45, 54 -- Dredge operated part of summer, 1930.

(Osborn(e) Cr.) -- Continued

- Smith, 1933 (B 844-A), p. 46, 55 -- Hydraulicking; dredge did not operate, 1931.
- Smith, 1937 (B 880-A), p. 52, 62 -- Dredging near junction of Osborn and St. Michael Creeks, 1935.
- Smith, 1938 (B 897-A), p. 61, 71 -- Dredge operated, 1936.
- Smith, 1939 (B 910-A), p. 64-65, 77 -- Dredge operated, 1937.
- Smith, 1939 (B 917-A), p. 63-64, 75 -- Dredge operated, 1938; considerable dredge renovation.
- Smith, 1941 (B 926-A), p. 59-60, 71 -- Dredge operated, 1939.
- Smith, 1942 (B 933-A), p. 56, 68 -- Dredge operated, 1940.
- Berg and Cobb, 1967 (B 1246), p. 125 -- Copper-bearing quartz vein.
- Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 97-98; and to Alaska Dept. Mines Report for Biennium ended 12/31/40, p. 85, which reported that a dredge operated in 1940.

(Otter Cr.)

Gold

Nome district

Nome (20.4-20.5, 9.0-9.2)

MF-463, loc. 124

64°29'-64°30'N, 165°17'-165°18'W

Summary: Dredge operated, 1913. May have been working an old beach.
See also (Nome beaches).

Chapin, 1914 (B 592), p. 387, 390 -- Dredge operated, 1913; may have been
in an old beach.

Hummel, 1975 (OF 75-2) -- Reference to Chapin, 1914 (B 592), p. 390.

(Peluk Cr.)

Gold

Nome district
MF-463, loc. 140

Nome (20.05, 9.0)
64°29'N, 165°21'W

Summary: Mining reported in 1901-02 and 1940. Gold probably from old beaches. See also (Nome beaches).

Collier and others, 1908 (B 328), p. 165 -- Gold worth \$2,000 [about 96 fine oz.] mined near head of creek, 1901-02. Pay is in angular gravel and clay on clay false bedrock 2-4 in. thick. Gold coarse, rough, and iron stained. Churn drill holes hit schist bedrock at 72-82 ft. (30 ft. above sea level); lower 40 ft. of gravel contains \$2-\$8 in gold per cubic yard.

Smith, 1942 (B 933-A), p. 57 -- Nonfloat mining, 1940.

(Penny R.)

Gold(?), Platinum(?)

Nome district

Nome

SW 1/4 NE 1/4 quad.

Summary: Open-cut mining reported in 1918 was probably on a tributary or an old beach line; may have been no more than unsuccessful prospecting . Unconfirmed report of the presence of platinum.

Cathcart, 1920 (B 712), p. 189 -- Open-cut mining reported, 1918. [Probably on a tributary or old beach line; may have even been unsuccessful prospecting.]

Brooks, 1925 (B 773), p. 30 -- Presence of platinum reported.

Peterson & Lamoreaux

Antimony, Gold, Lead

Nome district

Nome (19.45, 10.45)

MF-463, loc. 50

64°34'N, 165°25'W

Summary: All work before 1916; 2 shafts, tunnel, open cut. Iron-stained quartz in black schist country rock. Disseminated galena in quartz. About 1,500 lbs. of stibnite reported to have been mined, but not shipped. Gold content of mineralized material not stated, but as gold accompanies most of the stibnite in this area and as there was actual underground work, it seems safe to assume that there is gold at this prospect.

Mertie, 1918 (B 662), p. 432 -- Open cut and short tunnel on an iron-stained and fractured bull quartz ledge 8 ft. or more thick which strikes S 45° W and dips 45° NW. Stringers of quartz go off into black schist country rock. Disseminated galena in some of quartz. Nearby shaft, about 40 ft. deep, filled with water in 1916.

p. 439 -- About 100 ft. lower than above prospect is a caved shaft with iron-stained schist on dump. About 1,500 lbs. stibnite reported to have been mined but not shipped (drop in price of antimony).

Cathcart, 1922 (B 722), p. 240 -- Quotation from Mertie, 1918 (B 662), p. 432.

Hummel, 1962 (MF-247), loc. 13 -- Lead mineral(s) present.

Berg and Cobb, 1967 (B 1246), p. 124 -- About 1,500 lbs. stibnite reported to have been mined, but not shipped.

Hummel, 1975 (OF 75-2) -- References to Mertie, 1918 (B 662), p. 432, 439; Cathcart, 1922 (B 722), p. 240; and Hummel, 1962 (MF-247).

(Pioneer Gulch)

Gold

Nome district
MF-463, locs. 35, 90

Nome (19.4, 12.6)
64°42'N, 165°25'W

Summary: Bedrock is schist cut by small gold-bearing pyritiferous quartz veins. Part of placer deposit probably had moved a short distance downslope; some is a residual placer.

Collier and others, 1908 (B 328), p. 183 -- Mining began, Sept. 1903. -
Smith, 1908 (B 345), p. 233 -- Very narrow quartz stringers reported to carry considerable free gold. Considerable prospecting, 1907.

Moffit, 1913 (B 533), p. 76 -- Residual deposit has been mined. Bedrock is schist cut by small pyritiferous quartz veins. Gold coarse and angular; some in quartz fragments. Part of deposit probably has moved downslope, but some appears to be almost in place.

Cathcart, 1922 (B 722), p. 253 -- Residual placer deposit has yielded considerable gold. Material on dump on old shaft in bedrock suggests that shaft was sunk on a quartz-calcite vein containing a little pyrite and arsenopyrite.

Hummel, 1962 (MF-247), loc. 14 -- Gold present.

Cobb, 1973 (B 1374), p. 83 -- Gold was recovered from a residual placer.

Hummel, 1975 (OF 75-2) -- References to Moffit, 1913 (B 533), p. 76; and Hummel, 1962 (MF-247), loc. 14.

(Prospect Cr.)

Bismuth(?), Copper(?), Gold, Lead,
Tungsten

Nome district

Nome (19.2, 11.45)

MF-463, locs. 41, 96

64°38'N, 165°27'W

Summary: Quartz-feldspar veins carry galena; bismuth reported. Copper reported. Small amounts of placer gold and scheelite.

Anderson, 1947 (TDM 5-R), p. 17 -- Bismuth in quartz vein reported; galena only visible metallic mineral.

p. 19 -- Copper reported.

p. 27 -- Lead mineral(s) in quartz vein(s).

p. 42 -- Placer scheelite present.

Thorne and others, 1948 (RI 4174), p. 33-34 -- Small amounts of placer gold and scheelite.

Berg and Cobb, 1967 (B 1246), p. 124 -- Quartz-feldspar veins carry galena; bismuth also reported.

Hummel, 1975 (OF 75-2) -- Reference to Thorne and others, 1948 (RI 4174), p. 33-34.

(Quarry)

Antimony, Copper, Gold, Iron, Lead, Silver,
Zinc, Barite, Fluorite

Nome district
MF-463, loc. 8

Nome (16.7, 12.6)
64°42'N, 165°47'W

Summary: Fluorite and barite with small amounts of gold, silver, and sulfide minerals (including galena, sphalerite, boulangerite, and possibly covellite) in calcareous rocks that may be part of thrust sheet (Herreid) or original beds in chloritic schist (Sainsbury). Some of calcareous rock (mainly marble) dolomitized; no silicification. Mineralization in shear zones; may have been 2 epochs of mineralization. Vertical and lateral extent of mineralization not known. Small gossan (mainly goethite) developed over part of deposit. Includes references to barite near Sinuk R.

Mulligan and Hess, 1965 (USBM OF 8-65), p. 19 -- Road building operations uncovered a lead-zinc deposit with fluorite, copper, and silver in an iron-stained area adjacent to Cub Bear prospect.

p. 23 -- Specimens contained secondary copper, iron, and lead minerals, covellite, galena, sphalerite(?), magnetite, and fluorite. Copper, lead, zinc, and silver determined spectrographically.

p. 25 -- Fluorite found with lead and copper minerals.

Herreid, 1966 (GR 24), p. 2-5 -- Silicified schist along a marble-schist contact contains irregular pods and disseminations of fluorite and disseminated galena. Strong geochemical soil anomaly for zinc and lead over an area of about 2,000x6,000 ft. underlain by schist. Limonite in quartz-mica schist layers separated by small masses of quartz and along marble contacts and around fluorite masses. Disseminated galena in quartz veinlets. No silicification of marble; local dolomitization. Assays of grab samples indicate no more than 0.02 oz. Au and 5.30 oz. Ag per ton and up to 25% Pb and 1.1% Zn.

p. 10-11 -- May be economic concentrations of ore minerals at depth.

Herreid, 1970 (GR 36), p. 20 -- Deposit formed by replacement of calcareous rocks near base of thrust sheet offset by steep fault.

p. 24-29 -- Deposit is localized by a steep fault which can be traced to the Monarch gossan. A large thrust with marble in upper plate and schist in lower plate is in a structurally complex silicified zone characterized by irregular small masses of quartz, layers of quartz-mica schist, and irregular masses of dolomite and dolomite breccia. Mineral deposit is mainly masses and pods of fluorite and barite with minor disseminated galena and sphalerite. Grab samples contained as much as 0.02 oz. Au and 5.3 oz. Ag per ton. An old caved shaft, several pits, and old claim posts mark work apparently done before World War I and not reported in the geologic literature.

Brobst and others, 1971 (P 750-D), p. D1-D8 -- Barite, fluorite, galena, sphalerite, boulangerite, and associated silver and gold introduced into thrust sheets of Precambrian marble and schist. Most of the introduced minerals were emplaced pervasively and later sheared and recrystallized at a temperature of about 250°C. Some of marble is dolomitized. Fissure fillings consisting of calcite and aragonite with some sulfide minerals

(Quarry) -- Continued

and associated gold and silver may indicate a second epoch of mineralization. Mineralization might have been in shear zones between thrust sheets or might have penetrated favorable host rocks in either thrust sheet or in both. Mineralization was probably Cretaceous and possibly early Tertiary. Vertical and lateral extent of mineralization not known. Small gossan (mainly goethite) has developed over part of deposit.

U.S. Geological Survey, 1971 (P 750-A), p. A51 -- Summary of Brobst and others, 1971 (P 750-D), p. D1-D8.

Sainsbury and others, 1972 (OF 506), p. 6 -- Fluorite and barite, with small amounts of gold, silver, copper, lead, and zinc, replace schistose marble interbedded with chloritic schist. Prospect under active development in 1971 or 1972.

Hummel, 1975 (OF 75-2) -- References to most of above descriptions.

Sainsbury, 1975 (USBM OF 73-75), p. 89 -- References to Brobst and others, 1971 (P 750-D), p. D1-D8; Herreid, 1966 (GR 24). Sainsbury now believes the limestone and marble of the deposit represent sheared limestone originally intercalated in chloritic schist rather than a thrust sheet.

(Quartz Cr.)

Gold

Nome district

Nome (14.95-15.0, 10.3-10.8)

MF-463, locs. 62, 63

64°34'N, 166°00'-166°01'W

Summary: Bedrock is Precambrian schists near head and schist and minor limestone near coast, where there are also small quartz veins, one of which contains tetrahedrite. Small amounts of placer gold have been mined.

Collier and others, 1908 (B 328), p. 215 -- Bedrock exposed at coast and mountain front no more than 1/2 mi. to north is schist and minor limestone; small quartz veins. Tetrahedrite in a vein west of mouth of creek. Sluicing on creek 1 mi. from coast, 1903; 2 men made a little better than wages.

Sainsbury and others, 1972 (OF 510), p. 3 -- Small amounts of placer gold have been mined at head of creek. Gold on bedrock (Precambrian schist) covered by glacial moraine.

Hummel, 1975 (OF 75-2) -- References to above descriptions.

Red

Gold(?)

Nome district

Nome (20.1, 10.25)
64°33'N, 165°20'W

Summary: Calcite veins along faults in limestone and schist were explored by a tunnel, a shaft, and open cuts. Practically no quartz and no sulfides or visible gold.

Cathcart, 1922 (B 722), p. 236-237 -- Several claims explored by open cuts, a tunnel, and a shaft (most of which had caved by 1920). Country rock is faulted limestone and iron-stained schist with calcite veins along faults. Practically no quartz and no sulfide minerals or visible gold. Iron staining probably the result of deposition from circulating ground water.

Reinisch

Gold, Tungsten

- Nome district
MF-463, loc. 43

Nome (19.4, 11.25)
64°37'N, 165°25'W

Summary: One or more thin quartz veins in black graphitic schist contain visible gold and scheelite. In bottom of old placer pit. See also (Rock Cr.).

Cathcart, 1922 (B 722), p. 245 -- In a hydraulic pit on north bench of Rock Cr. across from Sophie Gulch a quartz stringer about half an inch thick cuts carbonaceous black schist. Vein has terminated quartz crystals projecting from one wall; contains visible free gold between wall rock and quartz.

Hummel, 1962 (MF-247), loc. 15 -- Gold and scheelite present.

Berg and Cobb, 1967 (B 1246), p. 124 -- Veins prospected primarily for gold; scheelite probably also present.

Hummel, 1975 (OF 75-2) -- References to Cathcart, 1922 (B 722), p. 245, and Hummel, 1962 (MF-247).

Rex

Gold

Nome district
MF-463, loc. 52

Nome (20.0, 10.2)
64°33'N, 165°21'W

Summary: Thin calcite veins, at least one of which follows a fault, in limestone. No quartz, sulfide minerals, or visible gold. Owner reported an assay showed \$3-\$5 per ton in gold for one vein. See also (Dry Cr.).

Cathcart, 1922 (B 722), p. 236 -- Several tunnels driven on calcite veins (none more than a foot thick) in limestone. At least one vein follows a fault. No quartz, sulfide minerals, or visible gold observed, but owner claims an assay of \$3-\$5 a ton in gold for one vein.

(Rock Cr.)

Antimony, Copper, Gold, Lead,
Tungsten

Nome district
MF-463, locs. 43, 98

Nome (19.3-19.45, 11.05-11.2)
64°36'-64°37'N, 165°25'-165°26'W

Summary: Rises on Mt. Brynteson and flows to Snake R. in trench incised in valley floor. Bedrock is mica schist with smaller amounts of limestone. Several shear zones and many quartz veins that contain gold and sulfide minerals, mainly pyrite, arsenopyrite, stibnite, galena, and minor amounts of copper sulfide(s); wall rock impregnated with sulfides in places. Some veins contain scheelite. Some of placers are residual. Placer concentrates contain gold, scheelite (some has been saved and marketed), magnetite, garnet, and quartz. Was mining from early 1900's to as recently as the early 1920's. See also: Reinisch, Stipek & Kotovic.

Moffit, 1906 (B 284), p. 135 -- Mining, 1905.

Collier and others, 1908 (B 328), p. 195-196 -- Rises on Mt. Brynteson and flows to Snake R. in narrow trench incised in sloping valley floor. Bedrock mica schist and interbedded limestone. Mineralized quartz veins contain a little gold. Most of placer gold is fine, but a few rough nuggets have been found. Concentrates contain scheelite, magnetite, limonite, and garnet.

Moffit, 1913 (B 533), p. 75-76 -- Residual concentration of gold on hill slope between Rock and Lindblom Creeks. Bedrock is schist cut by many small quartz veins that carry pyrite and gold. Gold on or near bedrock. Sulfides of lead, antimony, arsenic, and a little copper found here. Placer mining small-scale; hard to get water.

p. 86 -- Most of data the same as Collier and others, 1908 (B 328), p. 195-196. Vein of scheelite 3-4 in. wide reported to have been uncovered in creek.

Mertie, 1918 (B 662), p. 455 -- Placer mining, 1916.

p. 457 -- Some placer mining for scheelite, 1916, by Pioneer Mining Co. and by Warren.

Cathcart, 1920 (B 712), p. 188 -- Placer mining, 1918.

Cathcart, 1922 (B 722), p. 244 -- Pyrite and quartz replaced limestone in contact with schist in a shattered zone at the crest of an anticlinal fold. Nearby a shallow shaft followed a vertical quartz-feldspar vein about 2 ft. thick.

p. 246-247 -- In a hydraulic pit on south side of Rock Cr. east of mouth of Sophie Gulch highly mineralized chlorite schist cut by many quartz veins from 1 to 8 inches wide. Veins contain arsenopyrite, galena, and stibnite. Sluice-box concentrates from pit contain much scheelite and quartz; some of placer gold exhibits very delicate structure and some is attached to quartz. Dump from a caved tunnel half a mile above Sophie Gulch contains quartz-feldspar vein fragments with arsenopyrite and pyrite; adjoining schist is impregnated with fresh sulfides. Similar material at many places on Rock Cr. pans gold.

Brooks, 1925 (B 773), p. 31 -- Residual scheelite ore mined, 1923.

(Rock Cr.) -- Continued

Smith, 1926 (B 783), p. 16 -- Mining, 1924.

Coats, 1944 (OF 17), p. 5-6 -- Reference to Mertie, 1918 (B 662), p. 457.

Possibly important amounts of placer scheelite.

Anderson, 1947 (TDM 5-R), p. 42 -- Scheelite concentrates produced from a residual deposit in 1943.

Thorne and others, 1948 (RI 4174), p. 32-33 -- Some scheelite has been mined from placers; occurs in gravel for length of 1-1/2 mi.

Cobb, 1973 (B 1374), p. 89 -- Placer scheelite so abundant that some was produced.

Hummel, 1975 (OF 75-2) -- References to Cathcart, 1922 (B 722), p. 246; Moffit, 1913 (B 533), p. 75-76; Anderson, 1947 (TDM 5-R), p. 42.

(Rocky Mountain Cr.)

Gold, Tin, Tungsten.

Nome district

Nome (20.85-21.0, 14.0-14.05)

MF-463, locs. 32, 107

64°46'N, 165°12'-165°13'W

Summary: Vein of albite with later quartz and scheelite (about 3% by volume) is 1-1/2 to 2 in. thick and was traced for 18 ft. Zone of similar veins probably extends to a few hundred feet south of Nelson Cr. Coarse scheelite float in creek. Has been a little desultory placer gold mining. Cassiterite in concentrates.

Coats, 1944 (OF 17), p. 4-6 -- Has been desultory placer gold mining. Possibly important amounts of placer scheelite. A vein of albite with later quartz and scheelite is 1-1/2 to 2 in. thick and has been traced for about 18 ft.; contains about 3% (by volume) scheelite. Probably are more similar veins; coarse scheelite-bearing float in creek. Zone of scheelite-bearing veins probably extend to a few hundred feet south of Nelson Cr.

Anderson, 1947 (TDM 5-R), p. 40 -- Cassiterite in placer concentrates.

p. 42 -- Much placer scheelite. Attempt to mine in 1943 was not successful.

Berg and Cobb, 1967 (B 1246), p. 125 -- Data from Coats, 1944 (OF 17), p. 4-6.

Cobb, 1973 (B 1374), p. 89 -- Cassiterite reported.

Hummel, 1975 (OF 75-2) -- References to Coats, 1944 (OF 17), p. 4-6; Anderson, 1947 (TDM 5-R), p. 40, 42.

(Ruby Cr.)

Gold

Nome district
MF-463, loc. 68

Nome (16.65, 13.95)
64°47'N, 165°47'W

Summary: Reported to cut across high gravels. A little placer gold was recovered during prospecting of low-grade gravels. Includes reference to (Ruby Cr.)

Collier and others, 1908 (B 328), p. 216 -- Reported to cut across high gravel deposits. A little gold has been produced during prospecting. Gravels low grade and at high elevations.

Hummel, 1975 (OF 75-2), loc. 7 -- Reference to Collier and others, 1908 (B 328), p. 216. [Called Ruby Cr.; typographical error.]

(St. Michael(s) Cr.)

Gold

Nome district

Nome (21.45-21.6, 9.95-10.05)

MF-463, loc. 120

64°32'-64°33'N, 165°08'-165°09'W

Summary: A little gold mined in early 1900's about 3/4 mi. above mouth. In late 1930's dredge on Osborn Cr. also mined on St. Michaels Cr.; data not given separately for St. Michaels Cr. See also (Osborn Cr.).

Moffit, 1913 (B 533), p. 98 -- Gold is found about 3/4 mi. above mouth. A little mined each year.

Smith, 1937 (B 880-A), p. 52 -- Dredge started mining near junction of St. Michael and Osborne Creeks, 1935; probably will mine up both creeks.

Hummel, 1975 (OF 75-2) -- Citations of above references.

(Saunders Cr.)

Gold

Nome district
MF-463, loc. 133

Nome (21.8-21.9, 8.75-8.95)
64°28'-64°29'N, 165°06'-165°07'W

Summary: Dredge operated 1911-12; ground worked out. See also (Nome beaches).

Smith, 1912 (B 520), p. 342 -- Dredge operated, 1911.

Chapin, 1914 (B 592), p. 387, 390 -- Dredge worked out its ground and did not operate in 1913.

Hummel, 1975 (OF 75-2) -- Reference to Chapin, 1914 (B 592), p. 390.

(Seattle Cr.)

Tungsten

Nome district
MF-463, loc. 91

Nome (19.65, 12.6)
64°42'N, 165°23'W

Summary: Placer scheelite present.

Coats, 1944 (OF 17), p. 6 -- Possibly important amounts of placer scheelite.

(Sinuk R.)

Gold, Iron, Lead, Manganese, Zinc;
Fluorite

Nome district

Nome (16.2-17.1, 13.0-13.85)
64°44'-64°47'N, 165°43'-165°50'W

Summary: Probable gossans over zones of hydrothermal alteration. Minerals present include mainly limonite and smaller amounts of hematite, pyrolusite, galena, sphalerite, pyrite, gold, and purple fluorite. See also: American, Cub Bear, Galena, Mogul, Monarch, (Quarry), (Tub Mtn.).

Wedow and others, 1952 (OF 51), p. 33-34, 37 -- Described as stockworks and veins in limestone. Principal ore mineral at surface is limonite, minor amounts of hematite, pyrolusite, galena, sphalerite, pyrite, gold, and purple fluorite. Mineral assemblage indicates that deposits may be gossans overlying zones of hydrothermal alteration; may be similar to known radioactive lodes of York district [Teller quad.].

Mulligan and Hess, 1965 (USBM OF 8-65), p. 2, 10 -- Deposits aggregate more than 600,000 tons of rock containing 10-45% iron and about 0.005% manganese.

Berg and Cobb, 1967 (B 1246), p. 125-126 -- Lodes in brecciated limestone consist of veins and stockworks of botryoidal limonite and goethite and small amounts of hematite, galena, sphalerite, pyrolusite, and gold. Also reference to Mulligan and Hess, 1965 (USBM OF 8-65), p. 2, 10.

Sainsbury and others, 1972 (OF 506), p. 6 -- Quarry prospect is most promising looking of those in Sinuk R. area, in none of which are ore minerals exposed.

(Sledge Cr.)

Gold, Tungsten

Nome district

Nome (18.75, 11.5)
64°38'N, 165°31'W

Summary: Deep placer mining reported in 1916. A little scheelite in gravel. Quartz vein exposed in a cut contains no visible sulfides or gold.

Mertie, 1918 (B 662), p. 454 -- Deep placer mining, 1916.
Cathcart, 1922 (B 722), p. 249 -- Quartz vein exposed for about 20 ft. in a cut is about 2 ft. thick and is made up of feldspar and iron-stained quartz; no visible gold or sulfides.
Thorne and others, 1948 (RI 4124), p. 33 -- Placer scheelite present.

Sliscovich

Antimony, Gold, Silver

Nome district

Nome (20.1, 13.8)

MF-463, loc. 28

64°46'N, 165°19'W

Summary: Gold- and stibnite-bearing quartz vein in schist pinches, swells, and splits; walls marked by gouge; vein as much as 4 ft. thick. Stibnite content variable; where mined for stibnite quartz and stibnite contents were about equal; stibnite lenses as much as 13 in. thick. Gold, both free and in stibnite, disseminated throughout lode. Mine worked for gold only until 1915; stibnite mined (mainly from a stope 70 ft. long), 1915; in an 88-ton shipment most of value was in gold and silver; antimony content was about 36%. About 500 ft. of underground working, including an inclined shaft, and several pits. Probably has been no activity since about 1915 or 1916. Includes references to: Slisco, antimony near Manila Cr.

Brooks, 1907 (B 314), p. 30 -- Reference to Moffit, 1907 (B 314), p. 139.

Moffit, 1907 (B 314), p. 139 -- Quartz vein on Manila Cr. carries iron and antimony sulfides. Traced by surface float along hillside for about 3,000 ft. From float it appears that the vein reaches a width of 2-1/2 ft., but averages about 8 or 9 inches. Carries some gold.

Smith, 1908 (B 345), p. 244-245 -- Considerable development since 1906 [as of 1907]. Adit 315 ft. long intersected vein, which there is 3 ft. wide. Antimony content lower and gold content higher than at surface. Plan to put in a mill, sell gold, and save antimony concentrate (price of antimony too low to warrant shipping concentrate to Tacoma smelter).

Brooks, 1910 (B 442), p. 38 -- Some work done, 1909.

Smith, 1912 (B 520), p. 344 -- Stibnite deposit; contains some crystalline gold. 15 tons of ore (probably hand sorted) shipped to Tacoma smelter; said to have yielded \$125 a ton.

Moffit, 1913 (B 533), p. 133 -- Most of data from Moffit, 1907 (B 314), p. 139, and Smith, 1908 (B 345), p. 244-245. Ore shipments have been made.

Chapin, 1914 (B 592), p. 403-404 -- Has been some development every year, 1905-13. Vein has been traced half a mile; strikes N 60° E and dips 45° NW. Adit driven 315 ft. to lode; inclined shaft follows lode for 100 ft. Lode is about equal parts dull, opaque quartz and stibnite. Analyses of small shipment of ore showed 35.05% and 36.40% Sb; amounts of Au and Ag not released. Some of gold free, but more than half is in the stibnite. Country rock is chloritic schist; silicified along borders of lode; footwall of lode defined by a seam of gouge. Ore has not been mined regularly; several small shipments were primarily for testing. Mine being explored for gold and silver only. Stibnite later than quartz; brecciated quartz healed by stibnite.

Brooks, 1916 (B 642), p. 29-30 -- Test shipments made as early as 1906. Mine had been worked for its gold content until 1915, when work was directed toward getting out stibnite ore.

p. 71 -- Antimony ore shipped late in summer, 1915.

Brooks, 1916 (B 649), p. 50-51 -- Vein discovered, 1905. Test shipments, 1907 and succeeding years; commercial shipments, 1915.

p. 53-54 -- Quotation from Chapin, 1914 (B 592), p. 403-404.

Sliscovich -- Continued

- Smith, 1917 (BMB 142), p. 27 -- Stibnite shipped, 1915.
- Mertie, 1918 (B 662), p. 425-426 -- Reference to Chapin, 1914 (B 592), p. 403-404. Latest shipment was in fall of 1915; 88 tons of picked material sent to Tacoma; most of value in gold rather than antimony.
- p. 437 -- At 25-foot level quartz vein strikes N 45°E and dips 48° NW across cleavage of schist country rock; is 3 ft. thick, has gouge along footwall, and has a smooth, slickensided hanging wall. Stibnite in lenses in much-shattered quartz.
- Cathcart, 1922 (B 722), p. 184 -- Stibnite and gold present.
- p. 224 -- Reference to Chapin, 1914 (B 592), p. 403.
- p. 226-227 -- Gold accompanies stibnite. Structural features are parallel to the dominating structure of the Kigluaik Mts. to the north.
- p. 229-230 -- Quotation from Chapin, 1914 (B 592), p. 403-404. In 1915 stibnite ore was stoped for 70 ft. horizontally; vertical dimensions and amount of ore removed not given. Vein pinches and swells (from a few to as much as 45 inches of quartz and stibnite; gouge on both walls and within vein; stibnite usually footwall; also as "veins and nests" in quartz.
- Anderson, 1947 (TDM 5-R), p. 10 -- Several hundred feet of drifts, shafts, and small stopes. Quartz-stibnite vein with high-grade lenses and pockets of stibnite. Only widest parts of vein have been stoped. Reference to B 722.
- Hummel, 1962 (MF-248), loc. 15 -- Stibnite present.
- Berg and Cobb, 1967 (B 1246), p. 122-123 -- Staked in 1905. NE-striking NW-dipping gold- and stibnite-bearing quartz vein up to 4 ft. thick. Originally worked for gold, but in 1915 antimony-rich parts of vein were mined and ore shipped. Vein pinches, swells, and splits; walls marked by gouge. Stibnite content variable; in parts minable for stibnite quartz and stibnite about equal; stibnite lenses as thick as 13 in. Gold, both native and combined with stibnite, sparsely disseminated throughout lode. About 500 ft. of underground openings and several pits. Most of antimony ore mined from a stope 70 ft. long near foot of inclined shaft; contained about 36% Sb and undisclosed amounts of gold and silver.
- Hummel, 1975 (OF 75-2) -- References to Cathcart, 1922 (B 722), p. 226-227, 229-230; Hummel, 1962 (MF-248), loc. 15.

Sliscovich (South)

Antimony

Nome district

Nome (20.05, 13.75)

MF-463, loc. 28

64°45'N, 165°19'W

Summary: Shallow shaft (caved by 1920) was sunk on a narrow (no more than 8 in. thick) antimony-bearing quartz vein. See also Sliscovich.

Cathcart, 1922 (B 722), p. 230 -- Shallow shaft (caved in 1920) in vein probably no more than 8 in. thick. Antimony-bearing quartz vein.

About half a mile south of main Sliscovich mine.

Hummel, 1962 (MF-248), loc. 16 -- Antimony deposit.

Hummel, 1975 (OF 75-2) -- [Included with Sliscovich].

(Snake R.)

Gold

Nome district

Nome (19.1-19.2, 9.35-9.5)

MF-463, locs. 130, 131

64°31'N, 165°28'W

Summary: Fine gold discovered on river bars, 1898, followed by discoveries of rich stream placers on Anvil Cr. Unsuccessful attempt at dredging, 1900. Dredge operated 1919-24; principal purpose (at least at beginning) was to deepen channel as part of a harbor project; any gold encountered was saved. Most gold produced from basin, was from tributaries. See also: (Anvil Cr.), (Nome beaches).

Schrader and Brooks, 1900, p. 31 -- First gold discovery in area was fine gold on river bars, about July 25, 1898.

Brooks and others, 1901, p. 25 -- Quotation from Schrader and Brooks, 1900, p. 31.

p. 80 -- Bars carry gold.

Collier and others, 1908 (B 328), p. 170 -- A small, primitive dredge operated unsuccessfully near mouth as early as 1900. A larger dredge was put in river in 1904; results not known.

Smith, 1908 (B 345), p. 214 -- Rich [in gold] spots in lower Snake R. may be due to marine concentration of gold in stream gravel rather than to stream concentration of gold from old beaches.

Moffit, 1913 (B 533), p. 77-79 -- Gold on some of bars. Basin contains some of richest creek placers in Nome area.

Harrington, 1921 (B 714), p. 232-233 -- Dredge operated, 1919; main purpose was to deepen channel as part of a harbor project, but gold that was encountered was saved.

Brooks, 1923 (B 739), p. 9 -- Dredge operated, 1921.

Brooks and Capps, 1924 (B 755), p. 14 -- Dredge operated, 1922.

Brooks, 1925 (B 773), p. 27 -- Dredge operated, 1923.

Smith, 1926 (B 783), p. 18 -- Dredge operated, 1924.

Koschmann and Bergendahl, 1968 (P 610), p. 18 -- Site of original placer gold discovery in Nome area.

Cobb, 1973 (B 1374), p. 82 -- Gold discovered on river bars, 1898.

(Snow Gulch)

Gold, Tungsten

Nome district

Nome (19.55-19.6, 10.8-10.9)

MF-463, locs. 46, 101

64°36'N, 165°24'W

Summary: Small creek 3/4 mi. long; rich placers derived from high gravels of Dexter Hill. More than \$1,000,000 in gold (more than 48,300 fine oz.) mined in a few years around 1900. Quartz and calcite veins near head contain a little gold. Gravel contained scheelite; some reported to have been mined. See also New Era.

Schrader and Brooks, 1900, p. 32 -- Claims staked, 1898. Richest gulch in district in 1899.

Brooks and others, 1901, p. 25 -- Quotation from Schrader and Brooks, 1900, p. 32.

p. 69 -- Production included with that from Glacier Cr. (\$750,000, or about 36,280 fine oz.).

p. 75 -- Gulch about a mile long. Bedrock near mouth is chloritic schist that strikes across gulch; near head it is limestone. Quartz vein near head carries some gold. Gravels 3-4 ft. thick; practically all have been worked. Production, 1899-1900 worth over \$1,000,000 [more than 48,300 fine oz.].

Collier and others, 1908 (B 328), p. 195 -- Quotation from Brooks and others, 1901, p. 75. Some calcite veins showing gold have been opened up near head of gulch. Placers worked out; bedrock swept clean (as of 1903).

Moffit, 1913 (B 533), p. 77 -- Has been a productive stream.

p. 85 -- Data same as Brooks and others, 1901, p. 75. Both quartz and calcite veins near head carry gold.

Coats, 1944 (OF 17), p. 5-6 -- Production of placer scheelite has been reported. Stream carries possibly important amounts of scheelite.

Thorne and others, 1948 (RI 4174), p. 33 -- Has been extensive hydraulic mining. Scheelite in gravel.

Berg and Cobb, 1967 (B 1246), p. 124 -- Vein(s) prospected primarily for gold.

Koschmann and Bergendahl, 1968 (P 610), p. 18 -- One of first streams in area on which gold was discovered.

Cobb, 1973 (B 1374), p. 83 -- Small creek only 3/4 mi. long; rich placers derived from high bench gravels of Dexter Hill. In only a few years gold worth more than a million dollars [more than 48,300 fine oz.] was recovered.

p. 89 -- Placer scheelite so plentiful that some was produced.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 85 [citation of p. 131 is in error; reference is to Glacier Cr.].

(Sonora Cr.)

Gold

Nome district

Nome

SE 1/4 SW 1/4 NE 1/4 quad.

Summary: Colors of gold found and a little development work in 1901.
Location on creek not given.

Collier and others, 1908 (B 328), p. 215 -- Colors of gold found. A
little development work, 1901. No mining in 1903. -

(Sophie Gulch)

Antimony, Gold, Lead, Tungsten,
Zinc

Nome district

Nome (19.45, 11.15)

MF-463, locs. 43, 98

64°37'N, 165°25'W

Summary: Disseminated lode in shear zone in iron-stained mica schist consists of many irregular quartz, quartz-feldspar, and quartz-calcite veins from a fraction of an inch to at least a foot in thickness. Most of scheelite is at margins of quartz veins and disseminated in wall rock; gold in wall rock beyond zone of scheelite mineralization. Stringers carrying arsenopyrite, pyrite, galena, sphalerite, and stibnite cut the scheelite-bearing veins. Several tons of scheelite concentrate was sluiced from a residual placer of weathered lode material in 1916-17. Unweathered material is too low grade to be mined at a profit. Includes references to Sophie.

Mertie, 1918 (B 662), p. 433 -- Caved prospect tunnel above tungsten prospect is 65 ft. long. Mineralized country rock in pit below tunnel.

p. 436 -- Country rock is foliated mica schist. Nearly vertical fissures striking N 45° E are filled with iron-stained shattered quartz in veinlets and veins from a fraction of an inch to a foot or more thick. Both country rock and veins are cut by faults that strike N 18° W, dip 54° E, and contain iron-stained gouge. Scheelite mainly along sides of quartz stringers and disseminated in schist. Gold in schist outside of zone of scheelite mineralization, but not in scheelite-bearing rock. Arsenopyrite, pyrite, and galena in later veinlets cutting quartz. Owners report that scheelite-bearing zone is about 50 ft. wide and has been traced for about 1,000 ft. Two shafts about 30 ft. deep were sunk to test the ore. Residually weathered ore was mined by placer methods in 1916.

Mertie, 1918 (B 662), p. 457 -- Between 4,000 and 5,000 cubic yards of shattered and weathered residual lode material was hydraulicked and run through sluice boxes; considerable scheelite lost because relatively unweathered material could not be broken up by hydraulic nozzle. This mine accounted for a large part of the scheelite mined in Alaska in 1916.

Martin, 1919 (B 692), p. 21 -- Scheelite produced by sluicing residual lode material, 1917.

p. 41 -- Most of scheelite produced in Alaska in 1917 was from Sophie Gulch.

Cathcart, 1922 (B 722), p. 182 -- Gulch has been sluiced for its scheelite content. Gulch is cut in a shear zone in schist; multitude of small quartz veins; schist next to veins is impregnated with sulfides that are later than the quartz veins; scheelite both with sulfides and in quartz veins. More than one period of scheelite mineralization.

p. 233-234 -- Scheelite is contemporaneous constituent of quartz-calcite veins and accompanying sulfides. [This statement seems to be at variance with the one on p. 182.]. Quartz veinlets form regular stockworks in schist. Gold can be panned from decomposed schist.

p. 245-246 -- Quotation from Mertie, 1918 (B 662), p. 436. Veins are quartz-feldspar and quartz-calcite and are all contemporaneous;

(Sophie Gulch) -- Continued

- all badly shattered. Schist intensely iron stained. Arsenopyrite, pyrite, and galena in veinlets through quartz; arsenopyrite also in wall rock. Altered schist said to carry gold.
- Mertie, 1923 (B 739), p. 161 -- Typical example of a residual placer.
- Coats, 1944 (OF 17), p. 3 -- References to Mertie, 1918 (B 662), p. 436; and Cathcart, 1922 (B 722), p. 246. Scheelite content of unweathered material too low for economic mining; residual material (3-15 ft. thick) can be hydraulicked; very little present in 1943.
- Thorne and others, 1948 (RI 4174), p. 30-32 -- Quotation from and reference to Mertie, 1918 (B 662), p. 436-437, 457.
- Hummel, 1962 (MF-247), loc. 17 -- Scheelite mine or prospect.
- Berg and Cobb, 1967 (B 1246), p. 121 -- Disseminated lode from the weathered portion of which several tons of scheelite concentrates were mined in 1916-18 by placer methods. Deposit consists of iron-stained mica schist containing numerous irregular quartz, quartz-feldspar, and quartz-calcite veins from a fraction of an inch to at least a foot in thickness. Most scheelite at margins of quartz veins and disseminated in iron-stained schist wall rock; gold in wall rock beyond zone of scheelite mineralization. Stringers carrying arsenopyrite, pyrite, galena, sphalerite, and stibnite cut scheelite-bearing veins. Only residual material is rich enough to mine; unweathered material well below economic limits for lode mining. Very little residual material was not mined.
- Cobb, 1973 (B 1374), p. 83 -- Residual placer from which scheelite was mined; original lode material could not be mined at a profit.
- Hummel, 1975 (OF 75-2) -- References to Mertie, 1918 (B 662), p. 436; Cathcart, 1922 (B 722), p. 182, 245-246; Coats, 1944 (OF 17), p. 3; Hummel, 1962 (MF-247).

Spring

Antimony

Nome district
MF-463, loc. 32

Nome (21.15, 14.2)
64°47'N, 165°11'W

Summary: Antimony prospect.

Hummel, 1962 (MF-248), loc. 17 -- Antimony prospect.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248), loc. 17.

(Steep Cr.)

Gold

Nome district
MF-463, loc. 85

Nome (19.5-19.55, 13.5-13.65)
64°45'N, 165°24'W

Summary: Tributary of Goldbottom Cr. Has been small production of gold.
See also Nelson (Steep Cr.)

Moffit, 1913 (B 533), p. 88 -- Cuts schist and limestone of Mt. Distin;
short tributary of Goldbottom Cr. Coarse gravel 18 in. to 4 ft. deep
and 60-70 ft. wide. Magnetite in concentrates. Has been small gold
production for several years (as of 1905).

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 88.

Steiner

Gold

Nome district
MF-463, loc. 9

Nome (17.5, 10.5)
64°35'N, 165°41'W

Summary: 325 ft. of shaft and drift; only 60 ft. in quartz vein on which they were started. Vein said to have contained \$7 a ton in gold (gold at \$20.67 per fine oz.). Country rock is schist that in places is pyritiferous.

Mertie, 1918 (B 662), p. 427 -- Workings inaccessible in 1916. Shaft said to be 135 ft. deep with a drift driven 100 ft. to east from bottom of shaft. Material on dump is iron-stained pyritized schist. 2 kinds of quartz (one dull, opaque, and iron stained and the other clear and granular) and a little calcite.

Cathcart, 1922 (B 722), p. 256, 258 -- Shaft sunk 105 ft. and drift run 220 ft. Working started on a quartz-feldspar vein said to have been 5-10 ft. wide and traceable for 1,000 ft. on surface. Vein followed for 60 ft. in shaft; rest of workings in schist (in places pyritiferous) apparently barren of gold. Quartz said to have assayed \$7 a ton in gold.

Berg and Cobb, 1967 (B 1246), p. 124 -- Vein prospected primarily for gold.

(Stella Cr.)

Gold

Nome district
MF-463, loc. 67

Nome (16.3, 11.7)
64°39'N, 165°50'W

Summary: Some placer mining, 1900.

Brooks and others, 1901, p. 96 -- Some mining, 1900.

Hummel, 1975 (OF 75-2) -- Reference to Brooks and others, 1901, p. 96.

(Stevens Gulch)

Gold

Nome district

Nome (21.1, 9.65) (?)
64°31'N, 165°12'W(?)

Summary: Fine gold on clay false bedrock. Near Osborne Cr. This may be the same occurrences as (Washington Gulch).

Brooks and others, 1901, p. 84 -- In coastal plain south of Osborn Cr.
Gold fine; associated with magnetite and garnet on clay "bedrock."
No rich pay streak.

(Stewart R.)

Gold

Nome district
MF-396, loc. 83

Nome (18.75, 14.5)
64°48'N, 165°28'W

Summary: A little placer mining, 1908. Tunnel reported to have been started on a quartz vein said to be 4 ft. wide; no data on metal content (1907).

Smith, 1908 (B 345), p. 234 -- Quartz lead said to be 4 ft. wide reported to have been located and a tunnel started, 1907.

Smith, 1909 (B 379), p. 280 -- A little placer mining above mouth of Mountain Cr., 1908..

Stipek & Kotovic (Glacier Cr. divide) Tungsten

Nome district
MF-396, loc. 43

Nome (19.45, 10.95) approx.
64°36'N, 165°25'W approx.

Summary: Deposit similar to that on Sophie Gulch. A little scheelite was recovered using placer methods. Includes references to tungsten on Glacier Cr.-Rock Cr. divide.

Mertie, 1918 (B 662), p. 437 -- Small tungsten lode has been mined by placer methods.

Mertie, 1918 (B 662), p. 457 -- Small lode similar to the one on Sophie Gulch was prospected; scheelite present.

Coats, 1944 (OF 17), p. 5 -- Reference to Mertie, 1918 (B 662), p. 457.

Thorne, 1948 (RI 4174), p. 31 -- Quotation from Mertie, 1918 (B 662), p. 437.

Berg and Cobb, 1967 (B 1246), p. 121-122 -- Deposit similar to that on Sophie Gulch. A little scheelite has been recovered using placer methods.

Hummel, 1975 (OF 75-2) -- References to Mertie, 1918 (B 662), p. 437, 457.

Stipek & Kotovic (Rock Cr.)

Gold

Nome district

Nome (19.4, 1.15)

MF-463, loc. 43

64°37'N, 165°25'W

Summary: Shaft, several tunnels, and an open cut in pyritized schist with quartz veins. Free gold and abundant arsenopyrite. Mill test yielded 250 lbs. concentrate (\$48-\$65 a ton in gold at \$20.67 per fine oz.) and \$2.65 in free gold per ton of ore. Some quartz stringers ran as high as \$150 a ton in gold (\$20.67 per fine oz.). All work was before 1920. See also (Rock Cr.).

Mertie, 1918 (B 662), p. 432-433 -- A shaft 76 ft. deep with a 70-ft. crosscut and several tunnels in pyritized schist with white quartz veins encountered material containing pyrite, abundant arsenopyrite, and free gold. Mill test yielded 250 lbs. concentrate per ton and \$2.65 a ton in free gold; concentrates assayed \$48 to \$65 a ton in gold. Some quartz stringers rich in sulfides contain as much as \$150 a ton in gold.

Cathcart, 1922 (B 722), p. 244-245 -- Two tunnels, a shaft, and an open cut on quartz-albite vein that contains a little pyrite, arsenopyrite, and ilmenite and appears to be 3 or 4 ft. thick. Quotation from Mertie, 1918 (B 662), p. 433.

Hummel, 1962 (MF-247), loc. 18 -- Gold occurrence.

Berg and Cobb, 1967 (B 1246), p. 123-124 -- Same data as Cathcart, 1922 (B 722), p. 244-245.

Hummel, 1975 (OF 75-2) -- References to Cathcart, 1922 (B 722), p. 244-245; Hummel, 1962 (MF-247).

(Sunset Cr.)

Gold

Nome district
MF-463, loc. 79

Nome (18.4, 10.3)
64°34'N, 165°34'W

Summary: Mining, mainly in coastal plain south of Sunset Cr., 1907, 1924, 1934-39. Dredge operated 1934-39. See also (Nome beaches).

Smith, 1908 (B 345), p. 214 -- Gold mined near Sunset Cr. in 1907 probably was from third beach.

Smith, 1926 (B 783), p. 16 -- Mining, 1924.

Smith, 1936 (B 868-A), p. 49, 59 -- Dredge moved from Osborn Cr. began mining late in season, 1934.

Smith, 1937 (B 880-A), p. 52, 62 -- Dredge operated, 1935.

Smith, 1938 (B 897-A), p. 61, 71 -- Dredge operated, 1936.

Smith, 1939 (B 910-A), p. 64-65, 77 -- Dredge operated, 1937.

Smith, 1939 (B 917-A), p. 63-64, 75 -- Dredge operated, 1938.

Smith, 1941 (B 926-A), p. 59-60, 71 -- Dredge operated, 1939; short season.

Smith, 1942 (B 933-A), p. 68 -- Dredge did not operate, 1940.

Hummel, 1975 (OF 75-2) -- Reference to Smith, 1936 (B 868-A), p. 49; reference to Nelson and Hopkins, 1972 (P 689), p. 7-8, is in error as Sunset Cr. is not mentioned.

Tanner

Antimony

Nome district
MF-463, loc. 23

Nome (19.6, 13.7)
64°45'N, 165°23'W

Summary: Antimony prospect.

Hummel, 1962 (MF-248), loc. 18 -- Antimony prospect.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248), loc. 18.

Thompson

Antimony, Zinc

Nome district

Nome (21.15, 14.2)

MF-463, loc. 32

64°47'N, 165°10'W

Summary: Prospect or occurrence of antimony and zinc minerals.

Hummel, 1962 (MF-248), loc. 19 -- Occurrence (or prospect) of antimony and zinc minerals.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248), loc. 19.

(Thompson Cr.)

Tungsten

Kougaruk district
MF-463, loc. 82

Nome (20.6, 17.3)
64°57'N, 165°13'W

Summary: Scheelite in concentrates of samples collected downstream from a belt of sulfide-bearing calc-silicate rock formed along the contact of a thick gneissic granite sill.

Hummel, 1961 (P 424-D) -- p. D199 -- Scheelite in concentrates of samples collected downstream from a wide belt of sulfide-bearing calc-silicate rock formed along the contact of a thick gneissic granite sill.
Cobb, 1973 (B 1374), p. 79 -- Reference to above description.

(Tomboy Cr.)

Gold

Nome district
MF-463, loc. 58

Nome (13.25, 14.35)
64°38'N, 166°14'W

Summary: A little gold mined in 1902. Gravel with many granite pebbles and boulders on decomposed schist bedrock.

Collier and others, 1908 (B 328), p. 219 - Has been mining about a mile above mouth. Gravel with many granite boulders and pebbles on steeply dipping schist. Decomposed bedrock carries about \$2.25 per cubic yard. Was mining in 1902, but was abandoned in 1903.

Hummel, 1975 (OF 75-2) -- Reference to above.

(Trilby Cr.)

Gold

Nome district
MF-463, loc. 75

Nome (17.35, 12.15)
64°40'N, 165°42'W

Summary: About 240 fine oz. of gold probably reconcentrated from bench gravels was mined before 1903.

Collier and others, 1908 (B 328), p. 215 -- As of 1903 about \$5,000 in gold [about 240 fine oz.] had been recovered. Gold probably reconcentrated from bench gravels; creek does not cut down to bedrock.

(Tub Mtn.)

Iron

Nome district
MF-463, loc. 2

Nome (16.85, 14.05)
64°58'N, 165°45'W

Summary: Gossan of ferruginous rubble containing about 8,000 long tons of material with iron content of 10%-20%. No record of any development work.

Mertie, 1918 (B 662), p. 446 -- Limonitic iron ore reported.

Mulligan and Hess, 1965 (USBM OF 8-65), p. 18 -- Estimated residual iron ore is 8,000 long tons of 10-20% iron.

p. 25 -- One of 5 iron prospects aligned along an anticline whose axis strikes N 10° W.

Herreid, 1966 (GR 24), p. 2-3 -- Gossan deposit in which mainly ferruginous rubble is exposed.

Berg and Cobb, 1967 (B 1246), p. 126 -- Similar to Monarch, but smaller, probably leaner, and less extensively explored.

Hummel, 1975 (OF 75-2) -- References to above descriptions and to stream-sediment and regional data not included in this summary because they do not specifically apply to Tub Mtn. occurrence.

(Twin Mountain Cr.)

Copper, Gold, Tungsten

Nome district
MF-463, locs. 36, 94

Nome (18.7, 11.8-11.85)
64°39' N, 165°30'W

Summary: Country rock is schist with beds or lenses of limestone. Shattered quartz veins contain copper minerals. A little placer gold mining has been reported. In 1916 500 lbs. of scheelite was sluiced from a residual deposit like that on Sophie Gulch. See also Lilly.

- Brooks and others, 1901, p. 80 -- Some gold has been mined [as of 1900].
Collier and others, 1908 (B 328), p. 197 -- Gravel shallow and only a few feet wide. Probably unprofitable; miners in 1903 left to work for wages.
Mertie, 1918 (B 662), p. 437 -- Tungsten lode has been worked by placer methods.
 p. 442 -- Malachite and azurite (chalcopyrite also reported) appear to be localized in a shattered quartz vein. Tunnel inaccessible at time of Mertie's visit in 1916.
Mertie, 1918 (B 662), p. 455 -- Placer mining, 1916.
 p. 457 -- 500 lbs. scheelite sluiced from a weathered lode on a bench claim.
Cathcart, 1922 (B 722), p. 182 -- Scheelite has been mined from a quartz vein.
 p. 233 -- Reference to Mertie, 1918 (B 662), p. 437.
 p. 248-249 -- Gold-bearing ledge discovered in 1907. Country rock is various kinds of schist with beds or lenses of limestone.
 p. 251 -- 2 tunnels have been driven on quartz-calcite veins; one not accessible in 1920; in the other the vein pinches and swells from a stringer to a foot thick. Pyrite and arsenopyrite present; scheelite reported.
Coats, 1944 (OF 17), p. 5-6 -- Reference to Mertie, 1918 (B 662), p. 457. Creek contains possibly important amounts of placer scheelite.
Anderson, 1947 (TDM 5-R), p. 19 -- Reference to B 662.
Berg and Cobb, 1967 (B 1246), p. 121 -- 500 lbs. of scheelite was sluiced from a residual deposit similar to that on Sophie Gulch.
 p. 125 -- Copper-bearing quartz vein(s) have been prospected.
Hummel, 1975 (OF 75-2) -- References to Collier and others, 1908 (B 328), p. 197; Cathcart, 1922 (B 722), p. 251.

(Union Gulch)

Gold

Nome district
MF-463, loc. 116

Nome (19.95, 11.15)
64°37'N, 165°13'W

Summary: Small body of gravel on schist bedrock 'carried about \$3-\$4 in coarse gold per cubic yard.

Collier and others, 1908 (B 328), p. 173 -- Faulted schist bedrock. Gravel 10-20 ft. wide and about 30 in. thick; estimated to carry \$3-\$4 a cubic yard. Gold nearly all on bedrock. Gold coarse and rusty; largest nugget worth \$16.

Moffit, 1913 (B 533), p. 96 -- About the same as Collier and others, 1908 (B 328), p. 173.

Hummel, 1975 (OF 75-2) -- Reference to Collier and others, 1908 (B 328), p. 173.

(Washington Cr.)

Gold

Nome district

Nome (15.6, 12.5)

MF-463, loc. 61

64°42'N, 165°55'W

Summary: Bench gravels about 100 ft. above stream level carry gold; one \$10 nugget reported. The location of this deposit is probably near what is now called Green Gulch.

Collier and others, 1908 (B 328), p. 216 -- Placers reported to consist of high bench gravels about 100 ft. above stream level near Sinuk-Cripple Rivers divide. A \$10 nugget reported.

(Washington Gulch) (Cr.)

Gold

Nome district

Nome (21.1, 9.65)

MF-463, loc. 121

64°31'N, 165°12'W

Summary: A little gold has been recovered. Thin "pay streak" contains gold, magnetite, and garnet.

Brooks and others, 1901, p. 84 -- Fine gold in gravel on clay "bedrock."

Gold associated with magnetite and garnet. No rich pay streak.

Moffit, 1913 (B 533), p. 98 -- Drains part of Army Peak, but mainly is in lowland along Nome R. Gold is recovered from a 10-in.-thick layer of fine sand (resembling beach sand) on bedrock.

Hummel, 1975 (OF 75-2) -- Reference to Moffit, 1913 (B 533), p. 98.

(Waterfall Cr.)

Antimony, Copper, Gold, Lead, Silver

Nome district

Nome (18.65-18.75, 13.1-13.25)

MF-463, loc. 20

64°44'N, 165°30'W

Summary: Stockwork of iron-stained quartz and stibnite veins in schist; opened by 2 tunnels and 2-1/2 tons of ore that assayed more than 58% antimony and some gold and silver was mined and shipped before 1916; Christophosen mine. At head of creek galena and chalcopyrite with oxidation products are reported. Waterfall and Last Chance creeks are quite thoroughly confused in some references. Includes references to Christophosen (Waterfall Cr.). See also (Last Chance Cr.).

Mertie, 1918 (B 662), p. 438-440 -- 4 claims. 2 tunnels (total length 375 ft.) and open cuts. Tunnels said to intersect a stockwork of iron-stained schist and quartz with lenticular masses of stibnite, none more than 12 in. thick. In the open cuts is a vertical shear zone about 100 ft. thick that strikes about N 20° E. Metallic minerals include pyrite, pyrrhotite, stibnite and gold. About 2-1/2 tons of high-grade stibnite has been mined and sold; carries some gold and silver.

p. 442 -- Galena and chalcopyrite with malachite and azurite reported at head of Waterfall Cr. near antimony prospect.

Cathcart, 1922 (B 722), p. 182 -- Reference to Mertie, 1918 (B 662), p. 442.

p. 184 -- Reference to Mertie, 1918 (B 662), p. 438.

p. 231-232 -- Quotations from Mertie, 1918 (B 662), p. 439.

2-ft. vein of quartz containing a little stibnite in iron-stained graphitic quartz schist exposed by open cuts.

p. 253 -- Reference to p. 231.

Anderson, 1947 (TDM 5-R), p. 11 -- Data from B 722.

p. 19 -- Chalcopyrite with galena, malachite, and azurite.

Reference to B 662.

p. 27 -- Reference to "Copper" heading [p. 19].

Berg and Cobb, 1967 (B 1246), p. 122-123 -- Has been antimony production. Iron-stained stockwork of quartz and stibnite veins up to a foot thick in schist; subordinate pyrite and pyrrhotite, and a little gold. Milky white quartz in lenses as much as 3 ft. thick; predates sulfides which cut it; clear quartz crystals in crystalline stibnite. Ore mined from 2 tunnels and several open cuts assayed more than 58% Sb and carried gold and silver. 2-1/2 tons of ore shipped sometime before 1922. Other lodes nearby contain chalcopyrite, galena, and secondary copper minerals.

Herreid, 1970 (GR 36), p. 36 -- [Called Last Chance Cr. by Herreid.] Data from Cathcart, 1922 (B 722), p. 231.

Hummel, 1975 (OF 75-2) -- References to most of above older descriptions.

West

Gold

Nome district
MF-463, loc. 47

Nome (19.5, 10.75)
64°35'N, 165°25'W

Summary: Adit driven 120 or more ft. on a quartz vein containing a little pyrite and arsenopyrite; in schist that is altered and iron stained near vein. Altered schist said to pan gold. Assays indicate gold values in quartz. Includes references to: Gold Bug, Golden Eagle.

- Chapin, 1914 (B 592), p. 401 -- Golden Eagle staked on what appears to be the same lode as that at New Era. Deposit prospected by drift 50 ft. long. Vein of dull, opaque quartz without sulfides is 6 in. thick at surface and more than 6 ft. thick at face of tunnel. Operators state that representative samples of entire vein show commercial values.
- Mertie, 1918 (B 662), p. 434 -- Tunnel driven 125 ft. along an iron-stained, shattered quartz vein 6 ft. wide in schist. Iron sulfides in quartz; assays indicate rather high-grade ore.
- Cathcart, 1922 (B 722), p. 241 -- 120-ft. adit has been driven on a quartz-feldspar vein in schist. Vein at face of adit is 8 in. thick. Vein carries a little pyrite and arsenopyrite. Schist altered and intensely iron-stained next to vein; said to pan gold.
- Hummel, 1962 (MF-247), loc. 3 -- Iron-sulfide mineral(s).
- Berg and Cobb, 1967 (B 1246), p. 124 -- Vein(s) prospected primarily for gold.
- Hummel, 1975 (OF 75-2) -- References to Mertie, 1918 (B 662), p. 434; Hummel, 1962 (MF-247).

(Willow Cr.)

Gold, Tin

Nome district

Nome (16.5, 12.35)

64°04'N, 165°48'W

Summary: Placer deposits below mineralized areas were mined in 1914 and 1916. Cassiterite in concentrates.

Eakin, 1915 (B 622), p. 369-370 -- Open-cut mining, 1914.

Mertie, 1918 (B 662), p. 455 -- Open-cut mining, 1916.

Martin, 1919 (B 692), p. 20 -- Cassiterite in concentrates.

Herreid, 1970 (GR 36), p. 20 -- Placer deposits have been mined below known mineralized areas.

(Windy Cr.)

Graphite

Nome district

Nome (19.55, 17.2)
64°58'N, 165°21'W

Summary: Biotite schist intruded by granitic or pegmatitic dikes. In places graphite is abundant in small scales along cleavage surfaces; local segregations in beds or flattened lenticular masses are as much as 18 in. thick. Graphite also in pegmatites. Mountain slopes are strewn with graphite fragments.

Brooks and others, 1901, p. 118-119 -- In pass between Sinuk and Grand Central Rivers. Graphite in boulders on a talus slope; a little quartz in disseminated in small grains. Bedrock in area is "highly crystalline schist."

Moffit, 1913 (B 533), p. 136 -- In divide between Windy Cr. and Grand Central R. biotite schist is intruded by granitic or pegmatite dikes. Some is highly graphitic with graphite as abundant small scales along cleavage surfaces. Locally segregated in beds or flattened lenticular masses parallel to schistosity and as much as 18 in. thick; included are thin layers of schist containing garnets and much quartz. Graphite also in pegmatites. Mountain slopes strewn with graphite fragments; one (about half schist and half graphite) was about 7 ft. by 6 ft. by 30 in.

Mertie, 1918 (B 662), p. 448-449 -- Quotation from Moffit, 1913 (B 533), p. 135-136.

Harrington, 1919 (B 692), p. 363-364 -- Quotation from Moffit, 1913 (B 533), p. 135-136.

Cathcart, 1922 (B 722), p. 223 -- Flakes of graphite disseminated in schist; locally segregated in "nests of 1/4-inch size." Richest material is essentially quartz-graphite schist.

Unnamed occurrence

Antimony

Nome district

Nome (20.15, 14.45)

MF-463, loc. 30

64°48'N, 165°19'W

Summary: Antimony prospect.

Hummel, 1962 (MF-248), loc. 29 -- Antimony prospect.

Unnamed occurrence

Antimony

Nome district
MF-463, loc. 30

Nome (20.15, 14.35)
64°48'N, 165°18'W

Summary: Antimony prospect.

Hummel, 1962 (MF-248), loc. 30 -- Antimony prospect.

(Unnamed occurrence

Antimony

Nome district

Nome (20.15, 14.45)

MF-463, loc. 30

64°48'N, 165°19'W

Summary: Antimony prospect.

Hummel, 1962 (MF-248), loc. 31 -- Antimony prospect.

Unnamed occurrence

Antimony, Gold, Lead

Nome district

Nome (18.55, 13.4)

64°45'N, 165°31'W

Summary: Discontinuous lenses and pods of quartz along faults contain native gold, stibnite, pyrite, galena, and other sulfide minerals. Placer gold has been mined from Last Chance Cr. below these lode deposits.

Sainsbury and others, 1972 (OF 506), p. 6 -- Quartz veins on ridge at head of Penny R. consist of sulfide-bearing quartz that forms discontinuous lenses and pods along faults. Quartz contains native gold, stibnite, pyrite, galena, and other sulfides. Creek below [Last Chance Cr.] has been mined.

Unnamed occurrence

Antimony, Lead

Nome district

Nome (19.3, 10.3)

MF-463, loc. 51

64°34'N, 165°27'W

Summary: Occurrence of antimony and lead minerals.

Hummel, 1962 (MF-247), loc. 28 -- Antimony-lead prospect.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-247).

Unnamed occurrence

Copper

Nome district
MF-463, loc. 39

Nome (19.9, 12.25)
64°40'N, 165°21'W

Summary: Copper prospect.

Hummel, 1962 (MF-247), loc. 23 -- Copper prospect.

Unnamed occurrence

Copper

Nome district

Nome (19.75, 13.85)

MF-463, loc. 24

64°46'N, 165°22'W

Summary: Copper mineral(s) in float.

Hummel, 1962 (MF-248), loc. 28 -- Float occurrence of copper mineral(s).

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248).

Unnamed occurrence

Copper

Nome district

Nome (19.75, 13.85)

MF-463, loc. 24

64°46'N, 165°22'W

Summary: Copper mineral(s) in float.

Hummel, 1962 (MF-248), loc. 28 -- Float occurrence of copper mineral(s).

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248).

Unnamed occurrence

Copper

Nome district

Nome (21.0, 14.4)

MF-463, loc. 31

64°48'N, 165°11'W

Summary: Copper prospect.

Hummel, 1962 (MF-248), loc. 33 -- Copper prospect.

Unnamed occurrence

Copper

Kougarok district

Nome (21.25, 15.4)

MF-463, loc. 18

64°51'N, 165°09'W

Summary: Occurrence of copper mineral(s).

Hummel, 1962 (MF-248), loc. 25 -- Copper prospect.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248).

Unnamed occurrence

Graphite

Port Clarence district

Nome (18.85, 17.1)
64°57'N, 165°28'W

Summary: Graphite occurrence in lower Paleozoic schist in a predominantly marble unit; small granitic intrusive nearby.

Hummel, 1962 (MF-248), loc. 38 -- Graphite occurrence. Country rock mapped as lower Paleozoic schist in a predominantly marble unit; small granitic intrusive nearby.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248).

Unnamed occurrence

Graphite

Nome and Port Clarence districts

Nome (19.2, 17.15)

64°57'N, 165°25'W

Summary: Graphite in schist.

Rummel, 1962 (MF-248), loc. 36 -- Graphite occurrence. Bedrock mapped as schist in a predominantly marble unit of lower Paleozoic age.

Unnamed occurrence

Lead, Tungsten, Zinc

Nome district

Nome (18.8, 16.3)

MF-463, loc. 12

64°54'N, 165°28'W

Summary: A contact-metamorphic deposit in marble near its contact with granitic sill contains scheelite, galena, and sphalerite. Deposit is camouflaged by later regional metamorphism that produced silicate minerals similar to those produced by the contact metamorphism.

Hummel, 1961 (F 424-D), p. D198-D199 -- Metamorphosed contact-metasomatic deposit along contact of a gneissic granite sill contains scheelite, galena, and sphalerite.

Hummel, 1962 (MF-248), loc. 37 -- Zinc and scheelite occurrence.

Berg and Cobb, 1967 (B 1246), p. 119 -- Contact-metamorphic deposit contains scheelite, galena, and sphalerite in marble near contact with granitic sill. Small deposit that is difficult to recognize because it is camouflaged by later regional metamorphism that produced silicate minerals similar to those in lode.

p. 122 -- Summary of data on p. 119.

Hummel, 1975 (OF 75-2) -- References to Hummel, 1961 (F 424-D), p. D198-D199; Hummel, 1962 (MF-248), loc. 37.

Unnamed occurrence

Tungsten

Nome district

Nome (21.0, 14.25)

MF-463, loc. 32

64°47'N, 165°11'W

Summary: Occurrence of scheelite in calcareous schist.

Hummel, 1962 (MF-248), loc. 23 -- Scheelite occurrence in calcareous schist.

Unnamed occurrence

Tungsten

Nome district

Nome (21.0, 14.4)

MF-463, loc. 31

64°48'N, 165°12'W

Summary: Occurrence of scheelite in calcareous schist.

Hummel, 1962 (MF-248), loc. 24 -- Scheelite occurrence in calcareous schist.

Unnamed occurrence

Tungsten

Nome district

Nome (20.75, 15.9)

MF-463, loc. 16

64°53'N, 165°13'W

Summary: Occurrence of scheelite in graphitic, calcareous schist near a small granitic intrusive.

Hummel, 1962 (MF-248), loc. 26 -- Occurrence of scheelite in graphitic, calcareous schist near a small granitic intrusive.

Hummel, 1975 (OF 75-2) -- Reference to Hummel, 1962 (MF-248).

Unnamed occurrence

Tungsten

Nome district

Nome (19.55, 16.5)

MF-463, loc. 13

64°55'N, 165°22'W

Summary: Metamorphosed contact-metasomatic deposit along contact of a gneissic granite sill contains scheelite.

Hummel, 1961 (P 424-D), p. D198-D199 -- Metamorphosed contact-metasomatic deposit along contact of a gneissic granite sill contains scheelite.

Hummel, 1962 (MF-248), loc. 40 -- Scheelite occurrence.

Hummel, 1975 (OF 75-2) -- References to above descriptions.

Unnamed occurrence

Tungsten

Kougarok district

Nome (20.6, 17.15)

MF-463, loc. 14

64°57'N, 165°14'W

Summary: Scheelite in metamorphosed contact-metasomatic deposit.

Hummel, 1961 (P 424-D), p. D199 -- Metamorphosed contact-metasomatic deposit along contact between a body of quartz-plagioclase-biotite gneiss and interbedded marble and biotite schist; contains scheelite. -

Unnamed occurrence

Tungsten

Kougarok district

Nome (20,95, 17,5)

MF-463, loc. 15

64°58'N, 165°11'W

Summary: Scheelite deposit; probably a metamorphosed contact-metasomatic deposit.

Hummel, 1961 (P 424-D), p. D199 -- Scheelite in what is probably a metamorphosed contact-metasomatic deposit [the other three in the area are]; no intrusive shown on map at site of deposit.

Hummel, 1962 (MF-246), loc. 35 -- Scheelite present; small metagranitic sill shown on map.

Synonyms, Claim Names, Operators, and Owners

Many mines and prospects have undergone changes in both their own names and in the names of their operators and owners. All names that appear in the cited references appear in this summary either in the first section as occurrence names or in this as synonyms. Descriptions of placer deposits commonly give little information on the location of individual mines or claims, so the names of all operators and owners of placer mines and claims are in this section with a notation to refer to the description of the stream or other deposit that was mined or prospected.

Alaska Mines Corp. -- see (Nome beaches)
 Alaska Sunset Mines Co. -- see (Sunset Cr.)
 American Gold Dredging Co. -- see (Peluk Cr.)
 Ames & Guinan -- see (Glacier Cr.)
 Arctic Creek Dredging Co. -- see (Arctic Cr.)

 Arctic Gold Dredging Co. -- see (Hobson Cr.), (Saunders Cr.)
 Arctic Placer Mining & Milling Co. -- see (Bangor Cr.)
 Bangor Creek Dredging Co. -- see (Bangor Cr.)
 Bangor Dredging Co. -- see (Anvil Cr.)
 Bessie (Gold Dredging Co.) -- see (Holyoke Cr.)

 Big Four -- see New Era
 Borasco -- see Jorgensen
 Bunker Hill -- see (Waterfall Cr.)
 Caribou -- see (Dexter Hill)
 Caribou Bill('s) -- see (Dexter Hill)

 Casa De Paga Gold Co. -- see (Monument Cr.)
 (Center Cr.) -- see (Nome beaches)
 Center Creek Dredging Co. -- see (Nome beaches)
 Charles -- see (Cooper Gulch), (Dry Cr.)
 (Charles Cr.) -- see (Charley Cr.)

 Christophosen (Anvil Cr.) -- see (Anvil Cr.)
 Christophosen (Last Chance Cr.) -- see (Last Chance Cr.)
 Christophosen (Waterfall Cr.) -- see (Waterfall Cr.)
 Cochrane & Rodine -- see (Alpha Cr.), Boulder, (Boulder Cr., trib. Snake
 R.), Dakota, (Sledge Cr.), (Twin Mountain Cr.)
 Connelly & Janassen -- see California

 Connelly & Listen -- see (Monument Cr.)
 Connolly & Jensen -- see California
 Cripple River Dredging Co. -- see (Cripple R.)
 Dakota-Alaska Mining Co. -- see (Alpha Cr.), Boulder, (Boulder Cr., trib.
 Snake R.), Dakota, (Sledge Cr.), (Twin Mountain Cr.)
 (Deer Gulch) -- see (Dexter Hill)

 Dexter Creek Dredging Co. -- see (Dexter Cr.)
 (Dexter Cr., Left Fork) -- see (Dexter Cr.)
 (Dexter Station) -- see (Dexter Hill)
 (Dickens Cr.) -- see (Copper Mtn.)
 Dry Creek Dredging Co. -- see (Dry Cr.), (Newton Gulch)

 Ernst Alaska Gold Dredging Co. -- see (Nome beaches)
 Eureka -- see Jorgensen
 (Flat Cr.) -- see (Nome beaches)
 Fox -- see Galena
 Gambrinus -- see (Dexter Hill)

Gillette -- see (Dexter Hill)
 (Glacier Cr. - Rock Cr. divide) -- see Stipek & Kotovik (Glacier Cr. divide)
 Golconda -- see (Twin Mountain Cr.)
 Gold Beach Dredging Co. -- see (Osborn Cr.)
 Gold Beach Placers, Inc. -- see (Peluk Cr.)

 Gold Bug -- see West
 Golden Cow -- see (Nome Beaches)
 Golden Eagle -- see West
 (Grand Central R.) -- see (Windy Cr.)
 (Grass Gulch) -- see (Dexter Hill)

 (Green Gulch) -- see (Washington Cr.)
 Greenstone Mines, Inc. -- see (Osborn Cr.), (St. Michaels Cr.)
 (Grouse Gulch) -- see (Dexter Hill)
 Guinan & Ames -- see (Glacier Cr.)
 Gustafson & Swedman -- see (Oregon Cr.)

 Hall -- see (Arctic Cr.)
 Hammon Consolidated Gold Fields -- see (Nome beaches)
 Hastings Creek Dredging Co. -- see (Hastings Cr.)
 Head & Strand -- see Hed & Strand
 Hed & Strom -- see Hed & Strand

 Hendrickson, Kotovic & Stipek -- see (Anvil Cr.)
 Hines (& McLaughlin) -- see (King Mtn.)
 Homburger -- see (Newton Gulch)
 Homburger & Shoemaker -- see (Charley Cr.)
 Honey -- see (Dexter Hill)

 (Intermediate beach) -- see (Nome Beaches)
 Isabel -- see (Waterfall Cr.)
 Jannson -- see California
 Julian -- see (Osborn Cr.)
 Julien (Gold Mining &) Dredging Co. -- see (Osborn Cr.)

 Kentucky -- see Galena
 (Lake Cr.) -- see (Nome beaches)
 (Lake Cr. tributaries) -- see (Fluorite Cr.)
 Lane, Charles D., Co. -- see (Dexter Cr.)
 Last Chance -- see (Waterfall Cr.)

 Lee & Swanberg -- see (Osborn Cr.)
 Lena -- see (Dexter Hill)
 Lindblom, Brinterson & Linderborg -- see (Anvil Cr.)
 (Little Cr.) -- see (Nome beaches)
 Lynx -- see (Glacier Cr.)

Mabel -- see (Waterfall Cr.)
 Madeline -- see (Dexter Hill)
 (Mary Gulch) -- see (Mountain Cr.)
 Mattie -- see (Dexter Hill)
 McCarthy & Panos -- see (Nome beaches)

 (McDougall Cr.) -- see (Nome beaches)
 McIntosh -- see (Anvil Cr.)
 Miocene (Ditch) Co. -- see (Dexter Hill), (Glacier Cr.), (Snow Gulch)
 Monitor -- see (Waterfall Cr.)
 (Monroeville beach) -- see (Nome beaches)

 Monument Creek Mining Co. -- see (Monument Cr.)
 Moore -- see (Osborn Cr.)
 (Mt. Osborn) -- see Moffit
 (Nekula Gulch) -- see (Dexter Hill)
 Nelson (Bonita Cr.) -- see (Bonita Cr.)

 (Nicola Gulch) -- see (Dexter Cr.)
 Noble -- see (Nome beaches)
 Nome Consolidated Dredging Co. -- see (Nome beaches)
 Nome Gold Gravel Co. -- see (Cripple R.)
 Olsen -- see (Anvil Cr.)

 Osborne Creek Dredging Co. -- see (Osborn Cr.), (St. Michaels Cr.)
 Osborne Dredging Co. -- see (Osborn Cr.)
 Osborn(e) Mining Co. -- see (Osborn Cr.)
 (Osburn Cr.) -- see (Osborn Cr.)
 Oso -- see Galena

 Pioneer (Mining) Co. -- see (Nome beaches)
 Plein Mining & Dredging Co. -- see (Otter Cr.)
 Poorman -- see (Monument Cr.)
 (Quartz Gulch) -- see (Anvil Cr.)
 (Rocker Gulch) -- see (Nome beaches)

 Rowe -- see (Snake R.)
 Royal -- see (King Mtn.)
 Ruby -- see (Twin Mountain Cr.)
 (Ruby Cr.) -- see (Rulby Cr.)
 (Saturday Cr.) (Gulch) -- see (Nome beaches)

 Saunders (Creek) Dredging Co. -- see (Saunders Cr.)
 Scotia -- see (Anvil Cr.)
 (Second beach) -- see (Nome beaches)
 Sinuk River Barite -- see (Quarry)
 Sioux-Alaska Mining Co. -- see (Moss Gulch)

Slisco -- see Sliscovich
Snowflake -- see (Dexter Hill)
Sophie -- see (Sophie Gulch)
(Specimen Gulch) -- see (Dexter Hill)
(Submarine beach) -- see (Nome beaches)

Sugar -- see (Dexter Hill)
Summit -- see (Dexter Hill)
Sunrise -- see Galena
Sunset Mines Corp. -- see (Sunset Cr.)
(Third beach) -- see (Nome beaches)

(Tug Gulch) -- see (Lillian Cr.)
U.S. Smelting, Refining & Mining Co. -- see (Anvil Cr.), (Dexter Hill),
(Glacier Cr.), (Nome beaches), (Rock Cr.), (Sophie Gulch), (Twin
Mountain Cr.)
UV Industries -- see (Nome beaches)
Volkheimer (and associates) -- see (Quarry)
Warren -- see (Rock Cr.)

Widstead -- see (Anvil Cr.)
Widstedt -- see (Anvil Cr.)
Wild Goose Co. -- see (Anvil Cr.)
Wild Goose Mining & Trading Co. -- see (Cooper Gulch)
Williams -- see Galena

Winsted -- see (Anvil Cr.)
(Wonder Cr.) -- see (Nome beaches)

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