MINERAL OCCURRENCES IN THE CHUGACH NATIONAL FOREST, SOUTHCENTRAL ALASKA

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UNITED STATES DEPARTMENT OF THE INTERIOR

William P. Clark, Secretary

BUREAU OF MINES

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UNITED STATES DEPARTMENT OF THE INTERIOR
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SUMMARY REPORT

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This open file report summarizes the results of a Bureau of Mines wilderness study and will be incorporated in a joint report with the U.S. Geological Survey. The report is preliminary and has not been edited or reviewed for conformity with the U.S. Bureau of Mines standards and nomenclature. Work on this study was conducted by personnel from Alaska Field Operations Center, 2221 E. Northern Lights Blvd., Suite 110, Anchorage, Alaska 99508.

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UNIT OF MEASURE ABBREVIATIONS USED IN THIS REPORT

B.t.u.	British thermal unit
cy	cubic yard
ft	foot, feet
in	inch, inches
lb	pound
oz	ounce
pct	percent
ppm	parts per million
sq mi	square mile
yr	year

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ABSTRACT

A mineral investigation of the Chugach National Forest, Alaska was conducted jointly by the U.S. Geological Survey and the U.S. Bureau of Mines from 1979 to 1983 as part of the RARE II program. The Geological Survey remapped the geology and distribution of mineral resources. The Bureau investigated mines, prospects, and mineral occurrences. Gold, copper, coal, oil, building stone, sand and gravel, and a minor amount of antimony have been produced. Arsenic, chromium, cobalt, lead, manganese, molybdenum, nickel, and zinc occurrences have been identified. The recorded gold production to date is about 265,000 oz from numerous small placer and lode mines. An inferred gold reserve base of 11,750,000 cy of gravel and about 108,000 tons of lode ore of historically mined grades remains. Copper production totaled about 208,700,000 lbs from about 6,416,000 tons of ore. An inferred copper reserve base of similar ore, totals more than 7,200,000 tons. About 20,000 tons of coal have been produced from small mines in extensive coal deposits of varying rank occurring in folded sediments in or near the east end of the study area. Sand and gravel and building stone have been extracted locally as needed. Oil production from shallow wells near the east end of the

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study area started about 1900 and totaled 153,922 barrels by 1933 when production ceased for economic reasons. Potential exists for ore occurrences of all the previously mined minerals, some of the recently identified minerals, and for the discovery of additional mineral deposits.

INTRODUCTION

A mineral resource investigation of the Chugach National Forest (CNF) was conducted by an interagency team made up of members of the U.S. Geological Survey (USGS) and the Bureau of Mines (Bureau). This investigation, initiated under the RARE II program, started in 1979 and was completed in 1983. Because the boundaries of the CNF and study areas in the CNF were redefined during the study the entire CNF and adjacent areas were examined. The USGS compiled and evaluated data on the regional geology, geochemistry, and geophysics. The Bureau compiled and evaluated data on mines, prospects, mineral occurrences, and areas of mineralization, which are summarized in this report. More detailed and comprehensive Bureau open file reports on the investigations of mines, prospects, and their geologic setting will be completed later. A joint USGS/ Bureau summary report, to be published by the USGS as MF-1645A (1)3/, will describe the geology, geophysics, geochemistry, and the mineral resource potential of the study area.

3/ Underlined numbers in parentheses refer to references preceding the appendix.

STUDY AREA AND LAND STATUS

The CNF is located in southcentral Alaska (figure 1). Federal, state, city, and private land holdings (including native regional corporation selections) are present within the area studied. The surface area of the CNF is more than 5.9 million acres. The CNF boundaries and topographic quadrangle map boundaries are shown on figure 2.

BUREAU OF MINES STUDIES

The Bureau's contribution to the investigation of the CNF was the evaluation of mines, prospects, mineral occurrences, and mineralized areas. The Bureau's field work focused on metallic deposits. Field work was not done on the coal, oil, gas, stone, and sand and gravel resources. Data on these, such as locations, descriptions, and production, came from publications and company or government reports. The coal resource in the eastern part of the study area may be large but both the money and the time required to evaluate this resource were beyond the scope of this project. Building stone deposits and sand and gravel deposits are common in much of the area. Most of the existing or proposed highway corridors have nearby sand and gravel. Unless a specific use or a specific site is identified the evaluation of these low unit value commodities can be done only in general terms.

Pre-field office work and literature search was initiated in 1979. Data compilation on mineralization, production, and mining history included the review of commonly available literature, company files, files at the Technical Data Section of the USGS at Menlo Park, California, records of the Assay Office of the U.S. Mint at Seattle, Washington, and the Bureau's

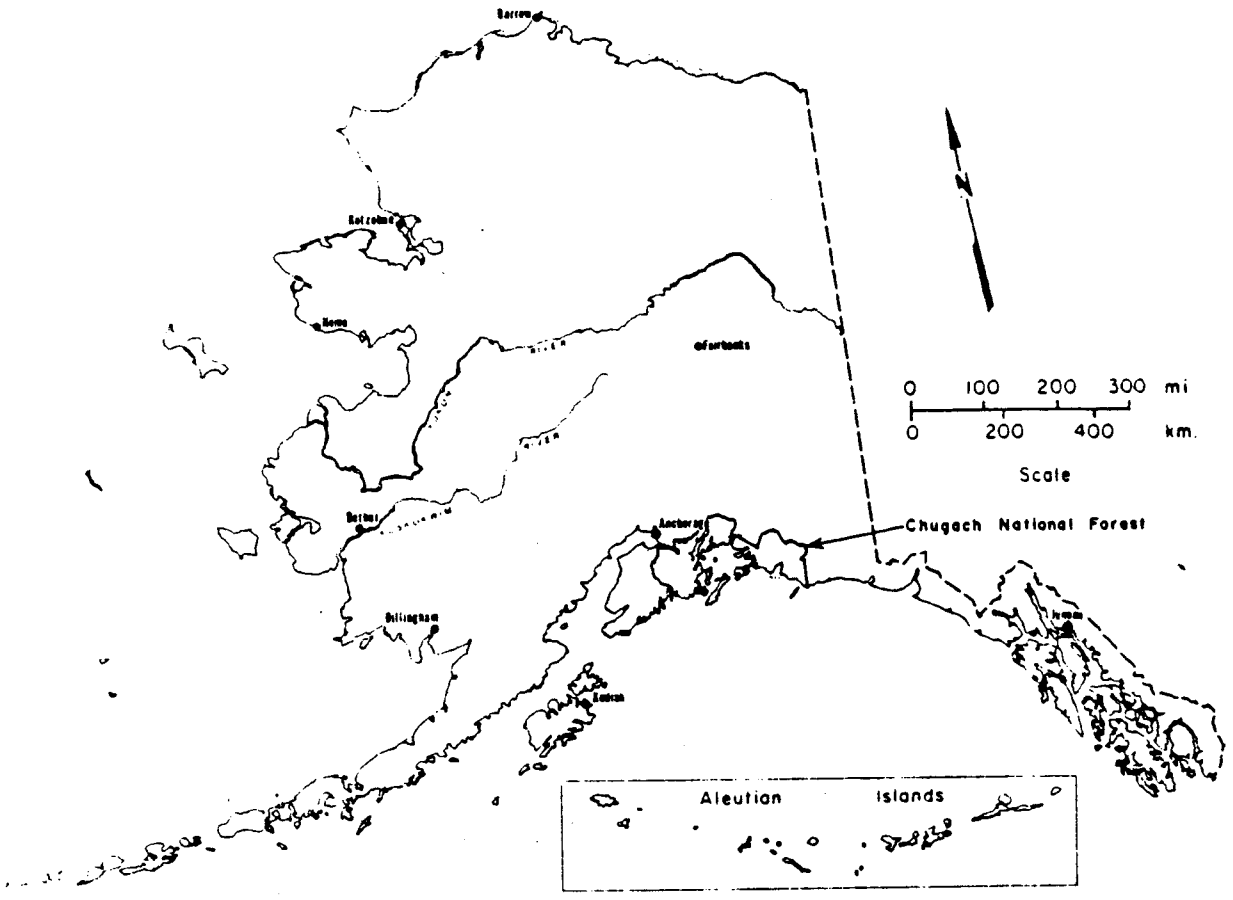

FIGURE 1.- Location of Chugach National Forest, southcentral Alaska

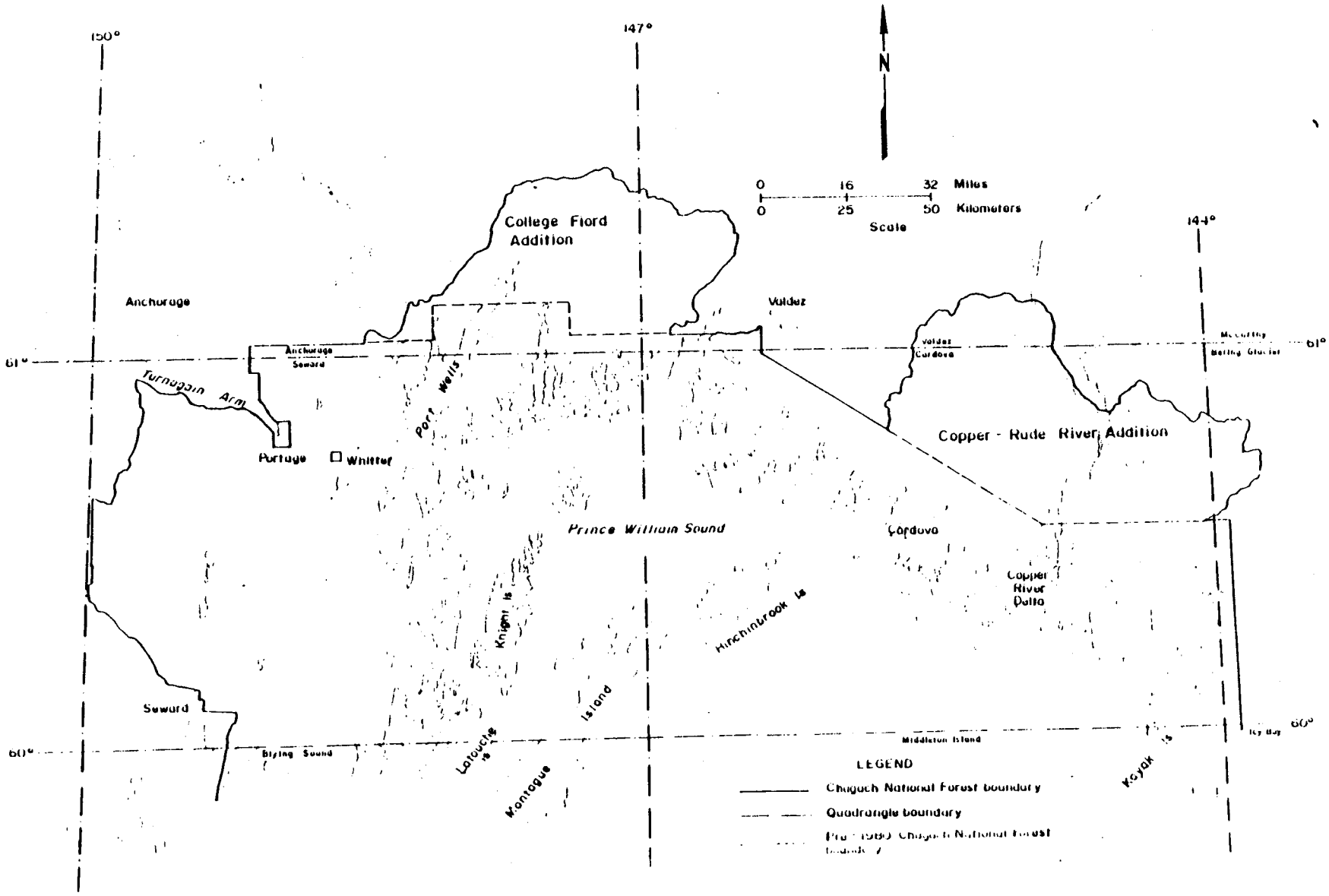

FIGURE 2.— Chugach National Forest and related quadrangle maps.

Minerals Availability System (MAS) files in Juneau, Alaska. Requests for information were made from individuals familiar with the area or having historical data. All data were reviewed and evaluated to obtain an historical overview.

Field work in 1979 was mostly of a regional reconnaissance nature with more detailed follow-up work at mineralized areas in 1980, 1981, and 1982. Field work during this project included locating the prospects, mapping accessible workings, and identifying and evaluating the extent of mineralization and its geologic setting. Standard sampling procedures were used at the lode mines. Placers were sampled either by sluicing and panning 0.1 cy samples or by running a suction dredge for a determined period of time. In addition to locating mines and prospects, the Bureau investigated geochemically anomalous areas to determine if unreported zones of mineralization were present.

The degree of the mineral assessment is not uniform across the study area. Differences are due to the amount of historic data available, access, topography, surface cover, and revision of study area boundaries which limited the time that could be spent in an area. The evaluation was most complete in areas of historic mining activity and is weakest for the eastern part of the study area, especially for the recent (1980) College Fiord and Rude-Copper River additions (figure 2). The new additions to the CNF include large areas of relatively inaccessible land, mostly ice covered or with few reported mineral occurrences and have received the least amount of geologic field work. Mineralization in these areas may have been by-passed or overlooked at the time of peak exploration activity because of surface cover, location, and access problems.

RESULTS

Data on specific mineralized areas, obtained from a review of available records, publications, and field investigations, are summarized in the appendix. Locations and distributions of mines, prospects, and mineral occurrences as well as drainages containing anomalous placer gold samples (>0.0005 oz/cy gold), are shown on figure 3.

Mines, prospects, and occurrences are defined as follows: mines are mineralized localities where systematic continuous ore production has occurred over a period of time; prospects are mineralized localities where development work has occurred but from which ore was not shipped for any sustained period of time; occurrences are mineralized areas where no physical work, such as trenching or pitting, has occurred.

The appendix contains descriptions of mines, prospects, and occurrences and rates the mineral development potential of each using one of four levels: "high," "moderate," "low," or "unknown." These ratings are estimates based on an evaluation of grades and extent of mineralization as well as geological and geochemical factors. Areas in which mineral deposits are concentrated are shown on Figure 4.

A deposit of high mineral development potential would, by definition, have high grades and probable continuity of mineralization. A deposit of moderate mineral development potential might have high metal content but the mineralization might be distributed discontinuously in and along structures. A deposit with low mineral development potential would contain uneconomic grades and/or show little evidence of continuity of mineralization. For example, a base metal deposits with grades below 0.1 pct would rank as low. Similarly, mineralized narrow fractures of

a few inches in width and/or with lateral extent of up to several tens of feet with no evidence of becoming larger would rank as low.

TYPES OF DEPOSITS

Placer and lode gold, base metal, antimony, sand and gravel, building stone, coal, and oil extraction have taken place historically in the CNF. Arsenic, chromium, lead, zinc, molybdenum, manganese, cobalt, nickel, and gas resources also exist.

PLACER GOLD DEPOSITS

Placer gold appears to have been the first mineral commodity explored for in the area. In the late 1840's, the Russian-American Company attempted to evaluate the gold potential of its concessions in North America. The extent of this work is not well known. Gold was discovered on the Kenai River and some of its tributaries in 1848 (2). Placer gold was mined by that company in 1850 and 1851 near Kenai Lake in the study area and Skilak Lake west of the study area. Abandoned mining equipment along other drainages was reported by later prospectors and attests to perhaps more extensive activity by Russian prospectors. After the Alaska Purchase in 1867, individual prospectors must have been active in the area because of the sporadic reports of gold discoveries between the 1860's and 1900's.

In the study area, a placer gold discovery on Cooper Creek (P-86)4/ was reported in 1884 and those on Resurrection (P-90) and Sixmile Creeks

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4/ Numbers in parentheses reference mines, prospects, or mineral occurrences shown on figure 3 and tabulated in the appendix. Prefix P designates placers, the letters A, BS, C, S, V refer to localities in the Anchorage, Blying Sound, Cordova, Seward, and Valdez Quadrangles, respectively.

(P-72) in 1888. In about 1896 high-grade gold gravels were discovered and mined on Bear (P-91) and Palmer (P-90) Creeks. Soon after, gold placers were discovered on Mills (P-79), Canyon (P-76), Crow (P-93), and other subsequently productive creeks.

In the Turnagain Arm area, placer gold prospects that could be worked successfully by pick- and shovel-methods were exhausted by 1912 and hydraulic mining was initiated to increase the volume of gravel processed.

Since 1980, 15 to 20 placer operations have been active during the 3 to 4 month mining season on the Kenai Peninsula. Operations ranged from small (4 to 8 in.) suction dredges and pick-and-shovel operations processing 10 to 15 cy/day to a backhoe-bulldozer washing-plant operation that could process up to 2,000 cy/day.

Currently (December 1982), approximately 1,860 placer claims are located within the study area (3). Additionally numerous "recreational" miners work along gold-bearing streams but their aggregate production is small.

Sampling during this study has revealed minor amounts of gold in numerous drainages with no previously reported placer gold occurrences. These include streams on the Kenai Peninsula as well as some in the Rude-Copper River addition and those in northwestern Prince William Sound (2, 4).

Geology of Placer Gold Deposits

Four types of placer gold deposits derived from gold-bearing quartz veins have developed as a result of glacial erosion, mass wasting, and fluvial processes: 1) alluvial placers; 2) bench placers; 3) eluvial placers; and 4) glacial placers. Alluvial and bench deposits have produced the bulk of the placer gold in the study area. Eluvial and glacial

deposits have potential for future production and may be genetically related to alluvial and bench deposits.

TABLE 1. - Major placer gold producing streams, Chugach National Forest area, Alaska.

Location	Locality no.(1)	Estimated gold production (oz)
Crow Creek	P-93	42,500
Canyon Creek	P-76	37,700
Resurrection/ Palmer Creeks	P-90	26,800
Lynx Creek	P-61	7,500
Bear Creek	P-91	5,000
Mills Creek	P-79	4,000
Gulch Creek	P-73	2,150
Sixmile Creek	P-72	1,750
Cooper Creek	P-86	1,150
Quartz Creek	P-81	800
Bertha Creek	P-64	700
Silvertip Creek	P-75	650
Crescent Creek	P-83	350
California Creek	P-92	300
Hargood Creek	P-82	300
Seattle Creek	P-70	200
Falls Creek	P-55	200
Stetson Creek	P-85	200
Kenai River	P-87	100
Others		650
Total		133,000

(1) Refers to figure 3 and appendix

Alluvial placers consist of gravel deposits resulting from the depositional and sorting processes of existing streams and include gravel bars, channel deposits, flood plain deposits, and alluvial fans. Gravels tend to be sandy, poorly to moderately well sorted, and stratified, but become increasingly consolidated and contain more clay near bedrock.

Bench placers consist of gravels deposited by streams at higher elevations within present valleys prior to the formation of the more deeply eroded active stream channels. Some of these deposits, including abandoned channels, were apparently deposited during interglacial periods prior to the most recent advance. Gravels tend to be poorly to moderately well-stratified, poorly sorted, and moderately to well consolidated.

Eluvial placers consist of winnowed colluvial gravels which contain anomalous concentrations of heavy minerals due to downhill creep and the winnowing action. Gravels occur as irregular sheets of angular bedrock fragments and soil mantling hillside slopes below gold-bearing quartz veins. These deposits may grade laterally or vertically into bench and/or alluvial placers.

Glacial placers consist mostly of till deposited directly by glacial ice. These gravels tend to be very poorly washed, largely unstratified, and contain angular rock fragments in a clay/silt-rich matrix. Gold tends to occur in subeconomic quantities. However, these gravels may be a source of gold for later concentration in alluvial deposits.

Placer Gold Production

Placer gold has been produced primarily from the Kenai Peninsula in the Hope and Sunrise areas and Girdwood from Crow (P-93), Canyon (P-76),

and Resurrection (P-90) Creeks. Placer gold is noted to be present in the gravels of the Port Valdez area in Gold, Mineral, Solomon, and other creeks, but production was minimal. The major producing streams and their estimated gold production are listed on table 1 and shown on figure 3. Placer deposits with subeconomic quantities of gold are found in many drainages. Only minor activity is reported elsewhere in the CNF. Nearly half of the total placer production (67,450 oz) was recovered between 1895 and 1910. More recently, mines have produced at a rate estimated to be from 1,000 to 2,500 oz/yr.

Inferred Placer Gold Reserve Base

The inferred placer gold reserve base of past producing areas is at least 11,750,000 cy of gravel. The distribution of the placer reserves is shown on table 2.

TABLE 2. - Inferred placer gold reserve base at major drainages, Chugach National Forest area, Alaska

Drainage	Locality no.(1)	Estimated auriferous gravels (cy)
Sixmile Creek	P-72	>1,000,000
Canyon-Mills Creeks	P-76,79	>2,000,000
Resurrection-Palmer Creeks	P-90	>2,000,000
Crow Creek	P-93	>1,000,000
Lynx Creek	P-61	>1,000,000
Bear Creek	P-91	>3,000,000
Silvertip Creek	P-75	>1,000,000
Quartz Creek	P-81	>750,000
Total		>11,750,000

(1) Refers to figure 3 and appendix

LODE GOLD DEPOSITS

Lode gold was explored for and mined on a small scale in the Kenai Peninsula, Girdwood, Port Wells, Port Valdez, Jack Bay, Culross Island, Bligh Island, and McKinley Lake areas. The major lode gold mines in the area and their production are shown on table 3.

On the Kenai Peninsula, the possibility of gold-bearing veins was noted in the Summit Creek area in 1896. Lode claims were located on Bear, Palmer, and Sawmill Creeks in 1898. Those in the Falls Creek area were located in 1905 and in Slate and Summit Creeks in 1906. The first notable but sporadic production in the Falls Creek area occurred in 1911. Over the years gold production has come periodically from the same properties. The longest continuous lode gold production on the Kenai Peninsula came from the Hirshey-Lucky Strike (S-289) veins on Palmer Creek. Other producers include the Primrose (S-214), Skeen-Lechner (S-225), East Point (S-226), Crown Point (S-227), Grant Lake (S-231), Gilpatrick Dike (S-253), Heaston-Oracle (S-255), and Ronan & James (S-256) Mines.

In the Girdwood area, lode gold mining occurred near Crow Pass at the headwaters of Crow Creek where several veins were mined. Remains of a small flotation mill are present at the Monarch (A-39) and Jewel (A-38) Mine sites near Crow Pass.

In the Port Wells area, with the exception of the Granite Mine (S-147), lode gold prospects consist of small, widely scattered, mineralized quartz and quartz-carbonate veins. The date of lode gold discovery in the Port Wells area is not known. Little interest was shown in lode gold mining in Prince William Sound until 1910 when the veins at the Cliff Mine (V-48), discovered in 1906 at Port Valdez, proved to be excellent producers. By 1911 the Golden Eagle (S-129) property was being developed.

TABLE 3. - Production from lode gold mining operations, Chugach National Forest area, Alaska.

Mine	Locality no.(1)	Reported/recorded*-gold production (oz)
Cliff	V-48	51,740*
Granite	S-147	24,940*
Hirshey-Lucky Strike	S-289	5,545*
Ramsay-Rutherford	V-5	5,375*
Monarch/Jewel	A-39, A-38	4,932*
Primrose	S-214	4,000 (659*)
Gilpatrick Dike	S-253	3,405*
Crown Point	S-227	3,125*
Mineral King	S-156	2,783*
Gold King	V-63	1,997*
Skeen-Lechner	S-225	1,796*
East Point	S-226	1,725*
Heaston-Oracle	S-255	1,274*
Big Four	V-28	846*
Grant Lake	S-231	792*
Cameron-Johnson	V-62	585*
Ronan & James	S-256	557*
Portage Bay	S-168	490*
Hirshey & Carlson	S-292	408*
Little Giant	V-21	367*
Hercules	V-27	269*
Tomboy Ledge	S-162	219*
Downing	S-294	150*
Nearhouse	S-299	102
Alaska Homestake	A-31	83*
Lansing	S-163	81
Rough & Tough	V-64	76*
Falls Creek	S-224	65
Seward Bonanza	S-221	65
Culross Mine	S-102	62

* Production records available.
(1) Refers to figure 3 and appendix.

Major properties in the Prince William Sound area include the Granite (S-147), Mineral King (S-156), and Portage Bay (S-168) Mines. Ore at the early operations was treated at stamp and gravity mills whose remains exist near some of the mine sites.

In the Port Valdez area, gold deposits occur to the north of and mostly outside the study area. The trend of the deposits extends into the CNF west to and across Columbia Glacier and east of the Cliff Mine (V-48) along the Lowe and Tasnuna Rivers. By 1911, 48 mines and prospects were located from Valdez Glacier to Columbia Glacier, a distance of about 26 miles (5).

In the Jack Bay area, located south of and adjacent to the Port Valdez area, small pits, trenches, and adits on gold-bearing quartz veins are reported (6). These workings are of limited extent and current assays did not reveal significant gold content. Records of gold production from this area have not been located.

On Culross Island, two zones of lode gold are present south of Culross Bay. Both deposits, the Culross Mine (S-102) and the John Sells Prospect (S-103), contain gold in quartz-filled fissures. Claims were first staked in 1907. By 1950, at least 895 ft of underground workings existed at the Culross Mine.

On Bligh Island, gold in quartz was noted in two areas (7). One site is near the entrance of Cloudman Bay (C-93) and the other at the northeast corner of Bligh Island (C-94).

In the McKinley Lake area, east of Cordova, most of the surface trenching and underground work had been completed by 1912 (8). The records show gold production as 16 oz. Although gold-bearing quartz veins and stockworks are present, the gold distribution is erratic, sparse, and discontinuous.

Geology of Lode Gold Deposits

In the Kenai Peninsula area, native gold occurs in epigenetic quartz veins in metasediments and in quartz veins spatially related to felsic dikes and sills. In the Girdwood, Port Valdez, Jack Bay, Culross Island, Bligh Island, and McKinley Lake areas, gold occurs in epigenetic quartz veins in metasedimentary rocks spatially associated with small granitic stocks. Gold-bearing veins generally are small and seldom exceed several hundred feet of strike length. Quartz veins at the Cliff Mine, the largest lode gold mine in the Prince William Sound area, were mined for about 800 ft vertically and about 2,000 ft horizontally. High grades, up to several ounces or tens of ounces of gold per ton, have been a motivating factor in prospecting for, developing, and mining vein deposits in the study area.

The description of Port Valdez quartz-gold veins by Brooks (5) in 1911 in general applies to the other parts of the study area. The lode gold deposits are fissure veins. A variation from this type is seen in the mineralized zones along fractures that have no well-defined walls. In some parts of Port Valdez, the fracturing is pronounced and individual fissures can be traced for long distances. Some have been traced for more than a quarter of a mile, and there is good reason to believe that one or two have been identified at intervals from a mile to a mile and a half. The fissures are mostly marked by a zone of brecciation and slickensides. In many of the veins, fragments of country rock form the majority of the material included between the walls. In some fissures, the vein matter is almost entirely absent for considerable distances and then reappears

farther along. Most of the veins that have been staked are narrow, and although some larger veins have been found, few exceed 2 to 3 ft in thickness.

Mineralogically, the ore is simple. In most veins, pyrite, arsenopyrite, gold, argentiferous galena, and sphalerite are the only metalliferous minerals recognized. The gangue mineral is almost entirely quartz, but some calcite and brown-weathering carbonate is present in many veins.

Lode Gold Production

Lode gold was produced from the Kenai Peninsula, Girdwood, Port Wells, Port Valdez, and McKinley Lake areas. The most recent, more or less continuous, lode gold production in the CNF was in the 1930's and 1940's when records show that gold was sold to the U.S. Mint at Seattle. There appears to have been little or no lode gold mining activity since 1956. In the Kenai Peninsula area, from 1911 to 1930, lode production fluctuated from a few hundred ounces to 1,500 oz/yr (9). During this period about 15,000 oz, or an average of 750 oz gold/yr, were produced from properties located near the headwaters of Palmer Creek (Hirshey-Lucky Strike, S-289), near Summit Lake (Gilpatrick, S-253; Heaston-Oracle, S-255), and the Moose Pass area (Crown Point, S-227; Primrose, S-214; and Skeen-Lechner, S-225). From the East Point Mine (S-226), 1,725 ounces were produced mostly during the 1950's. Lode production in the Girdwood area occurred mostly between 1937 and 1942 from the Jewel (A-38) and Monarch (A-39) properties. Of the total estimated 30,000 oz of lode gold production from these two areas, 25,000 oz came from the Kenai Peninsula area and 5,000 oz from the Girdwood area (table 4).

Several properties produced gold from the Port Wells area of Prince William Sound. The Granite Mine (S-147) produced at least 24,940 oz

gold and was the largest gold producer in the CNF. The Mineral King Mine (S-156) reportedly recovered 2,116.6 oz gold from 3,500 tons of ore between 1928 and 1932 and had a total recorded production of 2,783 oz gold. The Portage Bay Mine (S-168) has a recorded production of at least 490 oz gold. The Lansing Mine (S-163) recorded 81 oz of gold (10). The Culross Mine (S-102) produced an estimated 62 oz of gold.

The reported production from the Port Valdez area is about 61,646 oz gold. The Cliff Mine (V-48), located outside the CNF, produced at least 51,740 oz of gold. Other mines with sustained gold production in the Port Valdez area include the Ramsey-Rutherford (V-5: 5,375 oz), Gold King (V-63: 1,997 oz), Big Four (V-28: 846 oz), and Cameron-Johnson (V-62: 585 oz).

McKinley Lake properties (C-6 to C-9) near Cordova have a recorded production of 16 oz of gold. No notable production has come from the other districts.

TABLE 4. - Primary gold production Chugach National Forest and adjacent areas, Alaska.

District/area	Lode (oz)	Placer (oz)
Girdwood	5,000	42,500
Kenai Peninsula	25,000	90,500
Port Wells	40,000	negligible
Port Valdez	61,646	negligible
Jack Bay	negligible	negligible
Bligh Island	negligible	negligible
McKinley Lake	16	negligible
Culross Island	62	negligible
TOTAL	131,724	133,000

Inferred Lode Gold Reserve Base

The inferred reserve base of past lode gold producers is 108,440 tons of vein material (table 5).

TABLE 5. - Inferred lode gold reserve base at larger (>200 ton) mines and prospects, Chugach National Forest area, Alaska.

Mine/Prospect	Locality no. (1)	Reserve base (tons)
Golden Eagle	S-129	21,000
Crown Point	S-227	15,000
Portage Bay	S-168	10,000
Skeen-Lechner	S-225	10,000
Culross Mine	S-102	8,600
Seward Bonanza	S-221	7,400
Nearhouse	S-299	7,000
East Point	S-226	3,700
Summit Vein	S-254	3,400
Monarch, Jewel	A-39, A-38	3,100
Donohue	V-8	2,500
Hirshey-Lucky Strike	S-289	2,000
Gilpatrick Dike	S-253	2,000
Granite	S-147	1,900
Cameron-Johnson	V-62	1,800
Primrose	S-214	1,300
Brewer-Alaska	S-205	1,100
Nugget	S-136	900
Mayfield	V-67	600
Lansing	S-163	500
Mineral King	S-156	500
Mountain	S-133	500
Sweepstake	S-140	500
Hirshey & Carlson	S-292	500
Hercules	V-27	450
Shell	S-266	420
Minnie	V-59	400
Bahrenberg	A-41	340
Tomboy Ledge	S-162	300
Grant Lake	S-231	270
McMillan	S-249	250
Ivanhoe	V-60	210
Total		108,440

(1) Refers to figure 3 and appendix.

BASE METAL DEPOSITS

Copper prospects have been developed in the CNF since 1897, principally in the Latouche Island, Knight Island, Glacier Island, Copper Mountain, Landlocked Bay, Port Fidalgo, and Cordova areas. Copper deposits with past production are shown on table 6. Substantial amounts of copper were produced from the Beatson (S-17), Ellamar (C-91), Schlosser (C-66), and Midas (V-35) Mines and smaller amounts from 18 other mines or prospects. Systematic copper mining and ore shipments started from the Beatson Mine (S-17) in 1903 and from the Ellamar Mine (C-91) in 1906. Base metal mining ceased in 1930 with the closure of the Beatson Mine, the largest producer in the area. Zinc, silver, and gold are present in variable amounts in the sulfide copper ores.

From 1929 up to about 1964, base metal investigations have been site-specific with the aim of proving ore reserves in areas of better mineralization. In the 1930's, Solar Exploration explored underground at Rua Cove and Latouche Island. In the 1950's, Northern Pyrites Company explored the pyrite deposits of the Duke (S-3) and Duchess (S-4) Prospects on Latouche Island as potential sources of sulfur; the Alaska Copper Company re-evaluated copper occurrences at the Schlosser (C-66) Mine at Port Fidalgo. In the early 1960's, limited regional reconnaissance stream sediment sampling along highways on the Kenai Peninsula and other readily accessible nearby streams yielded no significant anomalies (11).

In the late 1960's, the Phelps Dodge Corporation conducted an intensive mineral survey on Latouche Island using electrical geophysical exploration techniques. Induced-potential and electromagnetic geophysical systems identified and traced several chargeability and conductor anomalies.

TABLE 6. - Copper deposits with production records from Chugach National Forest area, Alaska.

Mines	Locality No. (1)	Ore produced or sold (Tons)	Cu metal (lbs)	Cu (pct)
Beatson Copper Co.	S-17	5,992,941	182,600,000	1.65
Ellamar Mining Co.	C-91	301,835	15,761,337*	2.46
Schlosser Mine	C-66	21,434	4,160,820*	8.70
Midas Mine	V-35	49,350	3,385,680*	3.32
Threeman Mine	C-73	6,196.5	1,159,660*	8.63
Blackbird Properties	S-19			
Latouche Mining Co.		29,209*	52,000*	0.088
Blackbird Mine		5,150*	547,118*	5.31
Girdwood, Barrack		600*	72,510*	6.04
Fidalgo Copper Co.	C-63	2,747	360,376	6.55
Reynolds-Alaska (Boulder Bay)	C-87	2,850	215,000	3.77
Standard Copper Mines Co.	C-77	1,100	32,000	1.45
Dickey Copper Co. (Irish Cove)	C-65	293*	29,346*	5.01
Duchess Claim Reynolds-Alaska	S-2, 4	1,850	215,000	5.8
South Landlocked Bay Mining Co.	C-70	928	74,240	4.0
Harry Moore Mine	S-47	20	1,452	3.63
Alaska-Pioneer-Sourdough	C-72	6	720	6.0
Knights Island Copper Mining Co.	S-52	1	240	12.0
Hogan Bay Properties	S-26			
Patten Cooperating Co.		0.3	57	9.5
Happy Jack Mining and Devel.		+		
Copper Queen Mine		+		
Alaska Commercial Co.	C-75	70		
Pandora Claim	S-65	+		
Latouche Island Copper Mining Co. Ltd.	S-7	+		
Knight Island Consolidated Copper Co.	S-61	+		
Copper Coin (Russell Ball Copper Co.)	S-50	+		
Chisna Consolidated	C-69	+		
Duke Claim	S-3	+		
Total		6,416,580.8	208,667,556	

* Estimated
\+ Indicated in publications as having shipped some ore
(1) Refers to figure 3 and appendix

One continuous conductor zone extended south from the Beatson Mine through and past the Duke and Duchess Prospects, at which point the conductor

terminated abruptly. Two other conductor zones, conceivably southern continuations of the "Beatson Trend" or environment, were identified along the southwestern side of Latouche Island. Only moderate-base metal values (a few hundred ppm) were reported in drill cores that explored these two trends.

In the early 1970's, property owners and companies again explored the base metal potential of the Duke and Duchess Prospects on Latouche Island. A mineral reserve estimate, based on surface, subsurface, and diamond drill data, indicated the presence of at least 1.5 million tons at a grade of 0.9 pct copper, 1.8 pct zinc, 0.9 oz silver/ton, and 0.04 oz gold/ton.

In about 1974, Noranda Exploration Company carried out a base metal exploration program in a portion of Prince William Sound. As a result of this work, a large block of claims was staked on the southern half of Latouche Island. Three shallow core holes, drilled near the southeastern portion of the island in 1974 and 1975, did not intercept economically significant zones of base metal sulfide mineralization.

In the middle 1970's, Texasgulf Inc. drilled on the Copper Bullion claims (S-67) near Rua Cove on Knight Island. These drill sites appear to have been located on geophysical anomalies that suggested the presence of massive sulfides. Core left on the site shows that extensive sections of low-grade fracture-controlled pyrrhotite in greenstone were encountered.

An area of zinc-lead prospects and occurrences has been newly identified in the Miners River and Wells Bay areas. Investigations based on anomalous 1979 Bureau geochemical results led to the location of small and widely scattered mineralized fracture zones containing sphalerite, galena, and pyrite. Both volcanic and sedimentary host rocks occur in the area.

The greenstones in the Wells Bay area apparently contain more sphalerite and pyrrhotite with minor galena, while the occurrences in sedimentary rocks, which physically (and stratigraphically?) overlie the volcanics, contain more galena with sphalerite and pyrite.

Geology of Base Metal Deposits

Base metal deposits are mainly epigenetic and occur in fissures and shears in mafic volcanic and sedimentary rocks. The majority of these copper deposits are hosted in greenstones, but the two major copper producers in the CNF, the Beatson (S-17) and Ellamar (C-91) Mines, are hosted in fine-grained metasedimentary rocks near edges of greenstone masses. For these two deposits, a volcanic source of metals has been postulated recently although early workers thought them to be hydrothermal replacement deposits. A smaller number of epigenetic copper deposits in fissures in arkose are located on Latouche Island.

The greenstone accumulations in the study area, described as ophiolite complexes (19), have associated copper mineralization found mainly in broad discontinuously mineralized, steeply-dipping, northerly-trending shear zones such as those at Knight Island, Glacier Island, Copper Mountain, Hinchinbrook Island, and Cordova. Most of the copper prospects and occurrences are located at Knight Island and at Copper Mountain, areas where the greenstones are thick and well exposed. Iron and copper sulfide minerals, principally pyrrhotite, chalcopyrite, and pyrite, are present as disseminations, stringers, and massive sulfide lenses, apparently randomly distributed in and along the shears. Copper was of primary economic interest although zinc and occasionally lead are present in variable, apparently uneconomic, amounts.

The Ragged Mountain and Hinchinbrook Island greenstones appear to be barren of copper sulfide mineralization. Although the presence of native copper on Hinchinbrook Island is reported, copper prospects have not been located. A 1980 and 1981 Bureau follow-up investigation of slightly anomalous 1979 copper geochemical values in these two areas located no base metal sulfide deposits.

Sulfide deposits in sedimentary rocks have provided the largest individual accumulations of copper mineralization. Gold and silver were economically significant by-products in the ore. The largest of these deposits are located in four areas: 1) on Latouche Island, the Beatson (S-17), Blackbird (S-19), Duke (S-3), Duchess (S-4), and other mines and prospects; 2) at Virgin Bay, the Ellamar (C-91) Mine and associated deposits; 3) at Port Fidalgo, the Schlosser Mine (C-66), Dickey (C-65) Prospect; and 4) at Lynx Creek on Kenai Peninsula, the Ready Bullion (S-272) Prospect.

Base Metal Production

Copper was produced continuously from three localities (Latouche Island, Ellamar, and Port Fidalgo) and sporadically from other prospects. All but the Beatson and nearby mines on Latouche Island produced direct-shipping ore. About 208,667,556 lbs of copper was recovered from 6,416,580.8 tons of ore. Production from 22 mines and prospects is itemized on table 6. Zinc and minor amounts of lead are reported with copper ore, but production of these was not recorded. Silver and gold by-products were recovered at the smelter.

TABLE 7. - Inferred copper reserve base at major copper deposits, Chugach National Forest area, Alaska

Name	Locality no.(1)	Reserve base (tons)	Cu (pct)
Volcanic-hosted			
Threeman	C-73	1,900,000	1.0
Rua Cove	S-67	1,320,000	1.2
Pandora	S-65	85,000	1.3
Fidalgo Mining Co.	C-63	45,000	0.3
Cordova Copper Co.	C-34	18,000	0.6
Hemple	C-74	6,300	1.3
Copper Coin	S-50	5,900	2.4
Galena Bay	C-83	5,800	7.9
Standard Copper	C-77	4,300	2.8
Ibeck	C-17	3,800	2.8
Reynolds-Alaska, Landlocked Bay	C-79	3,000	4.6
Seattle-Alaska	BS-2	2,900	3.0
Jonesy	S-59	1,300	3.3
Chisna	C-69	1,200	0.3
	Subtotal	3,402,500	
Sediment-hosted			
Beatson	S-17	Probably large	(no data to estimate)
Duchess	S-4	2,700,000	1.2
Ellamar	C-91	536,000	0.6
Duke	S-3	269,000	1.3
Schlosser	C-66	224,000	3.2
Midas	V-35	62,000	1.6
Four-in-One	A-8	33,500	0.2
Scott Glacier	C-16	19,000	1.1
	Subtotal	>3,843,500	
	Total	7,246,000	

(1) Refers to figure 3 and appendix.

Inferred Base Metal Reserve Base

The minimum inferred reserve base estimate of 22 copper deposits is 7,246,000 tons. Of this total, volcanic-hosted deposits account for

3,402,500 tons and sediment-hosted deposits account for 3,843,500 tons. An additional unknown but probably large reserve base may be present at the Beatson Mine. Table 7 shows copper deposits that contain in excess of 1,000 tons of inferred reserve base.

COAL DEPOSITS

Extensive coal occurrences which are confined to the Bering River area, in the eastern part of the CNF, have been known since at least 1896 (13). The principal coal deposits lie in a belt extending northeastward of Bering Lake. The eastern half of the coal field reportedly contains mainly anthracite and the western half contains mainly subbituminous coal. The B.t.u. content of the coal as received from the field ranges from 12,000 to 15,000 (14). Testing of Carbon Creek coal in a beehive oven did not make satisfactory coke.

Coal-bearing rocks underlie an area estimated to be about 70 sq. mi. Coal exposures consist mainly of isolated outcrops and prospect openings along the main stream courses. The intervening areas are covered with soil, moss, and other vegetation. Few coal beds have been traced for more than short distances and little is known of the maximum extent of the individual coal beds. Martin (14) mentioned that an anthracite seam on the east side of Carbon Mountain was traced for 2 miles.

A review of reports indicates that rapid changes in thickness are common features of coal beds in the Bering River field. Not all the descriptions indicate the cause of the thickness change, but structural deformation, in the form of squeezing and faulting, and stratigraphic thinning are represented.

Twenty-two coal beds over 3-ft-thick occur in a 2,700 ft section of the Kushtaka-Kultieth Formations (13). A coal resource estimate of this area, suggests a reserve base of 400 million short tons of coal. The outcrop length of the Kushtaka-Kultieth Formation in the area of Carbon and Monument Mountains suggests a minimum coal resource in the order of 1.2 billion short tons of coal. A coal resource of up to 3.6 billion tons has been inferred by others (15).

PETROLEUM DEPOSITS

Oil exploration in the Gulf of Alaska had its beginning in 1900 near Katalla in the southeastern part of the study area (16). Oil was first produced commercially from a 40 acre tract near Strawberry Point. Oil seeps are common throughout the Katalla-Controller Bay area. Of 44 wells drilled between 1900 and 1930, almost all had some oil shows and 18 wells produced oil commercially at one time or another. The production of 44 degree Baume gravity paraffin-base petroleum was refined locally.

In the first decade of the 1900's, production from the field was great enough that a small refinery was built to process the crude oil. From 1911 until 1933, the refinery operated under different owners (usually the major holder of wells in the Katalla Field). The refined products were marketed locally to the fishing fleet although the demand was much greater than the supply. Production per well varied from 15 to 240 barrels per month. The better wells pumped every day, but in the smaller ones, oil was allowed to accumulate and pumped once a week. The refinery burned down in 1933 and was not rebuilt. Total production from the field amounted to 153,922 barrels.

Occasional attempts at further development occurred in the 1960's and at present (1982) there is renewed interest in the area. Historic levels of production were low and should be achievable again.

Oil occurs in the Tertiary Poul Creek Formation which consists of complexly faulted and fractured carbonaceous shaly horizons. Twenty-three shale and mudstone samples from all the Tertiary formations were analyzed by techniques designed to evaluate the type and amount of organic material contained in the sedimentary rocks and determine their source-rock potential (1). The data suggest that the formations are thermally immature or are approaching the threshold of maturity. Where the formations, especially the Poul Creek, are more deeply buried, with longer burial history, they may become thermally mature and capable of generating hydrocarbons.

SAND AND GRAVEL AND BUILDING STONE DEPOSITS

Sand and gravel deposits occur along highway and railroad corridors in association with nearly all of the historic and potential placer gold producing drainages. Large volumes of gravel are associated with the Placer, Trail, Snow, Kenai, and Resurrection Rivers. Most deposits occur as flood plain and/or bench gravels but alluvial fans are associated with Bertha, Spokane, and Silvertip Creeks, among others, and have been exploited as local gravel sources during construction and maintenance of the highway system.

Thirty-two sand and gravel permits existed for extraction from the CNF at the end of 1982 (17). Of these, 18 were free-use permits to the State of Alaska with no accounting records kept on the volume removed. The volume removed varies from year to year with the construction and surfacing

activities. Sand and gravel used for private purposes averages between 5,000 and 7,000 yd3/yr.

Sand and gravel are currently being extracted from pits along the Seward Highway from Snow River to Peterson Creek and from a pit near Hope. During 1982, small amounts have been used from the pits near Cordova by State of Alaska maintenance crews. The U.S. Forest Service (USFS) issued a permit in 1978 for 720,000 cy of gravel near Spencer Glacier but no material has yet been extracted from the area.

Metasandstone has been quarried at several sites for use as riprap, fireplace facing stone, foundation stone, and rock panels (S-278, 309, 317, 322). Several igneous dikes (S-305, 306, 308) have recently been located as sources of building stone. Slate has been quarried near Kenai Lake (S-322) for use in the construction of rock panels and haydite has been located near Moose Pass (S-232). A limestone deposit suitable for use as a source of agricultural lime and possibly as building stone is currently being developed near the Russian River (S-237). A similar but smaller deposit occurs near Seward (S-202). Small quantities of stone are purchased from the USFS each year for use as riprap, facing stone for fireplaces, and foundation materials. The only building stone permits currently active in the CNF are near Hope where 15 to 30 tons of rock are extracted each year and used primarily as fireplace facing stone.

OTHER DEPOSITS

Metallic and other minerals, in addition to gold and copper, may be produced in the future. Previous and recent work have disclosed scattered occurrences of molybdenum (18), nickel, cobalt, manganese (19), antimony,

arsenic, lead, zinc, fluorine, iron, and others. These elements were not of economic interest during the height of past mining activity. None of the known occurrences appear to have sufficient grade and tonnage of material to be of economic interest at this time. Data on these are insufficient to estimate reserves.

DISTRIBUTION OF MINERALIZED AREAS

Historically, gold deposits were believed to occur mainly in metasedimentary rocks of the Cretaceous Valdez Group and copper deposits to occur in and near mafic volcanic rocks of the Tertiary Orca Group. Recent work shows that this distinction may not hold as strongly as once believed. These rock groups form two broad arcuate trends across the study area. Within these broad trends are zones in which mineral deposits are concentrated (figure 4).

Figure 4 shows zones rated as being highly, moderately, or weakly mineralized. Highly mineralized zones contain one or more deposits each with high mineral development potential or several with moderate mineral development potential. Moderately mineralized zones contain one or more deposits each with moderate mineral development potential or several with low or unknown development potential. Weakly mineralized zones contain a few known mineral occurrences.

The surface area of all the highly mineralized zones is about 253 sq. mi. and that of the moderately mineralized zones is about 475 sq. mi. These represents nearly 8 pct of the area of the CNF.

The part of the study area underlain by Valdez Group rocks contains eight zones in which the frequency of gold deposits per unit area is high and five with moderate frequency is moderate. The highly mineralized

zones are at Crow Pass, Port Wells, Palmer Creek, Summit Lake, Moose Pass, Primrose, Coghill Lake, and Lost Creek. The five moderately mineralized zones of gold are at Gulch Creek, Passage Canal, Avery River, the area south of Kenai Lake, and the headwaters of Resurrection Creek. In addition to these zones of gold deposits, two weakly mineralized zones of antimony, one at Barry Arm of Port Wells and one near Kenai Lake; two weakly mineralized zones of copper mineralization, one at Lynx Creek and one extending east from Port Valdez to Copper River; one weakly mineralized zone of copper-silver-arsenic at Surprise Cove; and two weakly mineralized zones of molybdenum, one at Billings Glacier near Whittier and another at Crow Pass were identified.

The part of the study area underlain by rocks of the Tertiary Orca Group contains copper deposits which are most common in and near areas of greenstone accumulations. No highly mineralized zones were identified but five areally extensive moderately mineralized copper zones were identified in the general areas of Latouche Island, Knight Island, and Ellamar/Copper Mountain. Those on Latouche Island and at Ellamar are hosted primarily by sedimentary rocks. Weakly mineralized zones of copper, often of wide aereal extent, occur peripherally to the moderately mineralized zones. A trend of Tertiary Orca Group greenstones that extends from Hinchinbrook Island through Cordova to Scott Glacier is also rated as weakly mineralized by the frequency of copper occurrences.

In addition to the base metal zones in the area underlain by rocks of the Orca Group, a weakly mineralized zone, surrounding a moderately mineralized zone of zinc, lead, nickel, fluorite, silver, and copper exists near the headwaters of Miners and Wells Bays. A moderately mineralized zone of

manganese occurrences exists on the northeast side of Chenega Island and of arsenic occurrences at Main Bay. Other small isolated weakly mineralized zones include copper at Hogg Bay, gold at Whale Bay and McKinley Lake, copper at the south end of Culross Island as well as Glacier Island, tungsten on Perry Island, and nickel at Miners Bay.

A moderately mineralized zone of coal deposits is present in the eastern end of the study area north of Bering Lake. Oil occurrences exist east of the Katalla Oil Field.

SUMMARY

Gold, copper, sand and gravel, and oil were the major materials that have been produced commercially from the CNF. Minor amounts of antimony, building stone, and coal have also been extracted. An estimated 8 pct of the CNF is covered by zones of high and moderate mineralization.

The greatest frequency of gold deposits per unit area is primarily related to Cretaceous Valdez Group metasedimentary rocks. Areas of greatest frequency of copper deposits are related to mafic volcanic rocks of the Tertiary Orca Group.

Placer gold is common in areas underlain by Valdez Group metasedimentary rocks. Where stream deposits were sampled systematically, such as in the Kenai Peninsula, Girdwood, and Port Wells areas, native gold was recovered from most gravels. To the east of, and possibly on trend with the above named localities, placer gold was found in the Lowe and Tasnuna River drainages, both underlain by Valdez Group rocks.

Lode gold deposits also exist in areas underlain by Valdez Group rocks. Samples from most of the past producers still yield gold values.

The areas most likely to contain base metals and associated deposits include those underlain by Orca Group rocks. Two base metal mineral associations appear to be present. These are silver-, gold-, and zinc-bearing copper ores in metasedimentary rocks and the massive and disseminated copper-bearing ores in greenstones. Highly mineralized base metal zones include portions of Latouche and Knight Islands, Ellamar, Copper Mountain, and areas south of Port Fidalgo. An area of small lead-zinc veins in metasedimentary rocks was identified between Port Valdez and Unakwik Inlet.

Coal deposits in the Bering River area appear to be extensive and large resources of coal resources have been inferred. Exploration is under way to determine if reserves are present.

Small-scale oil production in the Katalla area occurred from 1903 to 1930. Exploration interest exists today to develop reserves for future production. The potential production rates can not be estimated with existing data.

Sand and gravel and building stone are abundant and available for site-specific uses.

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APPENDIX

MINES, PROSPECTS, AND MINERAL OCCURRENCES IN THE CHUGACH NATIONAL FOREST, ALASKA

APPENDIX - Mines, prospects, and mineral occurrences in the Chugach National Forest area, southcentral Alaska.

Sampling and evaluations of resource development potential of mineral localities, if not referenced otherwise, were done by the Bureau of Mines.

Explanation of listings:

1. Localities are shown on figure 3. Letter designations for lode mines are the initial letters of the 1:250,000 scale quadrangle on which the locality occurs: Seward, Cordova, Valdez, Anchorage, Blying Sound, Bering Glacier. Placer localities are prefixed with a "P", regardless of quadrangle.

2. a) Names of the locality show the generally most commonly used name first, followed by other names that have been used to refer to the property.
   b) Double lines under the name designate past mines.
   c) Single underline designates a prospect with high development potential.
   d) Asterisk by name indicates newly named and/or identified occurrence.

   CRM - refers to Copper River Meridian.
   SM - refers to Seward Meridian.

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Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-1	Columbia Claim; Columbia Red Metals Group (copper, silver, zinc, lead) sec. 11, T. 09 S., R. 11 W. CRM	4 shear zones, from 3-in.- to 18-ft-wide, and traceable for 800 ft along strike; contain sulfides traceable for 200 ft. Deposits range from 1-in.-wide veinlets of chalcopyrite and pyrite to 4-ft-wide zones of chalcopyrite. Disseminated galena, sphalerite, chalcopyrite, and pyrite also present.	Open pits. No reported production.	Six chip samples from four shear zones contained from 700 ppm to 7% copper, 11.3 ppm to 8 oz silver/ton, 0.16 to 0.87% zinc, and 240 ppm to 0.72% lead. Grab sample contained 0.12% copper, 15.4 ppm silver, 0.18% zinc and 815 ppm lead. Inferred reserves: 11,000 tons at 1.57% copper and 50 ppm silver. Low mineral development potential.
A-2	Idle Claim; Columbia Red Metals Group (zinc, copper, silver, lead, arsenic) sec. 10, T. 09 S., R. 11 W. CRM	Chalcopyrite, galena, and sphalerite occur in shears in two felsic dikes. Arsenopyrite occurs as 1/8-in. veinlets in a 15-ft-wide felsic dike.	80-ft-long adit; open pits. No reported production.	Chip samples contained from 370 ppm to 2.85% zinc, 205 ppm to 0.7% copper, 4.4 ppm to 22 ppm silver, 200 ppm to 0.22% lead, and 72 ppm to 16.5% arsenic. Inferred reserves: 350 tons at 2.27% zinc. Low mineral development potential.
A-3	Globe (copper) sec. 08, T. 10 S., R. 11 W. CRM	No data	No data. No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-4	Long Bay No. 1* (zinc, lead, silver, arsenic) sec. 14, T. 11 N., R. 12 E. SM	Mineralized shear zones, from 4-in.- to 20-ft-wide, cut greenstone, slate, and graywacke, and contain sphalerite, galena, pyrite, and arsenopyrite.	None.	Six chip samples contained from 39 ppm to 1.75% zinc, <1 ppm to 0.14% lead, 0.3 to 8.2 ppm silver, and <10 ppm to 1.6% arsenic. Sixteen grab samples contained from 36 ppm to 3.2% zinc, 5 ppm to 2.6% lead, and <0.1 ppm to 8 oz silver/ton. Moderate mineral development potential.
A-5	Wells Bay No. 1* (fluorite) sec. 28, T. 11 N., R. 12 E. SM	3- to 12-ft-wide fluorite-quartz-calcite vein, traced for 100 ft, cuts slate.	None.	Chip sample of mineralized zone contained 17.5% fluorine. Inferred reserves: 1,500 tons at 17.5% fluorine. Low mineral development potential.
A-6	Wells Bay No. 2* (lead, copper, gold, silver, arsenic) sec. 10, T. 11 N., R. 12 E. SM	Nine shear zones, 1- to 20-ft-wide, cut slate and graywacke; felsic dike is present. Massive and disseminated pyrite, arsenopyrite and galena in shear zones.	None.	Five chip samples from shear zones contained from <1 ppm to 1.1% lead, 107 ppm to 0.33% copper, 0.9 to 10.6 ppm silver, and 215 ppm to 0.53% arsenic. Three grab samples contained from 310 ppm to 0.5% copper, <0.03 to 1.4 ppm gold, 2.5 to 9.0 ppm silver, and 920 ppm to 5.1% arsenic. Chip sample across felsic dike contained 810 ppm arsenic. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-7	Wells Bay No. 3* (zinc, lead, silver, arsenic) sec. 03, T. 11 N., R. 12 E. SM	Two 1- to 4-ft-wide shear zones cut slate and conglomerate. Mineralization in shears includes sphalerite, galena, pyrite, and pyrrhotite.	None.	Chip, grab, and shallow core samples of mineralized zones contained 93 to 4.6% zinc, 32 ppm to 2% lead, 0.6 pp to 4.6 ppm silver/ton, and 11 ppm to 1.1% arsenic. Low mineral development potential.
A-8	Four-in-One (copper, silver, nickel) sec. 35, T. 12 N., R. 12 E. SM	Two mineralized shear zones, from 5- to 100-ft-wide, contain sulfide veinlets and pods of chalcopyrite and pyrite.	60-ft-long adit; open pits. No reported production.	Five chip samples contained from 20 ppm to 3% copper, and 2.6 to 46.0 ppm silver. Four grab samples contained from 195 ppm to 0.94% copper, 2.7 to 8.8 ppm silver, and 9 ppm to 0.18% nickel. Inferred reserves: 33,500 tons at 0.22% copper and 21.2 ppm silver. Inferred reserves are 33,500 tons at 0.2% Cu. Low mineral development potential.
A-9	Miners River No. 1* (zinc, lead, copper, silver, gold, arsenic) sec. 33, T. 12 N., R. 12 E. SM	450-ft-wide mineralized zone, cuts slates and graywackes. Quartz and calcite veinlets occur in the zone. Float rocks in area contain sphalerite, galena, arsenopyrite, and chalcopyrite.	None.	Three chip samples contained 1.6 to 4.1 ppm silver and 26 ppm to 0.18% arsenic. Selected grab sample contained 4.8% zinc, 1.7% lead, 0.5% copper, 55 ppm silver, 1.7 ppm gold, and 16% arsenic. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-10	Miners River No. 2* (zinc, lead, silver, gold, arsenic) sec. 04, T. 11 N., R. 12 E. SM	Shear zones, a few inches to 150-ft-wide, cut steeply dipping slates, graywackes, and conglomerates. Mineralization consists of 0.25- to 6-in.-wide veinlets of galena, sphalerite, and arsenopyrite. Pyrite occurs as disseminations and pods in the shear zones.	None.	Chip, grab, and shallow core samples contained 14 ppm to 19% zinc, 1 ppm to 17.5% lead, <0.1 ppm to 13.7 oz silver/ton, <.03 ppm to 0.084 oz gold/ton, and <10 ppm to 1.15% arsenic. Inferred reserves: 1,500 tons at 4.23% zinc, 2.24% lead, and 5.88 ppm silver. Moderate mineral development potential.
A-11	Wells Bay No. 4* (gold, silver, arsenic) sec. 18. T. 11 N., R. 12 E. SM	30-ft-wide, more than 100-ft-long shear zone contains fractured graywacke cemented by pyrite, arsenopyrite, and quartz.	None.	Eight grab samples contained from <0.005 to 0.012 oz gold/ton, <0.2 to 0.6 oz silver/ton, and up to 0.2% arsenic. Low mineral development potential.
A-12	Brown Bear; Norris Lead-Zinc Inc. (lead, zinc, silver, gold) sec. 32, T. 12 N., R. 12 E. SM	Two mineralized quartz veins, from a few inches to 18-in.-wide, contain galena, sphalerite, pyrite, calcite, and quartz.	6-ft-long adit (Pilgrim, 1930). No reported production.	Two grab samples taken in 1930 (Pilgrim, 1930) contained from 4.45 to 17.78% lead, 12.29 to 28.88% zinc, 3.6 to 28.8 oz silver/ton, and 0.08 to 0.19 oz gold/ton. Inferred reserves: 400 tons at 2.5% zinc, 0.8% lead, and 8.5 ppm silver (Dahners, 1947). Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-13	War Eagle (copper) sec. 17, T. 12 N., R. 12 E. SM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
A-14	Miners River Nickel (nickel, cobalt, copper) sec. 04, T. 11 N., R. 11 E. SM	10- to 20-ft-wide fracture zone cuts quartz diorite. Pyrrhotite, chalcopyrite, and pentlandite occur as disseminations in quartz diorite and in fissures.	Two adits 8- and 218-ft-long. No reported production.	Four chip samples contained from 400 ppm to 0.2% nickel, 93 ppm to 0.2% cobalt, and 100 ppm to 0.2% copper. Twenty-four surface grab samples contained from 20 ppm to 0.2% nickel, 36 to 800 ppm cobalt, and 20 ppm to 0.1% copper. A 260 pound bulk sample contained 0.25% nickel, 0.02% cobalt, and 0.31% copper. Inferred reserves: 11,000 tons at 0.2% nickel and 0.2% copper. Webber and Rutledge, 1944a). Low mineral development potential.
A-15	Wells Bay (copper) sec. 27, T. 11 N., R. 11 E. SM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-16	Unnamed occurrence; Dartmouth Glacier (gold, silver, arsenic) sec. 33, T. 13 N., R. 10 E. SM	*Several 2- to 12-in.-wide subparallel quartz veins in shear zones in and along margin of small granitic stock. Veins contain disseminated grains and massive pods of arsenopyrite with lesser disseminated galena and pyrite.	None.	Three chip samples contained from 0.02 to 0.48 oz gold/ton and 0.07 to 1.11 oz silver/ton; average 0.15 oz gold and 0.37 oz silver/ton. Three grab samples contained traces of gold and from a trace to 0.03 oz silver/ton. Moderate mineral development potential.
A-17	Unnamed occurrence; Lafayette Glacier (gold, silver) sec. 15, T. 11 N., R. 09 E. SM	*Quartz and metasedimentary float rock contains pyrite and anomalous silver values. Placer gold is present.	None.	Two samples contained a trace of gold, and 0.03 and 0.12 oz silver/ton. Low mineral development potential.
A-18	Unnamed occurrence; Crescent Glacier (gold, silver) sec. 19, T. 11 N., R. 09 E. SM	*Quartz float contains pyrite, arsenopyrite, and chalcopyrite.	None.	Sample contained no detectable gold and 0.03 oz silver/ton. Minor amount of placer gold present. Low mineral development potential.
A-19	Cann and Minor (gold, silver) sec. 32, T. 12 N., R. 09 E. SM	Two quartz veins reportedly associated with felsic dike. Veins up to 6-ft-wide contain pyrite, sphalerite, and chalcopyrite.	65-ft-long adit and stripping reported (Johnson, 1914a, p. 218). No reported production.	Not located. Mineral development potential unknown.
A-20	Griset and Benson; Eureka and Spruce Groups (gold) sec. 29, T. 11 N., R. 08 E. SM	Vertical quartz vein averages 3-ft-wide and is traceable for 300 ft on surface.	Reported 30-ft crosscut; open cuts; stripping (Johnson, 1914a, p. 218). No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-21	Charles Cameron (gold, silver) sec. 29, T. 11 N., R. 08 E. SM	Quartz veins 4- to 20-in.-wide in slates and argillites, reportedly contained arsenopyrite, chalcopyrite, pyrite, and gold.	25-ft-long adit; 100 ft of stripping reported in 1913 (Johnson, 1914a, pp. 226-227). No reported production.	Not located. Mineral development potential unknown.
A-22	Last Chance (gold) sec. 29, T. 11 N., R. 08 E. SM	3- to 36-in. quartz vein in massive metasandstone and slate is traceable for 150 ft. Vein contains large quartz crystals and minor arsenopyrite.	None.	Not located. Reported assays to $13 gold/ton in 1913 (Johnson, 1914a). Mineral development potential unknown.
A-23	Alaska Wonder Ledge; Simonton & Mills (gold, silver, copper) sec. 07, T. 11 N., R. 08 E. SM	Three subparallel vertical quartz veins in metasandstones. Westernmost vein is more mineralized and contains chalcopyrite, galena, sphalerite, pyrite, arsenopyrite, malachite, and azurite.	Some stripping on vein. No reported production.	Three samples contained only trace of gold and from 0.02 to 0.25 oz silver/ton. Low mineral development potential.
A-24	Walter, Brasslin, and Atkinson (gold, silver, arsenic) sec. 08, T. 11 N., R. 08 E. SM	2- to 8-in.-wide quartz vein in slates and metasandstone (Johnson, 1914a, p. 225). Arsenopyrite, galena, sphalerite, and gold present.	Two adits reported - total length 77 ft; open cuts; and stripping (Johnson, 1914a, p. 225). No reported production.	Not located. Assays to $8 gold/ton reported prior to 1930. Mineral development potential unknown.
A-25	Mt. Curtis* (gold, silver) sec. 31, T. 12 N., R. 08 E. SM	Minor pyrite and arsenopyrite in quartz veins, from 1- to 3-ft-wide, in massive metasandstones and slates.	None.	Three grab samples contained only traces of gold and silver. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-26	Paymaster Lode; Golden Seal; Black and Hogan (gold) sec. 31, T. 12 N., R. 08 E. SM	Reportedly a 1.5- to 3-ft-wide quartz vein is traceable for 200 to 300 ft (Johnson, 1914a, p. 225).	None.	Not located. Assays to $88/ton reported in 1913. Mineral development potential unknown.
A-27	Barry Arm Antimony (antimony) sec. 36, T. 12 N., R. 07 E. SM	Stibnite reported in 6- to 8-ft-wide shear zone in metasandstones and black slates (Grant and Higgins, 1910b, p. 78). The stibnite-bearing quartz lenses are up to 2-ft-wide.	Surface stripping and trenching. 1,000 pounds of antimony ore reportedly mined circa 1913 (Grant, and Higgins, 1910b, p. 78).	Not located. Mineral development potential unknown.
A-28	Capitol Hill (gold, silver) sec. 26, T. 12 N., R. 07 E. SM	Quartz vein reportedly contains gold, silver, and copper (Martin, 1920, p. 33).	40-ft-long adit reported (Martin, 1920, p. 33). No reported production.	Not located. Mineral development potential unknown.
A-29, 30	Dog (gold?) sec. 02, T. 12 N., R. 07 E. SM	No data.	No data.	Not visited. Mineral development potential unknown.
A-31	Alaska Homestake; Black and Hogan: Bruno #4; SSSS Mine (gold, silver) sec. 31, T. 12 N., R. 07 E. SM	Vertical quartz vein, 2- to 8-in.-wide, along the west wall of a 3- to 6-ft-wide felsic dike in metasandstone. Quartz is locally well banded and contains galena, arsenopyrite, sphalerite, and gold.	Two adits, in excess of 275 ft in length; 64-ft winze. Lower level is inaccessible. Recorded production 83 oz gold and 33 oz silver.	Six samples collected. Contained from a trace to 0.02 oz gold/ton and a trace to 0.04 oz silver/ton. One vein sample contained 1.99 oz gold/ton and 0.2 oz silver/ton. Moderate mineral development potential for a small mine if vein extension is located.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-32	Point Doran; Reiter and Olson; Bruno 1-3 (antimony, lead, copper) sec. 02, T. 11 N., R. 07 E. SM	Reportedly a 8- to 36-in.-wide quartz vein is traceable for 200 ft (Johnson, 1914a, p. 228). Other quartz veins occur nearby. Stibnite, galena, and chalcopyrite reported in veins.	None.	Not visited. Mineral development potential unknown.
A-33	H. G. Cloes (gold?) sec. 23, T. 11 N., R. 07 E. SM	Reportedly a quartz vein contains pyrite, chalcopyrite, and galena (Roehm, 1936).	Minor stripping reported (Roehm, 1936). No reported production.	Not located. Mineral development potential unknown.
A-34	Unnamed prospect; Lagoon Creek (gold, silver) sec. 32, T. 11 N., R. 07 E. SM	Quartz veins and stringers up to 1-ft-wide in a well-developed 12-ft-wide shear zone along the contact of a 50-ft-wide felsic dike in hornfels. Disseminated grains and massive pods of pyrite, with lesser arsenopyrite and chalcopyrite.	15-ft-long adit. No reported production.	Six samples contained from a trace to 0.005 oz gold/ton and 0.01 to 0.05 oz silver/ton. Low mineral development potential.
A-35	Olson and Viette; Dominick Ledge (gold, silver) sec. 32, T. 11 N., R. 07 E. SM	Quartz-calcite vein up to 2-ft-wide, in a 43-in.-wide shear zone in metasandstones and metasiltstones. Vein contains pyrite, sphalerite, chalcopyrite, and gold.	200-ft-long adit; some surface stripping. No reported production.	Five chip samples contained from a trace to 0.08 oz gold/ton and a trace to 0.02 oz silver/ton. Low mineral development potential.
A-36	Roth and Johnson; Fiord #1 and 2 (gold?) sec. 18, T. 11 N., R. 07 E. SM	Reportedly a 30-in.-wide quartz vein is traceable 600 ft (Roehm, 1938). Vein occurs between two felsic dikes in black slate and metasandstone. Vein contains arsenopyrite, pyrite, chalcopyrite, and galena.	None.	Not located. Placer gold and sulfides occur in the vicinity. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-37	Raggedie Ann (gold?) sec. 21, T. 11 N., R. 02 E. SM	No data.	None.	Not visited. Mineral development potential unknown.
A-38	Jewel (gold, silver, arsenic) sec. 16, T. 11 N., R. 02 E. SM	2-in.- to 1-ft-wide quartz vein in argillite and graywacke. Arsenopyrite, galena, chalcopyrite, pyrite, pyrrhotite, molybdenite, and gold in vein. Other sulfide-bearing veins nearby.	285-ft-long adit; 3 raises; stripping. Production included with that of the Monarch mine. (A-38)	Weighted average of ten chip samples is 1.07 oz gold ton and 0.50 oz silver/ton. Samples contain up to 4.7% arsenic. Reserves: 3,100 tons. High mineral development potential for small operation.
A-39	Monarch; Bruno, Agostino, Crow Creek Mining Co. (gold, silver, molybdenum, arsenic) sec. 16, T. 11 N., R 02 E. SM	At least two quartz veins in interbedded slates and graywackes intruded by felsic dikes and granitic stock. Veins contain calcite, galena, chalcopyrite, sphalerite, arsenopyrite, molybdenite, gold, and silver. Additional crosscutting veins contain similar mineralization.	Five adits, a total of 950 ft of drifts, 125 ft of crosscuts, 52 ft of winzes, and 4 raises totalling 100 ft. Recorded production is 4,932 oz gold and 996 oz silver, some from Jewel Mine (A-37).	Forty-three chip and grab samples contained from a trace to 6.82 oz gold/ton and trace to 3.94 oz silver/ton. Weighted average grade of all chip samples is 0.31 oz gold/ton and 0.31 oz silver/ton. Contain up to 400 ppm molybdenum and 1.34% arsenic. High mineral development potential for a small mine if vein extension can be located.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-40	Brenner; Barnes; Greenback Mining Company (gold, silver, molybdenum, copper, arsenic) sec. 16, T. 11 N., R. 02 E. SM	At least 4 veins present; two exposed at the shaft collar. One vein is 6- to 12-in.-wide, contains calcite, galena, sphalerite, pyrite, pyrrhotite, arsenopyrite, and gold. Other veins contain similar mineralization.	54-ft inclined shaft (flooded), and a caved drift 175 ft in length. Minor production reported.	Six chip samples contained from a trace to 0.12 oz gold/ton and from 0.02 to 0.27 oz silver/ton. Grab sample contained 0.52 oz gold/ton and 0.50 oz silver/ton. Some samples contain up to 148 ppm molybdenum, 0.14% copper, and 0.3% arsenic. Moderate mineral development potential for a small mine.
A-41	Bahrenberg; Hottentot; Treasure Box (gold, silver, arsenic) sec. 09, T. 11 N., R. 02 E. SM	Quartz-calcite vein contains arsenopyrite, pyrite, galena, and sphalerite. The metasedimentary country rock is contact metamorphosed.	Surface cut and short adit located. A reported 65-ft-long adit was not located (Park, 1933, p. 417). Recorded production is 54 oz gold and 21 oz silver.	Four samples collected averaged 1.65 oz gold/ton and 1.68 oz silver/ton. Contain up to 3.4% arsenic. Reserves: 344 tons. Moderate mineral development potential for a small mine.
A-42	Eagle River; Mayflower Lode (silver) sec. 15, T. 12 N., R. 02 E. SM	Quartz stringers in vertical zones contain calcite, galena, pyrite, sphalerite, arsenopyrite, chalcopyrite, and malachite.	None.	Not located. Reported assay of 24.8 oz silver/ton (Martin and others, 1915). Mineral development potential unknown.
A-43	Unnamed occurrence; Terentiev Lake (lead, silver, arsenic) sec. 27, T. 09 S., R. 11 W. CRM	*Limonite-stained quartz-cemented fractures in granite.	None.	USGS grab sample contained 0.15% lead, 10 ppm silver, and 0.2% arsenic. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
A-44	Unnamed Occurrence* (gold, silver) sec. 28, T. 13 N., R. 11 E. SM	One quartz vein, approximately 1-ft-wide and heavily limonite-stained. Local copper staining. Pyrite only sulfide observed.	None.	USGS grab sample contained 30 ppm silver, 700 ppm arsenic, and 10 ppm molybdenum. Mineral development potential unknown.
A-45	Unnamed Occurrence* (gold?) sec. 28, T. 13 N., R. 10 E. SM	One quartz vein, approximately 4-in.-wide in granite. Vein contains stibnite.	None.	One USGS grab sample contained 0.3% arsenic and 100 ppm antimony. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
CO	Katalla Oil Field (oil) T. 19 S., R. 05 and 06 E. CRM	Hydrocarbons occur in the carbonaceous shaly horizons in the upper part of the Poul Creek Formation.	18 wells, 153,922 barrels of oil produced from 1900's to 1933 (Blasko, 1976).	A sample of gas from a seep contained 64.3% methane, 13.4% ethane, 10.6% propane, 3.1% normal butane, 2.8% isobutane, 0.6% normal pentane, 0.4% isopentane, 0.1% cyclopentane, 0.3% hexanes, 0.8% nitrogen, and 3.6% CO_2. Specific gravity 0.883. Mineral development potential unknown.
C1	Wingham Island Dev. Assoc. (gold) sec. 17, T. 21 S., R. 06 E. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C2	Bering River Coal North (coal) T. 17 S., R. 07 & 08 E. CRM	Thirty exposures of low-volatile bituminous to a semi-anthracite coal, from 0.5- to 31-ft-thick, have been mapped in a 20 mi^2 area.	Trout Creek - 3 adits; Kushtaka Ridge - 2 adits; Carbon Creek - 2 adits; Nevada Creek - 1 adit (Martin, 1908). No reported production.	Coal contained from 1.0 to 9.4% moisture, 1.8 to 15% ash, 0.6 to 4.1% sulfur, 72.2 to 86.6% carbon, and 12,350 to 15,000 B.t.u. (Cooper and others, 1946). Mineral development potential unknown.
C3	Bering River Coal South (coal) T. 17 & 18 S., R. 06 & 07 E. CRM	Sixteen exposures of low-volatile bituminous to semi-anthracite coal, from 0.3- to 12-ft-thick, have been mapped in 15 mi^2 area.	Tokun Creek - 2 adits; Dick Creek - 1 adit; Powers Creek - 1 adit; Bering Lake - 1 adit (Martin, 1908). No reported production.	Coal contained from 1.0 to 8.6% moisture, 2.6 to 34.2% ash, 0.7 to 6.5% sulfur, 47.0 to 80.7% carbon, and 8,390 to 14,070 B.t.u. (Cooper and others, 1946). Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C4	Sheep Creek* (copper) sec. 17, T. 15 S., R. 04 E. CRM	60-ft-wide, malachite-stained slate outcrop with a 0.5-ft-wide shear with chalcopyrite.	None.	Grab sample contained 0.51% copper. Low mineral development potential.
C5	Chugat No. 1 (copper) sec. 30, T. 16 S., R. 02 E. CRM	No data.	No data. No reported production.	Not looked for. Mineral development potential unknown.
C6	McKinley Lake Mining Co. (gold, silver) sec. 22, T. 16 S., R. 01 E. CRM	Three major quartz veins and quartz stockworks, from a few inches to 40-ft-wide. Two veins parallel bedding of the Tertiary Orca Group slates and graywackes; one vein is transverse to bedding. Quartz veins contain pyrrhotite, pyrite, stibnite, and gold.	5 adits reportedly 305-ft, 569-ft, 33-ft, 73-ft, and 18-ft-long (Richelson, 1934). One shaft; numerous open cuts; ball mill on site. Reported production 16 oz gold, 9 oz silver.	Eleven samples from two adits contained from <0.005 to 0.107 oz gold/ton and <0.2 to 0.2 oz silver/ton. Two grab samples from ball mill contained 25 and 50 ppm gold and 2 and 2.6 ppm silver. Low mineral development potential.
C7	Rilley Group (gold, silver) sec. 22, T. 16 S., R. 01 E. CRM	Barren quartz stringers occur either on bedding planes or in transverse fractures.	6 adits and 6 open cuts reported (Richelson, 1934). No reported production.	Not located. Mineral development potential unknown.
C8	Lucky Strike Mining Co. (gold, silver) sec. 15, T. 16 S., R. 01 E. CRM	Quartz veins and stockworks, from a few inches to 25-ft-wide, parallel bedding of Tertiary Orca Group slates and graywackes. Quartz veins contain pyrite, arsenopyrite, and gold.	7 adits reported (Richelson, 1934), 135-ft, 215-ft, 78-ft, 536-ft, and 93-ft-long, 2 of unknown length; 16-ft-deep shaft. No reported production.	Eighteen samples from 536-ft and 93-ft-long adits contained from <0.03 to 0.10 ppm gold and <0.2 to 0.2 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C9	Bear Creek Mining Co. (gold, silver) sec. 15, T. 16 S., R. 01 E. CRM	No data.	Development work reported (Chapin, 1913). No reported production.	Not looked for. Mineral development potential unknown.
C10	Childs Glacier* (copper, zinc) sec. 03, T. 14 S., R. 03 E., CRM	Slates and greenstones with disseminated pyrite and chalcopyrite.	None.	Four grab samples contained from 34 ppm to 0.64% copper and 110 ppm to 0.17% zinc. Mineral development potential unknown.
C11	Grinnell Glacier* (copper) T. 13 S., R. 03 & 04 E., CRM	Shear zones, 2- to 10-ft-wide in metasedimentary and volcanic rocks, contain pyrite, pyrrhotite, chalcopyrite, and malachite.	None.	Four chip samples contained from 255 ppm to 0.13% copper. Nine grab samples contained 13 ppm to 0.19% copper. Low mineral development potential.
C12	Shiels Glacier* (gold, zinc, lead, silver) sec. 31, T. 11 S., R. 04 E. CRM	Slates and greenstones contain disseminations and lenses of pyrite, pyrrhotite, and disseminated galena, and sphalerite.	None.	Two grab samples from talus contained: 0.03 and 5.0 ppm gold, 34 ppm and 0.92% zinc, 47 ppm and 0.20% lead, and 5.4 and 11.2 ppm silver. Mineral development potential unknown.
C13	Woodworth Glacier* (copper) sec. 04, T. 11 S., R. 01 W. CRM	Two shear zones, 1- and 4-ft-wide, in greenstone contain minor quartz and chalcopyrite veinlets.	None.	Three grab samples contained from 0.12% to 1.02% copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C14	Rude River* (tin) sec. 13, T. 13 S., R. 01 W. CRM	Pyrite in sheared slate float rocks.	None.	Grab sample contained 0.17% tin. Mineral development potential unknown.
C15	Northern Scott Glacier* (zinc) sec. 07, T. 14 S., R. 01 E. CRM	Slates in talus at the base of red-stained outcrops contain chalcopyrite, pyrite, and sphalerite; greenstones contain chalcopyrite and pyrrhotite.	None.	Three grab samples contained from 210 ppm to 0.77% zinc. Low mineral development potential.
C16	Scott Glacier* (copper, zinc, silver) sec. 36, T. 14 S., R. 01 W., and sec. 31, T. 14 S., R. 01 E. CRM	Shear zones, up to 2-ft-wide, in slate and graywacke. Sulfide lenses and disseminations in rock and shear zones, includes chalcopyrite, pyrrhotite, bornite, and sphalerite. Mineralized zone 200-ft-wide and 1,000-ft-long.	None.	Seven chip samples contained from 39 ppm to 2.3% copper, 68 ppm to 5.9% zinc, and <0.1 ppm to 29 ppm silver. Seven grab samples contained from 36 ppm to 14.8% copper, 58 ppm to 8.7% zinc, and <0.1 ppm to 8.0 oz silver/ton. Inferred reserves: 19,300 tons at 1.06% copper, 2.06% zinc, and 13.6 ppm silver. Moderate mineral development potential.
C17	Ibeck Creek (copper, zinc, lead, silver) sec. 15, T. 14 S., R. 01 W. CRM	14-ft-wide shear zone in greenstone contains small lenses and disseminations of pyrrhotite, pyrite, chalcopyrite, and sphalerite.	80-ft-long adit. No reported production.	Five chip samples contained from 4 ppm to 3.4% copper, 40 ppm to 1.95% zinc, 10 ppm to 0.26% lead, and 3.6 to 11 ppm silver. Four grab samples contained from 0.52 to 5.5% copper, 215 ppm to 2.4% zinc, 30 ppm to 0.2%

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
				lead, and 0.4 to 14 ppm silver. Inferred reserves: 3,800 tons at 2.8% copper, 2.2% zinc, and 10.0 ppm silver (Garrett, 1971a). Moderate mineral development potential.
C18	Ibeck Creek* (zinc) sec. 20, T. 14 S., R. 01 W. CRM	Red-stained greenstone outcrop with disseminated pyrite.	None.	Grab sample contained 0.25% zinc. Low mineral development potential.
C19	Boswell, Holt, & Flynn (copper) sec. 01, T. 14 S., R. 02 W. CRM	No data.	No data. No reported production.	Not looked for. Mineral development potential unknown.
C20	Caledonia Group (copper) sec. 13, T. 14 S., R. 02 W. CRM	Three mineralized shear zones in greenstone contain bornite and malachite.	Three open cuts reported. No reported production.	Not looked for. Mineral development potential unknown.
C21	Head of Bay; Cordova-Tacoma Copper Co. (copper, zinc, silver) sec. 10, T. 14 S., R. 02 W. CRM	Four shear zones, 1- to 5-ft-wide, cut greenstones and contain pyrrhotite and chalcopyrite.	87-ft-long adit with winze. No reported production.	Six chip samples contained from 650 ppm to 4.05% copper, 35 to 310 ppm zinc, and <0.1 to 1.8 ppm silver. Two grab samples contained 4.6 and 15.2% copper, 360 ppm and 0.15% zinc, and 8.8 and 11 ppm silver. Inferred reserves: 800 tons at 0.6% copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C22	Wash & Waskey No. 2 (copper) sec. 26, T. 14 S., R. 02 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C23	Wash & Waskey No. 1 (copper) sec. 35, T. 14 S., R. 02 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C24	Snyder Falls Creek* (copper) sec. 21, T. 14 S., R. 02 W. CRM	Veinlets of chalcopyrite and disseminated pyrite and pyrrhotite occur in greenstone pods.	None.	Ten grab samples contained from 29 ppm to 3.35% copper. Low mineral development potential.
C25	Hanson & Co. No. 2 (copper) sec. 17, T. 14 S., R. 02 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C26	Hanson & Co. No.1 (copper) sec. 17, T. 14 S., R. 02 W. CRM	2-in.-wide shear zones contain pyrite; quartz veins in area contain pyrrhotite and chalcopyrite.	No data. No reported production.	Not located. Mineral development potential unknown.
C27	Flynn & Co. (copper) sec. 19, T. 14 S., R. 02 W. CRM	No data.	No data. No reported production.	Not located. Three grab samples taken in area of prospect contain from 100 to 200 ppm copper. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C28	Shepard - Macpherson (copper, zinc, lead) sec. 19, T. 14 S., R. 02 W. CRM	Quartz veins in slate and graywacke contain pyrrhotite, chalcopyrite, and galena.	No data. No reported production.	Not located. Grab sample taken in area of reported prospect contained 170 ppm copper, 0.4% zinc, and 0.36% lead. Mineral development potential unknown.
C29	Wilson Point (gold, silver) sec. 28, T. 14 S., R. 03 W. CRM	4-ft-wide, 20-ft-long brecciated graywacke zone with quartz matrix.	No data. No reported production.	Chip and a grab sample contained <0.03 to 0.05 ppm gold and <0.1 ppm silver. Low mineral development potential.
C30	Rosecrans & Co. (copper) sec. 05, T. 15 S., R. 02 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C31	Boswell & Lowe (copper) sec. 05, T. 15 S., R. 02 W. CRM	No data.	No data. No reported production.	Not looked for. Mineral development potential unknown.
C32	Emerald (copper) sec. 07, T. 15 S., R. 02 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C33	U.S. & Mountain Group (copper) sec. 25, T. 15 S., R. 03 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C34	Cordova Copper Co.; Tacoma-Cordova Mines; A.R.C. Industries; Armstrong Exploration (copper) sec. 15, T. 15 S., R. 03 W. CRM	Chalcocite, chalcopyrite, pyrrhotite, malachite, and native copper occur in 1-in.- to 2-ft-wide quartz-epidote veins along east-northeast-trending shear zones. Shear zones occur along contact between slates and greenstones.	Twelve adits on seven claims (Bureau of Land Management, 1982, Mineral Survey 1061A-B). No reported production.	Seven adits sampled. Twenty chip samples contained from 11 ppm to 15.5% copper. Nineteen grab samples contained from 32 ppm to 29% copper. Inferred reserves: 17,600 tons at 0.64% copper. Moderate mineral development potential.
C35	Dalton; Dalton, Boswell, Lowe (copper) sec. 21, T. 15 S., R. 03 W. CRM	No data.	Two adits, house, pipeline, flume, penstock, and dam reported (Bureau of Land Management, 1982, Mineral Survey 878,902). No reported production.	Not located. Mineral development potential unknown.
C36	Cameron (copper) sec. 21, T. 15 S., R. 03 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C37	Armstrong Exploration Co. No. 1 (copper) sec. 28, T. 15 S., R. 03 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C38	Glendar Rock Quarry (Stone) sec. 33, T. 15 S., R. 03 W. CRM	No data.	No data. No reported production.	Not looked for. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C39	Bayview No. 1 (gold) sec. 01, T. 16 S., R. 04 W. CRM	Interbedded slates and greenstones. No mineralization reported.	Open cut reported (Garrett, 1971b). No reported production.	Three grab samples contained from 0.01 to 0.04 ppm gold. Low mineral development potential.
C40	Hartney Bay (copper) sec. 15, T. 16 S., R. 04 W. CRM	Mineralization in the area includes disseminated pyrite and pyrrhotite in greenstones.	No data. No reported production.	Not located. Four grab samples from area contained from 80 to 400 ppm copper. Mineral development potential unknown.
C41	Flynn & Co. (copper) sec. 14, T. 16 S., R. 04 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C42	Tansey 1 (copper) sec. 25, T. 16 S., R. 04 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C43	Tansey 2 (copper) sec. 28, T. 16 S., R. 04 W. CRM	Quartz veinlets in slates and graywackes.	Open cut. No reported production.	Grab sample contained 42 ppm copper. Low mineral development potential.
C44	Revenue (copper) sec. 18, T. 15 S., R. 03 W. CRM	Shear zones in slate contain disseminated pyrrhotite and pyrite.	No data. No reported production.	Samples from area contained 16 and 25 ppm copper. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C45	Hawkins Island No. 1 (copper) sec. 19, T. 15 S., R. 03 W. CRM	Approximately 15% pyrite in slate.	No data. No reported production.	Grab sample contained 36 ppm copper. Low mineral development potential.
C46	Hawkins Island No. 2 (copper) sec. 13, T. 15 S., R. 04 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C47	Kippen & Co. (copper) sec. 35, T. 15 S., R. 05 W., CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C48	Flynn & Scott (copper) sec. 03, T. 16 S., R. 05 W. CRM	Pyrrhotite disseminated in greenstone.	30-ft-long open cut. No reported production.	Four samples contained from 25 ppm to 475 ppm copper. Low mineral development potential.
C49	Kelly & MacCormac (copper) sec. 03, T. 16 S., R. 05 W. CRM	3-ft-wide shear zone cuts slate. No mineralization noted.	15-ft-long open cut. No reported production.	Three samples contained 24 to 140 ppm copper. Low mineral development potential.
C50	Hinchinbrook Is. (copper) sec. 36, T. 17 S., R. 08 W. CRM	No data.	No data. No reported production.	Eight grab samples contained from 10 to 150 ppm copper. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C51	Simpson Creek* (zinc, copper) sec. 21, T. 13 S., R. 03 W. CRM	Pyrrhotite, chalcopyrite, sphalerite, and pyrite in slate found as stream float. Source not located.	None.	Two grab samples contained 140 ppm and 1.6% zinc, and 35 ppm and 0.16% copper. Mineral development potential unknown.
C52	Ellis, Boone, & Ibeck No. 1 (copper) sec. 06, T. 14 S., R. 04 W. CRM	No data.	No data. No reported production.	Three samples from area contained from 26 to 115 ppm copper. Mineral development potential unknown.
C53	Ellis, Boone, & Ibeck No. 2 (copper, silver) sec. 11, T. 14 S., R. 05 W. CRM	Chalcopyrite and pyrite occur in quartz veinlets along contact of slate and graywacke with the Sheep Bay Granite.	No data. No reported production.	Eleven samples from the area contained from 13 ppm to 0.14% copper and <0.1 to 8.5 ppm silver. Mineral development potential unknown.
C54	Ellis, Boone, & Ibeck, No. 3 (copper) sec. 25, T. 14 S., R. 06 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
C55	Gravina River* (tungsten) sec. 23, T. 12 S., R. 04 W. CRM	Altered, silicified felsic intrusive rocks found on gravel bars contained pyrite, chalcopyrite, and scheelite. Source area not identified.	None.	Float from river contained 245 ppm tungsten. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C56	Dead Creek (copper, silver, zinc) sec. 21, T. 11 S., R. 04 W. CRM	60-ft-wide shear zone with a 10-ft-wide gossan, contains quartz veinlets with chalcopyrite, sphalerite, malachite, and azurite.	60-ft-long adit; one open pit. No reported production.	Chip sample contained 91 ppm copper, 0.8 ppm silver and 140 ppm zinc. Grab sample contained 8.9% copper, 2.7 oz silver/ton and 0.31% zinc. Low mineral development potential.
C57	Upper Dead Creek* (zinc, copper) sec. 14, T. 11 S., R. 04 W. CRM	4-ft-wide shear zone in slate-graywacke contains pyrite, sphalerite, and malachite in 1-ft-wide zone.	None.	Chip sample contained 41 ppm zinc and 7 ppm copper. Grab sample contained 1.23% zinc and 0.17% copper. Low mineral development potential.
C58	Upper Brown Creek* (copper) sec. 24, T. 10 S., R. 04 W. CRM	7-ft-wide, red-stained zone of slate in contact with a greenstone. Chalcopyrite occurs in quartz veinlets in slate and as disseminations in greenstone.	None.	Four chip samples contained from 120 ppm to 1.3% copper. Low mineral development potential.
C59	Whalen & Nelson (copper) sec. 20, T. 12 S., R. 05 W. CRM	2- to 12-ft-wide zone of stringers and disseminations of chalcopyrite and pyrrhotite in slate.	One adit and surface stripping reported (Grant and Higgins, 1909a). No reported production.	Not located. Mineral development potential unknown.
C60	Guthrie & Bellola (copper) sec. 03, T. 13 S., R. 06 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C61	Sybil 1-3; Port Fidalgo Co. (copper) sec. 28, T. 12 S., R. 06 W. CRM	No data.	No data. No reported production.	Not looked for. Mineral development potential unknown.
C62	Merchant (copper) sec. 28, T. 12 S., R. 06 W., CRM	No data.	No data. No reported production.	Not looked for. Mineral development potential unknown.
C63	Fidalgo Mining Co; Blackney's Prospect (copper) sec. 28, T. 12 S., R. 06 W. CRM	Three main shear zones, up to 30-ft-wide, are traceable for 4,000 ft. Zones are subparallel with trend of interbedded slate, graywacke, greenstone. Massive chalcopyrite, pyrrhotite, and pyrite in 1- to 5-ft-wide veins.	Four adits, 735-ft, 1200-ft, 175-ft, and 350-ft-long. Reported production 360,376 lbs of copper, and 12 oz of silver from 2,747 tons of ore.	Four chip samples of shear zones in 735-ft-long adit contained from 175 ppm to 0.23% copper. Nine chip samples across the main shear zone in 1,200-ft-long adit contained 0.12 to 1.25% copper. Fifteen chip samples from the rest of the adit contained 9 ppm to 0.29% copper. Three chip samples from the 175-ft-long adit contained 300 ppm to 0.73% copper. Three chip samples from the 350-ft-long adit contained from 0.17 to 0.73% copper. Grab samples from dump contained 1 to 6.3% copper. Inferred reserves: 45,500 tons at 0.3% copper. Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C64	FM 1-26, FM Fraction (copper) sec. 28, T. 12 S., R. 06 W. CRM	No data.	No data. No reported production.	Not looked for. Mineral development potential unknown.
C65	Dickey Copper Co.; Mason & Gleason Irish Cove Copper Co. (copper, zinc, gold, silver, lead, cobalt) sec. 02, T. 13 S., R. 07 W. CRM	Mineralized shear zones cutting slate and graywacke have been traced for 300 ft. Chalcopyrite, pyrite, sphalerite, and pyrrhotite occur in 6- to 8-ft-wide shear zones.	4 adits reported: 500-ft, 125-ft, 35-ft (caved), and 10-ft-long. Reported production 29,346 lbs copper (Fellows, undated).	Five grab samples from 500-ft-long adit contained 0.01 to 1.23% copper 0.02 to 1.5% zinc, <0.03 to 12.5 ppm gold, <0.1 to 28 ppm silver, and 0.01 to 0.13% lead. Selected grab sample contained 15.5 ppm gold. Five grab samples from 125-ft-long adit contained 0.3 to 4.3% copper, 1.43 to 14% zinc, <0.03 to 5.25 ppm gold, 25 to 26 ppm silver, 80 ppm to 0.13% lead, 14 to 740 ppm cobalt. Grab sample from the crosscut contained 1.6% copper, 3.1% zinc, 2.8 ppm gold and 10 ppm silver. A 262 lb bulk sample from the ore bunkers contained 8.65% copper, 9.6% zinc, 0.072 oz gold/ton, 0.62 oz silver/ton, and 0.04% cobalt. Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C66	Schlosser; Fidalgo-Alaska Copper Mines, Inc.; Alaska Copper Corp. (copper, zinc, gold, silver) sec. 03, T. 13 S., R. 07 W. CRM	150- to 300-ft-wide mineralized shear zone in slate and graywacke. Chalcopyrite, pyrite, sphalerite, and pyrrhotite occur in massive lenses, 3.5- to 10-ft-wide and 20- to 80-ft-long, and in stockworks.	5 adits, 1800-ft, 540-ft, 410-ft, 250-ft, 50-ft-long. Reported production, 4,160,820 lbs of copper and 1,384 oz of silver from 21,434 tons of ore (Forrester, 1942).	Grab samples from various adit levels and of surface materials contained 0.02 to 19.5% copper, 150 ppm to 29% zinc, 2 to 150 ppm silver, and <.02 to 5.8 ppm gold. Indicated reserves: 25,625 tons at 3% copper. Inferred reserves: 224,000 tons at 3.18% copper (Holt, 1942). Moderate mineral development potential.
C67	Banzer (gold, silver, copper) sec. 19, T. 12 S., R. 07 W. CRM	6-in.-wide quartz stringers in slate contain chalcopyrite, pyrrhotite, pyrite, sphalerite, and galena.	Stripping; several shafts reported (Capps and Johnson, 1915). No reported production.	Not located. Two grab samples of float contained 0.08 to 0.22 ppm gold, 0.1 to 6.9 ppm silver, and 22 ppm to 0.24% copper. Mineral development potential unknown.
C68	Billygoat Mountain; Threeman Mining Co. (copper, zinc) sec. 17, T. 12 S., R. 07 W. CRM	Two shear zones from a few inches to 5-ft-wide in greenstone, contain lenses and stringer zones of chalcopyrite, pyrite, and pyrrhotite.	Two adits, 30- and 70-ft-long reported (Capps and Johnson, 1913). No reported production.	Grab sample from 70-ft-long adit contained 3.8% copper, 0.2% zinc, and 7.5 ppm silver. Gossan assayed 1.55% copper, 0.4% zinc, and 13 ppm silver. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C69	Chisna Consolidated; Buckeye Group (copper) sec. 07, T. 12 S., R. 07 W. CRM	Two shear zones, 5- to 40-ft-wide, cut greenstone. Thin films of chalcopyrite and pyrite along fractures in the greenstone.	40-ft inclined shaft; 20-ft-long adit; open cuts. Some ore shipped.	Chip samples contained from 0.2 to 0.38% copper. Inferred reserves: 1,200 tons at 0.26% copper. Inferred reserves 1,200 tons at 0.3% Cu. Low mineral development potential
C70	South Landlocked Bay Mining Co. Dolan and Rystrom (copper, zinc, silver) sec. 07, T. 12 S., R. 07 W. CRM	1-ft-wide lenses of chalcopyrite, pyrite, and pyrrhotite in a 4- to 15-ft-wide shear zone in greenstones.	Four adits reported with over 900 ft of workings (Capps and Johnson, 1913). One caved adit located. Reported production 74,240 lbs of copper (Mihelich and Wells, 1957).	Grab sample contained 7.35% copper, 0.79% zinc, and 20.5 ppm silver. Chip samples taken in 1955 (Mihelich and Wells, 1957) contained from 1.3 to 6.8% copper, 0.8 to 3.5% zinc, and trace to 0.2 oz silver /ton. Inferred reserves: 600 tons at 4.7% copper and 26% zinc. Moderate mineral development potential.
C71	Hoodoo; Threeman Mining Co. (copper, zinc, gold, silver) sec. 07, T. 12 S., R. 07 W. CRM	Four 1.5- to 3-ft-wide shear zones which cut greenstone, contain lenses of chalcopyrite, pyrrhotite, and sphalerite.	Four adits reported (Capps and Johnson, 1913) 180-ft, 45-ft, 15-ft (inaccessible), and 50-ft-long (sampled). No reported production.	Five chip samples from 50-ft-long adit contained from 0.11 to 2.9% copper, 680 ppm to 0.95% zinc, <0.03 to 0.03 ppm gold, and 0.2 to 13.9 ppm silver. Three selected grab samples contained 1.14 to 19.3% copper, 0.95 to 2.25% zinc, 0.15 to 44 ppm gold, and 0.23 to 34 ppm silver. Inferred reserves: 300 tons at 1.29% copper, 0.34% zinc, and 7.97 ppm silver. Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C72	Alaska-Pioneer-Sourdough; Steinmetz (copper, gold) sec. 06, T. 12 S., R. 07 W. CRM	2-in.- to 4-ft-wide lenses of chalcopyrite and pyrrhotite in shear in greenstone.	65-ft-long adit; 26-ft-deep shaft; open cuts. Reported production - 720 pounds of copper (Capps and Johnson, 1915).	Selected grab sample contained 7.9% copper. Four chip samples taken in 1955 (Mihelich and Wells, 1957) contained from 0.2 to 3.9% copper and trace to 0.11 oz gold/ton. Inferred reserves: 500 tons at 2.27% copper. Moderate mineral development potential.
C73	Threeman Mine (copper, zinc, gold, silver, cobalt) sec. 06, T. 12 S., R. 07 W. CRM	Pyrite, pyrrhotite, chalcopyrite occur as massive lenses, 1- to 9.5-ft-wide, in two shear zones in greenstones. Zones have been mined over a 350-ft dip length.	Six adits reported (Sainsbury, 1953), four located: 60-ft, 500-ft, and 250-ft-long; 3 are caved. Reported production, 1,159,660 lbs of copper, 101 oz of gold, and 5,308 oz of silver from 6,196.5 tons of ore. (Mihelich and Wells, 1957; and Fellows, undated report).	Chip and grab samples contained 53 ppm to 5.25% copper, 40 ppm to 2.85% zinc, <0.02 to 0.10 ppm gold, <1 to 22 ppm silver, and 5 to 700 ppm cobalt. Sixteen chip samples taken in 1955 contained from 0.3 to 8.6% copper, 0.05 to 0.64% zinc, trace to 0.07 oz gold/ton, and trace to 0.78 oz silver/ton (Mihelich and Wells, 1957). Inferred reserves: 1,902,000 tons at 1.05% copper (Sainsbury, 1953). Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C74	Hemple Copper Co. (copper, zinc, gold, silver) sec. 06, T. 12 S., R. 07 W. CRM	24-ft-wide shear zone cuts greenstone, slate, and graywacke, and is traceable for at least 1,500-ft along strike. Stringer zones and lenses of pyrrhotite and chalcopyrite, 2- to 8-in.-wide, parallel foliation.	Four adits reported (Capps and Johnson, 1913), two adits located: 1,200-ft, 250-ft, 65-ft, and 18-ft-long; 2 shafts. Open cuts. No reported production.	Chip samples contained from 0.19% to 2.6% copper, 800 ppm to 0.7% zinc, 2.6 to 3.7 ppm silver, and <0.03 to 0.12 ppm gold. Selected grab samples contained 4.5 and 4.6% copper, 1.7 and 1.8% zinc, 4.1 and 13 ppm silver, 0.06 and 3.1 ppm gold. Five chip samples taken in 1955, from the 1,200 ft adit contained from <0.1 to 1.1% copper, <0.1 to 1.3% zinc, trace to 0.32 oz gold/ton, and 0.02 to 0.32 oz silver/ton (Mihelich and Wells, 1957). Inferred reserves: 6,300 tons at 1.3% copper. Moderate mineral development potential.
C75	Alaska Commercial Co.; Threeman Mining Co. (copper, zinc, gold, silver) sec. 06, T. 12 S., R. 07 W. CRM	30-ft-wide shear zone cuts greenstone. Sulfide lenses of chalcopyrite, pyrrhotite, sphalerite, galena, and arsenopyrite occur both in shears and as stringers in fractures in the massive greenstone.	Three adits reported (Capps and Johnson, 1913), 500-ft, 20-ft, and 100-ft-long. 500-ft adit located. Reported production 70 tons.	Three chip samples from the 500-ft-long adit contained 430 ppm to 1.3% copper, 330 ppm to 0.43% zinc, <0.03 to 0.05 ppm gold, and 3.8 to 27 ppm silver. Three chip samples from the same adit in 1955, contained from 4.9 to 6.0% copper, trace to 1.4% zinc, trace to 0.18 oz gold/ton, and trace to 0.26 oz silver/

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
				ton (Mihelich and Wells, 1957). Inferred reserves: 900 tons at 1.12% copper, 0.5% zinc, and 23.31 ppm silver. Moderate mineral development potential.
C76	Montezuma; Threeman Mining Co. (copper, silver) sec. 01, T. 12 S., R. 08 W. CRM	Shear zones up to 20-ft-wide that cut greenstone have been traced for 900 ft along strike. Chalcopyrite-pyrrhotite lenses 1- to 4-in.-wide and quartz with disseminated pyrite occur in shear zones.	Two adits, 400-ft and 10-ft-long. No reported production.	Chip samples contained 0.74% to 3.2% copper, and 3.2 to 20 ppm silver. Grab samples contained 125 ppm to 0.75% copper and 0.92 ppm to 10 ppm silver. Inferred reserves: 200 tons at 1.67% copper and 9.88 ppm silver. Moderate mineral development potential.
C77	Standard Copper Mines Co. (copper, zinc, gold, silver) sec. 01, T. 12 S., R. 08 W. CRM	1- to 20-ft-wide shear zones cut greenstone and contain 1- to 5-ft-wide sulfide lenses of pyrite, chalcopyrite, and quartz.	Five adits reported (Grant and Higgins, 1909), three adits located, 175-ft, 660-ft, 290-ft, 85-ft, and 28-ft-long. Recorded production, 32,000 lbs copper, 518 oz silver, 36 oz gold. 1,100 tons produced.	Three chip samples from the 660-ft-long adit contained from 280 ppm to 0.89% copper, 200 ppm to 0.9% zinc, 0.01 to 0.11 ppm gold, and 0.5 to 2.5 ppm silver. Three grab samples from the adit contained 0.70 to 2% copper, 200 ppm to 2% zinc, 0.08 to 0.19 ppm gold, and 2.3 to 6.1 ppm silver. Chip samples taken in 1955, yielded 0.07 to 6.1%. Inferred reserves are 4,300 tons at 2.89% Cu.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
				copper, trace amounts to 0.31% zinc, trace amounts to 0.04 oz gold/ton, and trace amounts to 0.10 oz silver/ton (Mihelich and Wells, 1957). Inferred reserves: 4,300 tons at 2.8% copper. Low mineral development potential.
C78	Falck (copper, zinc, silver) sec. 01, T. 12 S., R. 08 W. CRM	1- to 20-ft-wide shear zones in greenstone contain chalcopyrite, pyrrhotite, sphalerite, quartz, and calcite.	Two adits reported (Capps and Johnson, 1915), 25-ft and 15-ft-long; 25-ft adit located; open cuts. No reported production.	Chip samples contained from 0.11 to 7.5% copper, 240 ppm to 0.68% zinc, 0.7 to 18.3 ppm silver. A selected grab sample from the dump contained 7.7% copper, 0.77% zinc, and 23 ppm silver. Inferred reserves: 200 tons at 2.03% copper, 0.23% zinc, and 13 ppm silver. Moderate mineral development potential.
C79	Reynolds-Alaska Development Co.; Landlocked Bay Property (copper, zinc, silver) sec. 31, T. 11 S., R. 07 W. CRM	1- to 20-ft-wide shear zones cut greenstone. One zone is traceable for 400 ft, 2-in.- to 4-ft-wide massive sulfide lenses of chalcopyrite and pyrrhotite occur along shear zones.	Four adits present, 170-ft, 600-ft, 30-ft, 18-ft-long; 3 caved - open cuts, flooded shaft (Capps and Johnson, 1913). No reported production.	Chip samples from open cuts contain from 0.18 to 8.4% copper, 170 ppm to 0.25% zinc, and 0.8 to 28 ppm silver. Grab samples from the workings contained from 100 ppm to 9.75% copper, 100 ppm to 1.05% zinc, and 0.8 to 9.5 ppm silver. Inferred

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
				reserves: 3,000 tons at 4.6% copper, 0.14% zinc, and 15.65 ppm silver. Moderate mineral development potential.
C80	Steinmetz (copper, zinc, gold, silver) sec. 36, T. 11 S., R. 08 W. CRM	Chalcopyrite and pyrrhotite occur along 3- to 4-ft-wide shear zones in greenstones.	One caved adit; open pits. No reported production.	Grab samples from workings contained from 2 to 3% copper, 0.17 to 6% zinc, 0.19 to 15.5 ppm gold, and 13 to 22.5 ppm silver. Mineral development potential unknown.
C81	Tibbitt (copper, silver, zinc) sec. 36, T. 11 S., R. 08 W. CRM	1- to 8-ft-wide shear zones in greenstones, minor slate and graywacke contain chalcopyrite, pyrite, and pyrrhotite.	Four adits reported (U.S. Bureau of Land Management, 1982, Mineral Survey 879), 45-ft, and ?-ft-long; open cuts. One 20-ft adit located. No reported production.	Two grab samples contained 0.59% and 2% copper, 1.8 ppm and 6.4 ppm silver. Two chip samples from the 45-ft-long adit contained 430 ppm and 0.93% copper, 3.4 and 12.7 ppm silver, and 240 ppm and 0.13% zinc. Inferred reserves: 500 tons at 0.72% copper. Low mineral development potential.
C82	Threeman Mining Co. Prospect (copper, zinc, silver) sec. 36, T. 11 S., R. 08 W. CRM	2- to 15-ft-wide shear zone, parallels trend of the slate. Chalcopyrite and pyrrhotite lenses, 1- to 1.17-ft-wide, occur along the shear.	One adit, 41-ft-long. No reported production.	Three chip samples contained 200 ppm to 1% copper, 145 to 0.8% zinc, and <0.2 to 6 ppm silver. Grab sample from the dump contained 4.9% copper, 0.49% zinc, and 50 ppm silver. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C83	Galena Bay Mining Co. (copper, zinc, silver) secs. 25, 26, 35, 36, T. 11 S., R. 08 W. CRM	Numerous 1- to 20-ft-wide shear zones cut greenstone. Most of workings are along one shear that is traceable for over 1,000 ft.	9 adits reported (Capps and Johnson, 1915), 8 adits located, 30-ft, 400-ft, 10-ft, 80-ft, 2,200-ft (caved), 31-ft, 15-ft, and 18-ft-long. Open cuts. Buildings. No reported production.	Chip samples from shears contained from 58 ppm to 13% copper, 46 ppm to 2% zinc, <0.1 ppm to 32.8 ppm silver. Grab samples of various materials contained from 80 ppm to 6.1% copper, 790 ppm to 20.1% zinc, and 1.1 to 20 ppm silver. Inferred reserves: 5,800 tons at 7.9% copper, 1.3% zinc, and 5 ppm silver. Moderate mineral development potential.
C84	Copper Mountain Prospect (copper, zinc, silver, cobalt) sec. 23, T. 11 S., R. 08 W. CRM	6-in.-wide shear zone cutting greenstone, contains chalcopyrite and quartz veinlets.	20-ft-long adit. No reported production.	Chip sample contained 1.87% copper, 800 ppm zinc, and 10.9 ppm silver. A selected grab sample contained 11.7% copper, 0.35% zinc, 43.5 ppm silver, and 770 ppm cobalt. Inferred reserves: 300 tons at 1.87% copper. Low mineral development potential.
C85	Mogul Group (copper) sec. 22, T. 11 S., R. 08 W. CRM	0.5- to 4-ft-wide shear zones cut greenstone. Sulfide minerals along the shears include chalcopyrite, pyrite, pyrrhotite, and sphalerite.	13-ft-deep shaft. Open cuts. No reported production.	Six chip samples contained 620 ppm to 0.37% copper. Inferred reserves: 400 tons at 0.25% copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C86	Fielder & Hemple (copper, zinc) sec. 27, T. 11 S., R. 08 W. CRM	25- to 30-ft-wide shear zone cuts greenstones and contains pyrite, chalcopyrite, pyrrhotite, and quartz.	Two adits, 250-ft and 20-ft-long. No reported production.	Five grab and two chip samples contained 50 ppm to 0.5% copper and 440 ppm to 0.1% zinc. Low mineral development potential.
C87	Reynolds-Alaska Development Co. Boulder-Bay (copper, silver, zinc) sec. 27, T. 11 S., R. 08 W. CRM	Mineralization restricted to N. 60°-65° E. trending and 78° SE. dipping shears at greenstone-slate contact. Mineralization occurs as massive lenses, veinlets, disseminations, and thin selvages of chalcopyrite, pyrite, pyrrhotite, and sphalerite.	Four adits reported (Capps and Johnson, 1915), three adits located, 2,200-ft, 200-ft, (caved) 300-ft, and 5-ft-long. Reported production - 215,000 lbs of copper from 2,850 tons of ore. (Fellows, undated).	Chip samples contained 0.6 to 1.7% copper, 225 ppm to 0.61% zinc, and 2.4 to 8.9 ppm silver. Grab samples contained 60 ppm to 6% copper, 67 ppm to 1.7% zinc, and 1.1 to 13 ppm silver. Inferred reserves: 600 tons at 1.37% copper, 0.28% zinc, and 6.67 ppm silver. Moderate mineral development potential.
C88	Rua (copper, zinc) sec. 28, T. 11 S., R. 08 W. CRM	Shear zone cuts greenstone, contains pyrite and pyrrhotite.	60-ft-long adit. No reported production.	Chip sample contained 900 ppm copper and 0.19% zinc. Low mineral development potential.
C89	Wagner (copper) sec. 28, T. 11 S., R. 08 W. CRM	No data.	One caved adit. No reported production.	Selected grab dump sample contained 39 ppm copper. Mineral development potential unknown.
C90	McNaughton & Turner (copper) sec. 16, T. 11 S., R. 08 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C91	Ellamar Mine (copper, zinc, gold, silver) sec. 19, T. 11 S., R. 08 W. CRM	90- to 240-ft-wide, 500-ft-long lenticular mass of sulfides in slates and graywackes was mined. 35-ft-thick lens of pyrite overlies and parallels lenses of chalcopyrite, chalmersite, pyrrhotite, sphalerite, and galena.	600-ft-deep three compartment shaft; 9,300 ft of workings on 8 levels (flooded). Recorded production, 15,761,337 lbs of copper, 51,305 oz of gold, 191,615 oz of silver from 301,835 tons of ore.	Grab sample from the dump contained 50 ppm copper, 0.006 oz gold/ton and 0.2 oz silver/ton. Three core holes drilled in 1955, 1956: hole No. 2 cut 10-ft of 0.02% copper, 0.02 oz gold/ton, and 0.02 oz silver/ton; hole No. 3 cut 28-ft of pyrite, which contained 0.5% copper, 0.085 oz gold/ton, and 0.75 oz silver/ton. Indicated reserves: 36,000 tons at 2% copper, 0.1 oz gold/ton, and 0.5 oz silver/ton. Inferred reserves: 500,000 tons at 0.5% copper, 0.085 oz gold/ton, and 0.75 oz silver/ton. Moderate mineral development potential.
C92	Ella (copper) sec. 29, T. 11 S., R. 08 W. CRM	Possible extension along strike of the Ellamar deposit.	No data. No reported production.	No data. Mineral development potential unknown.
C93	Cloudman Bay (gold, silver) sec. 07, T. 12 S., R. 08 W. CRM	20- to 30-ft-wide quartz stockwork in slate contains chalcopyrite, pyrite, and sphalerite.	40 ft of stripping reported (Capps and Johnson, 1913). No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
C94	Bligh Island; Alaska Commercial Co. (gold) sec. 36, T. 11 S., R. 09 W. CRM	Gold-bearing quartz vein in greenstone.	Caved shaft (Capps and Johnson, 1913). No reported production.	Chip samples in the area contained from <0.03 to 0.03 ppm gold. Gold up to 120 oz/ton reported (Capps and Johnson, 1913). Low mineral development potential.
C95	Jack Bay 3 (gold) sec. 27, T. 10 S., R. 07 W. CRM	Arsenopyrite and gold in 0.5- to 3-ft-wide quartz vein in graywacke. Vein is traceable for several hundred ft along strike.	No data. No reported production.	Not located. Mineral development potential unknown.
C96	Jack Bay 2 (copper, gold) sec. 23, T. 10 S., R. 07 W. CRM	6-ft-wide zone of quartz veinlets contains chalcopyrite and pyrrhotite in slate.	No data. No reported production.	Grab sample contained 140 ppm copper and 0.006 oz gold/ton. Low mineral development potential.
C97	Wortmann's Glacier* (zinc, copper, silver) sec. 06, T. 11 S., R. 02 W. CRM	Mineralized zone in greenschist contains sphalerite, chalcopyrite, and pyrite.	None.	USGS grab samples contained 1.0% zinc, 0.1 to 0.5% copper, and 0.5 to 3 ppm silver. Mineral development potential unknown.
C98	Hinchinbrook Island* (manganese) sec. 34, T. 17 S., R. 07 W. CRM	Manganese-rich rock forms a 30 x 90-ft rubble area. Minerals present include bementite, quartz, chalcedony, calcite, hematite, barite, rancieite, todorokite, and birnessite.	None.	USGS grab samples contained 29 and 35% manganese. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
BG-1	Bering River (coal) sec. 22, T. 17 S., R. 08 E. CRM	Eleven ft of coke in 5 beds is exposed in a 180-ft section of sandstone and diabase sills (Martin, 1908).	No data.	No data. Mineral development potential unknown.
BG-2	Canyon Creek; Alaska Petroleum and Coal Co. (coal) sec. 01, T. 17 S., R. 08 E. CRM	Four seams of anthracite in outcrop. One 2.75-ft-thick, strikes N. 80° E. and dips 35° NW. Another 4.1-ft-thick, strikes N. 10° E. and dips 60° NW.	Recorded production - 18,000 to 20,000 tons of coal.	Two samples contained 7.4 and 7.8% moisture, 9.2 and 14.4% ash, 0.6 and 0.7% sulfur, 70.1 and 74.0% carbon, and 15,310 to 15,460 B.t.u. (dry basis) (Cooper and others, 1946). Mineral development potential unknown.
BG-3	Wardall Ridge (coal) sec. 10, T. 17 S., R. 08 E. CRM	Four beds of bituminous coal, 22.5-ft-thick, crop out in a 24.5-ft sandstone and shale section.	No data	Two samples contained 3.1 and 5.3% moisture, 1.2 and 6.9% ash, 0.6 to 0.7% sulfur, 70.3 to 80.1% carbon, and 12,360 to 14,220 B.t.u. (Cooper and others, 1946). Mineral development potential unknown.
BG-4	Clear Creek (coal) T. 17 S., R. 08 E., CRM	Seven exposures of semianthacite to semibituminous coal in creek range in width from 0.4 to 47 ft.	Two adits reported (Martin, 1908).	Eight samples contained from 1.2 to 6.6% moisture, 1.7 to 12.7% ash, 0.6 to 3.1% sulfur, 72.5 to 88.7% carbon, and 15,360 to 15,960 B.t.u. (dry basis) (Cooper and others, 1946). Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
BS-1	Latouche Consolidated Copper Co. Prospect; Tibbits Prospect (copper, silver) sec. 02, T. 03 S., R. 08 W. SM	3-ft-wide shear zone cutting graywacke contains chalcopyrite mainly as stringers in quartz veinlets.	6 x 6-ft water-filled shaft, depth unknown. No recorded production.	3-ft-wide chip sample of the mineralized shear zone contained 1.7% copper and 8.5 ppm silver. Dump grab sample contained 0.59% copper and 8.5 ppm silver. Low mineral development potential.
BS-2	Seattle-Alaska Prospect Owen Ore Co.; Alpha Claims (copper, silver, zinc) sec. 36, T. 02 S., R. 08 E. SM Latouche Island	Series of parallel shear zones, up to 5-ft-wide, cut interbedded graywacke and shale. Siliceous zones, up to 4-ft-wide, within the shears contain pyrite, pyrrhotite, bornite, up to 5% chalcopyrite, and traces of native copper. Mineralization has been drifted on for 45 ft. Mineralization may extend a total of 236 ft vertically between levels and for 4,300 ft along strike.	Four accessible adits: 1) adit with 424 ft of workings. 2) 58-ft-long adit. 3) 235-ft-long adit. 4) short adit driven in alluvium. One caved adit reported to be 400-ft-long (Johnson, 1918, pp. 209-210) and a caved adit of unknown length. Three open cuts found. 12 tons of ore shipped in 1914, yielded 2,350 lbs of copper and 23 oz of silver.	Chip sample across a 4-ft-wide mineralized zone contained 6.5% copper, 14.2 ppm silver, and 0.12% zinc. 0.5-ft-wide chip sample contained 9.0% copper, 24.5 ppm silver, and 0.13% zinc. High-grade dump sample contained 0.53% zinc. Inferred reserves are 2,900 tons at 3% Cu. Moderate mineral development potential.
BS-3	Unnamed occurrence (copper, silver, zinc) sec. 28, T. 02 S., R. 09 E. SM Latouche Island	Landslide block of slate and graywacke contains 3 bedding-conformable chalcopyrite and pyrrhotite-bearing zones, up to 2-ft-thick and extending 500 ft along strike. Additional sulfides may be present. Limonite-stained parallel bedding of sedimentary rocks exposed on slope.	No signs of prospecting. No production.	20-ft-wide chip sample contained 2.5% copper, 18.5 ppm silver, and 0.14% zinc. Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
BS-4	Alpha Claims 1-74 (copper) sec. 24, T. 02 S., R. 08 E. SM Latouche Island	No mineralization found. Shoreline exposures consist of interbedded shale and graywacke.	None reported.	Reported prospect (Tysdal, 1978) not located. Mineral development potential unknown.
BS-5	Whale Claims (copper) sec. 06, T. 03 S., R. 08 E. SM Latouche Island	Slate and sandstone reportedly contain stringers and disseminations of chalcopyrite and bornite (Schrader and Spencer, 1901, p. 89). Mineralization appears confined to a fracture zone parallel to bedding.	None reported. No signs of prospecting.	Not sampled. Mineral development potential unknown.
BS-6	Unnamed prospect (copper) sec. 06, T. 03 S., R. 08 E. SM Elrington Island	None found.	None located. No production.	Prospect not located. Mineral development potential unknown.
BS-7	Unnamed occurrence (copper) sec. 24, T. 02 S., R. 01 E. SM	Malachite stain on wall of cliff observed by the USGS from helicopter.	None.	Mineral development potential unknown.
BS-8	Reynolds-Alaska Development Co. (copper) sec. 22., T. 02 S., R. 01 E. SM	Chalcopyrite disseminated in shear zone in greenstone.	None.	Mineral development potential unknown.
BS-9	Featherbed (copper) sec. 28, T. 02 S., R. 01 E. SM	Float of greenstone contains disseminated pyrite and minor chalcopyrite.	None.	Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
BS-10	Featherbed (copper) sec. 22, T. 02 S., R. 01 E. SM	Shear zone up to 7-in.-wide, contains stringers of chalcopyrite.	None.	Reportedly contains 14% to 19% copper. Mineral development potential unknown.
BS-11	Peterson (copper, zinc) sec. 33, T. 02 S., R. 01 E. SM	5-ft-wide zone of brecciated greenstones contains quartz, calcite, sphalerite, pyrite, epidote, and chalcopyrite.	Two short adits. No reported production.	Mineral development potential unknown.
BS-12	Iron Mask (copper, zinc) sec. 21, T. 03 S., R. 01 E. SM	Tuffaceous breccia; fractured and recemented by quartz containing pyrite and minor calcite, chalcopyrite, and sphalerite.	None.	USGS assays show an average of 1.1% copper across 13-ft-wide, 98-ft-long zone. Mineral development potential unknown.
BS-13	Fairview (copper) sec. 22, T.03 S., R. 01 E. SM	Breccia zone, 8- to 10-ft-wide, in greenstone recemented by quartz, pyrite, and chalcopyrite. Sulfide zone to 6.5-ft-thick.	One short adit. No reported production.	Mineral development potential unknown.
BS-14	Unnamed occurrence (silver, cadmium, cobalt, lead, zinc) sec. 28, T. 03 S., R. 01 E. SM	2-ft-wide zone of sheared and brecciated sheeted basalt dikes contain quartz, pyrite, chalcopyrite, and galena.	None.	USGS sample contained 3 ppm silver, 70 ppm cadmium, 0.15% copper, 0.3% lead, and 0.92% zinc. Mineral development potential unknown.
BS-15	Leitzke (copper) sec. 33, T. 03 S., R. 01 E. SM	Brecciated zone of diabase cemented by quartz, pyrite, and minor chalcopyrite.	None.	Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-1	Addison-Powell; Peabody-Alaska Copper Corp. (copper, gold) sec. 15, T. 10 S., R. 05 W. CRM	Chalcopyrite with moderate to abundant pyrite and pyrrhotite in small veinlets in greenstone and as lenses and veinlets in adjacent metasedimentary rocks. Small amounts of gold reported (Johnson, 1916).	100-ft-long adit, 150 ft of open cuts and stripping reported (Johnson, 1916). No reported production.	Not located. Seven grab samples from the area contained from 10 ppm to 0.39% copper. Mineral development potential unknown.
V-2	Johnson Pit (sand & gravel) sec. 19, T. 09 S., R. 05 W. CRM	Quaternary alluvial gravels.	Sand and gravel operation. No reported production.	Not looked for. Mineral development potential unknown.
V-3	Alaska Asphalt Pit (sand & gravel) sec. 36, T. 08 S., R. 06 W. CRM	Quaternary alluvial gravels.	Sand and gravel quarry operation. No reported production.	Not looked for. Mineral development potential unknown.
V-4	Rose Johnson (gold, lead, copper) sec. 08, T. 08 S., R. 05 W. CRM	Several quartz veins, 2- to 7-in.-wide, contain free gold, pyrite, galena, chalcopyrite, and sphalerite.	Several short adits; 20-ft shaft; open cuts; and some stripping reported (Johnson, 1915a). Reported production of 49 oz gold and 3 oz silver.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-5	Ramsay-Rutherford; Lost Hope (gold, silver) sec. 03, T. 08 S., R. 05 W. CRM	Two well-defined quartz veins. The main, southern, vein varies in width from 1-in. to 7-ft, averages 2-ft, and has been traced for 450 ft along strike. The second vein, which averages 9-in.-wide, is exposed approximately 90 ft north of the main vein. Mineralization includes gold, silver, siderite, pyrite, pyrrhotite, chalcopyrite, sphalerite, galena, and arsenopyrite.	Four mine levels reported (Johnson, 1915a). The 50-ft level has 220 ft of drifts, stopes to surface; 100-ft level has 210 ft of drifts and a crosscut, stopes to the 50-ft level; 150-ft level has 50 ft of drifts; the 300-ft level (mill level) has 770-ft crosscut (caved), 540 ft of drifts, 15-ft winze, raise to the surface. Reported production of 5,375 oz gold and 1,194 oz silver.	Two grab samples contained 0.07 oz gold/ton and <0.01 and 2.1 ppm silver. Mill concentrate contained 37.5 ppm gold and 9.5 ppm silver. Gold fineness is 778. Twenty-four USGS samples contained 0.05 to 28.0 ppm gold. High mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-6	Pinocle (gold, silver) sec. 04, T. 08 S., R. 05 W. CRM	Quartz filled fissure that varies from stringers to 3 ft of solid quartz. Mineralization consists of gold, silver, pyrite, pyrrhotite, and chalcopyrite.	Short adit (caved); a 115-ft crosscut; a 10-ft shaft; and stripping (Johnson, 1915a). Workings are now caved. No reported production.	Two chip samples contained 0.13 ppm and 0.051 oz gold/ton and <0.01 oz silver/ton. Grab sample contained 0.503 oz gold/ton and <0.01 oz silver/ton. Low mineral development potential.
V-7	Ibex (gold, silver) sec. 06, T. 08 S., R. 05 W. CRM	4-ft-wide vein of banded quartz.	200-ft-long adit reported (Brooks, 1912). No reported production.	Not located. Mineral development potential unknown.
V-8	Donohue; Valdez Mining Co. (gold, silver) sec. 06, T. 08 S., R. 05 W. CRM	Mineralized quartz vein ranges from 3- to 10.5-ft-wide. Vein in the lower adit is 24- to 50-in.-wide ribbon quartz and massive white quartz. Native gold occurs in both the ribbon and massive quartz.	Two adits. A 470-ft adit at the 2,610 ft elevation. An adit (partially caved) at the 2,860 ft elevation has a 50-ft winze. No reported production.	Six chip samples contained from <0.003 to 0.413 oz gold/ton and <0.01 to 0.10 oz silver/ton. Four grab samples contained <0.05 to 100.2 oz gold/ton and 0.5 to 16.9 oz silver/ton. Inferred reserves: 2,500 tons at 13 ppm gold and 3.3 ppm silver. High mineral development potential.
V-9	Valdez Bonanza (gold, silver) sec. 12, T. 08 S., R. 06 W. CRM	2- to 5-ft-wide quartz vein pinches out at depth. Mineralization is mainly pyrite with minor gold in the quartz veins.	100-ft-long adit with a crosscut reported (Brooks, 1912). No reported production.	Not located. Mineral development potential unknown.
V-10	Glacier Stream Pit (sand & gravel) sec. 26, T. 08 S., R. 06 W. CRM	Quaternary alluvial gravels.	Sand and gravel operation. No reported production.	Not looked for. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-11	Blue Ribbon (gold, silver) sec. 11, T. 08 S., R. 06 W. CRM	Quartz vein, 1/16- to 14-in.-wide, can be traced for 1,000 ft along strike.	No data. No reported production.	Not looked for. Mineral development potential unknown.
V-12	Queen of Sheba (gold, silver) sec. 16, T. 08 S., R. 06 W. CRM	Quartz vein, 1- to 8-ft-wide, contains gold, galena, and pyrite.	30-ft-long adit and 15-ft open cut. No reported production.	Two chip samples contained 0.03 and 1.1 ppm gold and 0.1 and 5.1 ppm silver. Grab sample contained 31.0 ppm gold and 66.4 ppm silver. Moderate mineral development potential.
V-13	Alaskan; Colorado No. 2, Whale Nos. 1-2. (gold, silver) sec. 16, T. 08 S., R. 06 W. CRM	Quartz vein, 5-in.- to 5-ft-wide, is traceable for 150 ft. Second quartz vein outcrops 200 ft to east. Mineralization includes pyrite, galena, sphalerite, chalcopyrite, and gold.	5-ft and 14-ft-long adits; adits, 200-ft crosscut (Johnson, 1915a); 17-ft shaft reported; several open cuts. No reported production.	Assay from bottom of shaft said by owner to contain 1.6 oz gold/ton and 0.2 oz silver/ton (Pilgrim, 1930) Six BOM chip samples contained 0.04 to 5.54 ppm gold and 0.3 to 15.4 ppm silver. Selected grab sample contained 23.5 ppm gold and 12.0 ppm silver. Moderate mineral development potential.
V-14	Golden Dollar (gold, silver) sec. 16, T. 08 S., R. 06 W. CRM	No data.	No data. No reported production.	Not looked for. Mineral development potential unknown.
V-15	Olson & Woods (gold, silver) sec. 16, T. 08 S., R. 06 W. CRM	Reported 4-ft-wide shear zone with iron-stained quartz stringers.	200-ft adit reported (Johnson, 1915a). No reported production.	Not looked for. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-16	Hecla (gold, silver) sec. 09, T. 08 S., R. 06 W. CRM	Two quartz veins, up to 6-ft-wide and traceable for 150 ft, contain gold, silver, and pyrite.	Two adits 65-ft and 76-ft-long (caved) (Johnson, 1915a). No reported production.	Located but not sampled. Mineral development potential unknown.
V-17	Tiger (gold, silver) sec. 09, T. 08 S., R. 06 W. CRM	Quartz stringers in shear zone.	10-ft-long adit (caved) (Johnson, 1915a). No reported production.	Located but not sampled. Mineral development potential unknown.
V-18	McIntosh (gold, silver) sec. 08, T. 08 S., R. 06 W. CRM	Reported 1- to 3-ft-wide shear zone of shattered graywacke and quartz with no well-defined walls (Brooks, 1912).	No data. No reported production.	Not located. Mineral development potential unknown.
V-19	High Grade; Golden Sunshine (gold, silver, lead) sec. 05, T. 08 S., R. 06 W. CRM	Reported 15- to 130-ft-wide shear zone, with quartz veins up to 8-in.-wide, contains gold, pyrite, and galena (Johnson, 1915a).	110-ft-long and 70-ft-long adit reported (Johnson, 1915a). No reported production.	Not located. Mineral development potential unknown.
V-20	Ethel; Cash; Williams-Gentzler (gold, silver) sec. 35, T. 07 S., R. 06 W. CRM	Several quartz veins, up to 1-ft-wide, contain gold, pyrrhotite, pyrite, and galena.	245-ft-long adit. No reported production.	Grab sample contained 0.24 oz gold/ton and 6.8 oz silver/ton. Mineral development potential unknown.
V-21	Little Giant; Mountain King; (gold, silver) sec. 34, T. 07 S., R. 06 W. CRM	Quartz veins from 6-in.- to 4-ft-wide contain gold, pyrite, pyrrhotite, sphalerite, and galena.	One vertical shaft; three small inclined shafts; 165-ft-long adit. Reported production is 367 oz gold and 152 oz silver.	Two grab samples contained from 0.364 and 1.35 oz gold/ton and 1.4 and 5.8 oz silver/ton. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-22	Mountain View; Hickey Property (gold, silver) sec. 33, T. 07 S., R. 06 W. CRM	Quartz vein, up to 3-ft-wide, contains free gold, pyrite, and galena (Johnson, 1915a).	One adit with a crosscut; stripping reported (Johnson, 1915a). No reported production.	Not located. Mineral development potential unknown.
V-23	Quitsch; Home Group (gold, silver) sec. 16, T. 07 S., R. 06 W. CRM	Two quartz veins present (Roehm, 1936). 1- to 4-ft-wide quartz vein at the 5,074 ft elevation, is traceable for 200 ft. Second vein at the 3,810 ft elevation. Mineralization includes gold, pyrite, and galena.	146-ft-long adit at the 5,074 ft elevation 200-ft-long adit at the 3,810 ft elevation reported. Reported production of 140 tons of ore (Roehm, 1936).	Not located. Mineral development potential unknown.
V-24	Slide; Little Giant Group (gold, silver) sec. 21, T. 07 S., R. 06 W. CRM	No data.	No data. Reported production of 4 oz gold (Johnson, 1919).	Not located. Mineral development potential unknown.
V-25	Von Gunther (gold, silver) sec. 21, T. 07 S., R. 06 W. CRM	Fissure contains 2-in.-wide quartz stringers (Johnson, 1915a). Mineralization includes gold and pyrite.	25-ft-long adit reported (Johnson, 1918b). No recorded production.	Not located. Mineral development potential unknown.
V-26	Monte Carlo; Cook & Barrett (gold, silver) sec. 29, T. 07 S., R. 06 W. CRM	Mineralized quartz vein up to 5-ft-wide (Johnson, 1915a). It is an offshoot of a 15-ft-wide quartz vein. Mineralization includes free gold, pyrite, and galena.	110-ft adit with a 35-ft raise, a 35-ft-long adit 70 ft above the lower adit reported (Johnson, 1915a). No reported production.	Not looked for. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-27	Hercules; Millionaire; Mineral King; Mineral Creek Mining Co; Chesna (gold, silver) sec. 29, T. 07 S., R. 06 W. CRM	Nine quartz veins range in width from 2- to 30-in. Mineralization includes gold, pyrite, galena, sphalerite, pyrrhotite, and chalcopyrite.	Ten adits. 120-ft, 250-ft, 180-ft, >50-ft, 75-ft, 450-ft, 60-ft, and 200-ft-long, one caved (Johnson, 1915a). Reported production 269 oz gold and 44 oz silver.	Two chip samples contained 11.8 ppm and 1.6 oz gold/ton and 4.2 ppm and 0.7 oz silver/ton. Grab sample contained 11 ppm gold and 9.8 ppm silver. Twenty-five USGS samples contained <0.05 to 1.5 ppm gold. Inferred reserves: 450 tons at 22.5 ppm gold and 9.1 ppm silver. Moderate mineral development potential.
V-28	Big Four (gold, silver) sec. 31, T. 07 S., R. 06 W. CRM	6-in.- to 3-ft-wide quartz vein is traceable for 200 ft. Vein pinches and swells, roughly parallels the schistosity of country rock. Mineralization consist of free gold, pyrite, sphalerite, and galena.	One adit, caved 45 ft from the portal; two 25-ft-deep shafts. Reported production is 846 oz gold and 371 oz silver.	Four grab samples contained <0.03 ppm to 3.98 oz gold/ton, and from a trace to 1.0 oz silver/ton. Moderate mineral development potential.
V-29	Devinney & Dolan (gold, silver, lead, zinc) sec. 25, T. 08 S., R. 07 W. CRM	Mineralized quartz veins range in width from a few inches to 2 ft (Roehm, 1936). Mineralization consists of gold, pyrite, and sphalerite.	238-ft-long adit with a raise; and a 38-ft-long adit reported (Roehm, 1936). No reported production.	Not located. Mineral development potential unknown.
V-30	Blondeau Pit (sand & gravel) sec. 31, T. 08 S., R. 06 W. CRM	Quaternary alluvial gravels.	Sand and gravel operation. No reported production.	Not looked for. Mineral development potential unknown.
V-31	Yellow Bar (gold, silver) sec. 36, T. 08 S., R. 07 W. CRM	No data.	No data. No reported production.	Not looked for. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-32	M-K Till Plant (stone) sec. 13, T. 09 S., R. 07 W. CRM	No data.	Stone quarry. No reported production.	Not looked for. Mineral development potential unknown.
V-33	Patten, Swanport (gold, silver, copper, nickel) sec. 13, T. 09 S., R. 07 W. CRM	Mineralization occurs as a contact deposit in shale which contains gold, silver, bornite, and nickel (Weed, 1925).	400-ft adit reported. No reported production.	Not looked for. Site of Alyeska Pipeline Terminal. Mineral development potential unknown.
V-34	Golden, Happy Days (gold, silver) sec. 25, T. 09 S., R. 07 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
V-35	Midas Mine; All-American Lode; Jumbo; Alaska Development and Mineral Co.; Granby Mining, Smelting, and Power Co., (LTD); (copper, zinc, gold, silver) sec. 10, T. 10 S., R. 06 W. CRM	Two mineralized shear zones cut slates. Shear zones range from a few inches to 20-ft-wide but average between 3- and 4-ft-wide; these are traceable for at least 800 ft along strike. Sulfide mineralization includes pyrite, chalcopyrite, pyrrhotite, and sphalerite.	Four adits. -Level 1 - caved. -Level 2 - 700-ft-long caved. -Level 3 - 600-ft-long. -Level 4 - caved. -Also shafts and open cuts. Cumulative production greater than 3,385,680 lbs copper, 2,569 oz gold, 15,157 oz silver, from 49,350 tons of ore (Rose, 1965).	Four chip samples contained 0.11 to 6.3% copper, 0.26 to 3.1% zinc, <0.005 to 0.066 oz gold/ton, and <0.2 to 0.6 oz silver/ton. Two grab samples contained from 20 ppm to 3.9% copper, 4.0% zinc, 10.1 ppm gold and 20 ppm silver. Inferred reserves are 62,000 tons at 1.6% Cu. Moderate mineral development potential.
V-36	Bayview (copper) sec. 15, T. 10 S., R. 06 W. CRM	Cubanite and chalcopyrite in shear zones along south edge of a greenstone belt.	No data. No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-37	Orion (gold) sec. 17, T. 10 S., R. 07 W. CRM	Quartz vein from 1- to 10-in.-wide, shows ribbon banding parallel to the well-defined walls (Johnson, 1918d). Mineralization includes gold, arsenopyrite, and pyrrhotite.	75-ft adit (caved). No reported production.	Workings caved, no samples were taken. Mineral development potential unknown.
V-38	Curley Kidney (gold) sec. 15, T. 10 S., R. 08 W. CRM	Shear zone, from 2- to 4-ft-wide, with a few short quartz lenses and stringers, most only a few inches thick. Mineralization includes gold, pyrite, and arsenopyrite.	25-ft adit reported; some stripping (Johnson, 1919). No reported production.	Nine grab samples contained from <0.005 to 0.027 oz gold/ton. Low mineral development potential.
V-39	Jack Bay Copper Prospect (copper) sec. 01, T. 10 S., R. 08 W. CRM	Mineralized sedimentary rock inclusions (slightly metamorphosed) contain sulfides and quartz within a greenstone body.	25-ft adit reported (Johnson, 1919). No reported production.	Not located. Mineral development potential unknown.
V-40	Jack Bay Claim (copper, zinc, lead) sec. 35, T. 09 S., R. 08 W. CRM	Slightly mineralized shear zone, with well-defined walls, contains a thin gouge zone at some locations. Quartz occurs as small stringers, which contain arsenopyrite, pyrrhotite, sphalerite, and galena.	40-ft adit at 620 ft elevation. No reported production.	Four grab samples from the prospect area contained from 10 to 190 ppm copper, 810 ppm to 0.15% zinc, and 0.13 to 0.18% lead. Low mineral development potential.
V-41	Gold Creek Prospect (gold) sec. 15, T. 08 S., R. 07 W. CRM	Quartz veins occur in a 20-ft-wide shear zone with individual veins ranging from 1/4- to 6-in.-wide. Arsenopyrite occurs in quartz.	15-ft adit; 20-ft trench. No reported production.	Chip sample contained 0.04 ppm gold. Grab sample contained 0.29 ppm gold. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-42	McCallum (gold, silver) sec. 23, T. 08 S., R. 07 W. CRM	Quartz veins range from 1-in.- to 2-ft-wide. Mineralization includes chalcopyrite, pyrite, arsenopyrite, gold, and galena.	Three adits present. 90-ft adit at 2,800 ft elevation; 23-ft adit at 2,780 ft elevation; 20-ft crosscut adit at the 2,700 ft elevation. No reported production.	Five chip samples contained from <0.03 to 1.41 ppm gold, 0.1 to 1.0 ppm silver. Two grab samples contained 0.06 ppm and 5.8 oz gold/ton and 0.1 ppm and 1.2 oz silver/ton. Moderate mineral development potential.
V-43	Imperial; Tuscarora, Ellis Imperial Mines Co. (gold, silver) sec. 05, T. 09 S., R. 07 W. CRM	2-in.- to 4-ft-thick ribbon and solid quartz vein contains gold, pyrite, galena, chalcopyrite, and sphalerite.	724-ft-long adit. Reported production of 74 oz gold and 18 oz silver.	Nine chip samples contained from <0.03 to 0.14 ppm gold and <0.01 to 2.6 ppm silver. Low mineral development potential.
V-44	Alaska Gold Hill; Black Diamond, Last Chance (gold, silver) sec. 32, T. 08 S., R. 07 W. CRM	Two major fissures 1/2-in.- to 4-ft-wide reported. Fissures are filled largely with crushed country rock and a few small quartz stringers up to 5-ft-wide.	Three adits reported (Johnson, 1919). A 50-ft-long adit with a 75-ft crosscut and a 55-ft drift; 120-ft adit; and 605-ft adit. No reported production.	Not located. Mineral development potential unknown.
V-45	Cube; Three-in-One, Cube Mining Co. (gold, silver) sec. 32, T. 08 S., R. 07 W. CRM	Quartz vein and lenses occur in a zone from a few inches to 8-ft-wide, but averages 2 ft. Quartz contains galena, arsenopyrite, chalcopyrite, and pyrite.	Two adits connected by raise. 900-ft-long adit; 400-ft-long adit; 160-ft raise connecting the two adit levels (both adits caved). Reported production of 73 oz gold.	Grab sample contained 0.031 oz gold/ton and 2.1 oz silver/ton. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-46	Unnamed adit east of the Cliff Mine (gold, silver) sec. 06, T. 09 S., R. 07 W. CRM	Multiple quartz veins, all approximately 4-in.-wide, contain minor pyrite.	165-ft-long adit. No reported production.	Four grab samples contained from a trace to <0.005 oz gold/ton and <0.2 to 0.2 oz silver/ton. Low mineral development potential.
V-47	Unnamed adit east of the Cliff Mine (gold, silver) sec. 01, T. 09 S., R. 08 W. CRM	Shear zone, approximately 10-in.-wide, contains quartz with minor sulfides.	240-ft-long adit. No reported production.	Two grab samples contained <0.005 oz gold/ton and <0.2 oz silver/ton. Low mineral development potential.
V-48	Cliff Mine; Chugach Gold Mines Inc. (gold, silver) sec. 01, T. 09 S., R. 08 W. CRM	Gold occurs in a linked quartz vein system within fissures which range from 6-in.- to 5-ft-wide. Veins were mined for 1,700 ft along strike and 775 ft down dip. Highest gold values are in banded quartz. Mineralization includes gold, pyrite, arsenopyrite, sphalerite, and galena.	Ten levels, 8,000 ft of workings by 1913 (Johnson, 1915a). Production up to 1949 was 51,740 oz gold and 8,153 oz silver.	Grab sample contained 0.76 ppm gold and 0.81 ppm silver. Pan concentrate of tailings contained 40 ppm gold and 7.1 ppm silver. High mineral development potential.
V-49	Gold Bluff (gold, silver, copper) sec. 36, T. 08 S., R. 08 W. CRM	Shear zone, from 2.5- to 4-ft-wide, contains lenses and stringers of quartz. Mineralization inlcudes gold, pyrite, pyrrhotite, and chalcopyrite.	200-ft-long adit, with a 5-ft crosscut reported (Johnson, 1915a). No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-50	Sealy-Davis; Sealy-Davis Mining Co; Rising Sun (gold, silver) sec. 36, T. 08 S., R. 08 W. CRM	Quartz vein in well-defined fissure zone to 5.5-ft-wide. Metallic minerals include gold, pyrite, arsenopyrite, chalcopyrite, sphalerite, galena, and pyrrhotite.	Four adits, 20-ft, 240-ft, 820-ft, 500-ft-long; winze; raise; stopes; stripping; and open cuts. Reported production 38 oz gold.	Fifteen chip samples from 3 adits contained from 0.1 to 7.9 ppm gold and <0.1 to 1.6 ppm silver. Grab sample contained 17 ppm gold and 2.8 ppm silver. Inferred reserves: 50 tons at 7.9 ppm gold and 1.6 ppm silver. Low mineral development potential.
V-51	Bluebird; Whistler (gold, silver) sec. 35, T. 08 S., R. 08 W. CRM	Poorly-defined 4- to 10-ft-wide mineralized shear zone filled with lenticular masses of fine-grained dense greenish-black basic dike (Johnson, 1915a). Metallic minerals include gold, pyrrhotite, chalcopyrite, galena, and pyrite.	100-ft-long adit with a 10-ft drift at the face, and a 10-ft-long adit at the west end of the vein reported (Johnson, 1915a). No reported production.	Not located. Mineral development potential unknown.
V-52	Shoup Bay (gold, silver) sec. 35, T. 08 S., R. 08 W. CRM	Numerous 1/2-in.-wide quartz veinlets trend parallel with the foliation of the slate country rock. No observed metallic minerals.	40-ft-long adit. No reported production.	Chip sample of quartz contained <0.03 ppm gold and 0.1 ppm silver. Low mineral development potential.
V-53	Alice Mine (gold, silver) sec. 35, T. 08 S., R. 08 W. CRM	Well-defined fissure, 3-in.- to 3-ft-wide, contains brecciated and silicified country rock recemented with pyritiferous quartz. Footwall is well-defined by slickenslides. Metallic minerals include gold, pyrite, chalcopyrite, arsenopyrite, sphalerite, and galena.	260-ft-long adit; 170 ft of shafts. 30 tons of ore reported milled in Valdez in 1913 (Johnson, 1915a).	Four chip samples contained from 0.2 ppm to 0.109 oz gold/ton and 0.2 ppm to 0.18 oz silver/ton. Two grab samples contained 0.005 and 0.257 oz gold/ton and <0.2 and 0.2 oz silver/ton. Eleven USGS samples contained 0.4 to 16.0 ppm gold. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-54	Silver Gem; I.X.L.; Shoup Bay Mining Co. (gold, silver, antimony) sec. 35, T. 08 S., R. 08 W. CRM	Fissure which ranges from 6-in.- to 9-ft-wide contains crushed and shattered country rock, massive quartz, quartz stringers and lenses. Mineralization includes gold, pyrite, arsenopyrite, sphalerite, galena, and stibnite.	500-ft-long adit (caved) (Brooks, 1912). No reported production.	Not located. Mineral development potential unknown.
V-55	Thompson-Ford; Owl Mining Co. (gold, silver) sec. 30, T. 08 S., R. 07 W. CRM	Mineralized quartz vein ranges in width from 1- to 18-in. Mineralization includes gold, pyrite, galena, sphalerite, and chalcopyrite.	325-ft-long crosscut with 100-ft and 25-ft drifts, and a 150-ft raise; a 100-ft-long adit with 15-ft drift, and a 20-ft shaft. No reported production.	Three chip samples contained from 0.4 to 0.59 ppm gold and 0.2 ppm silver. Five grab samples contained from 0.1 to 5.02 ppm gold and 0.2 to 3.1 ppm silver. Four USGS samples contained from <0.05 to 0.3 ppm gold. Low mineral development potential.
V-56	Guthrie-Belloli (gold, silver) sec. 30, T. 08 S., R. 07 W. CRM	Quartz vein, up to 6-ft-wide, contains gold, pyrite, chalcopyrite, arsenopyrite, sphalerite, and galena.	140-ft-long adit with 90 ft of crosscuts and 50 ft of drifts. No reported production.	Four grab samples contained from <0.005 oz gold/ton to 1.5 ppm gold and <0.2 oz to 19 ppm silver. Low mineral development potential.
V-57	Bunker Hill (gold, silver) sec. 24, T. 08 S., R. 08 W. CRM	4- to 25-in.-wide quartz lenses in fissure. In some places the quartz is shattered; in others the veining shows secondary banding parallel to the walls of the fissure. A second 1- to 4-ft-wide quartz vein is traceable for 400 ft. Mineralization includes gold, arsenopyrite, galena, pyrite, and sphalerite.	100-ft-long adit (caved); five prospect pits. No reported production.	Four chip samples contained from <0.03 to 1.29 ppm gold and <0.1 to 2.0 ppm silver. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-58	Sea Coast Mining Co. (gold, silver, lead, zinc) sec. 24, T. 08 S., R. 08 W. CRM	Several quartz veins range from small lenses to 10-ft-wide veins (Johnson, 1915a). Mineralization includes gold, pyrite, galena, pyrrhotite, chalcopyrite, and sphalerite.	Two adits reported (Johnson, 1915a). A 50-ft-long adit; 265-ft adit with a 40-ft winze and 20-ft raise; shallow shaft. No reported production.	Not located. Mineral development potential unknown.
V-59	Minnie (gold, silver) sec. 02, T. 08 S., R. 08 W. CRM	Quartz veins, from 0.5- to 2.5-ft-wide, contain gold, galena, pyrite, and sphalerite.	Two adits: 23- and 93-ft-long. No reported production.	Three chip samples contained from 0.04 to 12.0 ppm gold and <0.03 to 7.0 ppm silver. One grab sample contained 45 ppm gold and 12.5 ppm silver. Inferred reserves: 400 tons at 10 ppm gold. Moderate mineral development potential.
V-60	Ivanhoe; Bench-McDonald (gold, silver) sec. 02, T. 08 S., R. 08 W. CRM	Quartz veins, 3- to 31-in.-wide, in 0.3- to 4-ft-wide shear zones. Mineralization includes gold, pyrite, sphalerite, galena, and chalcopyrite.	Four adits: 16-ft, 6-ft, 37-ft, and 101-ft-long Five open cuts. No reported production.	Eight chip samples contained from <0.03 ppm to 1.46 oz gold/ton and <0.03 ppm to 1.1 oz silver/ton. Four grab samples contained from <0.03 to 6.5 ppm gold and 0.1 to 4.7 ppm silver. Inferred reserves: 210 tons at 30.3 ppm gold and 24.5 ppm silver. Moderate mineral development potential.
V-61	Rambler; Rambler Gold Mining Co. (gold, silver) sec. 36, T. 07 S. R. 08 W. CRM	Mineralized fault zone averages 1.5-ft-wide. Mineralization includes gold and sulfides.	227-ft-long adit; 18-ft shaft; 20-ft shaft; five trenches. No reported production.	Three chip samples contained from 0.07 to 0.64 ppm gold and <0.03 to 0.3 ppm silver/ton. Grab sample contained 0.22 ppm gold and 0.1 ppm silver. Low mineral development

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-62	Cameron-Johnson; Valdez Gold Co., Bald Mtn. Group (gold, silver) sec. 03, T. 08 S., R. 08 W. CRM	Seven quartz veins from 1-in.- to 11.5-ft-wide. Mineralization includes free gold, pyrite, sphalerite, and arsenopyrite.	Eight adits: 160-ft, 125-ft, 50-ft, 8-ft, 335-ft, 257-ft, 47-ft, and 15-ft-long; two open cuts. Reported production is 585 oz gold and 18 oz silver.	Twenty-five chip samples contained from 0.06 to 21.0 ppm gold and 0.1 to 8.5 ppm silver. Twelve grab samples contained from <0.03 ppm to 15.3 oz gold/ton and 0.16 ppm to 4.3 oz silver/ton. Inferred reserves: 1,800 tons at 5 ppm gold and 1.2 ppm silver. Moderate mineral development potential.
V-63	Gold King (gold, silver) sec, 06, T. 08 S., R. 08 W. CRM	Two quartz veins, from a seam to 4-ft-wide, contain gold, pyrite, galena, sphalerite, chalcopyrite, and stibnite.	Three adits present, 600-ft (ice-filled), 1,070-ft, 115-ft (caved). Reported production is 1,997 oz gold and 187 oz silver.	Five chip samples contained 0.09 to 3.4 ppm gold and 0.1 to 1.3 ppm silver. Two grab samples contained 4.85 to 45.62 oz gold/ton and 1.0 to 1.7 oz silver/ton. Six USGS samples contained <0.05 to 9.0 ppm gold. Mineral development potential unknown.
V-64	Rough & Tough; Ruff & Tuff (gold, silver) sec. 02, T. 08 S., R. 09 W. CRM	Quartz veins occur at or near a contact of a granitic intrusion with metasedimentary rocks. Quartz veins, which occur in both sedimentary rocks and the intrusion, contain free gold, galena, pyrite, and chalcopyrite.	372-ft-long adit; at least four open cuts. Reported production is 76 oz gold and 20 oz silver.	Seven chip samples contained from 0.18 ppm to 2.52 oz gold/ton and 0.3 ppm to 0.89 oz silver/ton. Grab sample contained 14 ppm gold and 3.3 ppm silver. Eight USGS samples contained <0.05 to 9.0 ppm gold. Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-65	Divider Mtn. (gold, silver) sec. 28, T. 07 S., R. 09 W. CRM	Quartz vein, up to 14-in.-wide, splits into two smaller veins, contains gold, pyrite, and galena.	6-ft-long trench. No reported production.	Chip sample contained 0.423 oz gold/ton and 0.21 oz silver/ton. Two selected samples contained 0.158 and 5.02 oz gold/ton and <0.01 and 3.1 oz silver/ton. Inferred reserves: 2 tons at 8.1 ppm gold and 101 ppm silver. Moderate mineral development potential.
V-66	National (gold, silver) sec. 21, T. 08 S., R. 09 W. CRM	60-in.-wide vuggy quartz vein contains galena and pyrite.	Open cut. No reported production.	Chip sample of quartz contained 0.13 ppm gold and 4.9 ppm silver. Grab sample contained 0.08 ppm gold and 14.1 ppm silver. Low mineral development potential.
V-67	Mayfield; Alaska-Mayfield Mines, Inc. (gold, silver) sec. 22, T. 08 S., R. 09 W. CRM	One main quartz vein ranges from 1- to 10-ft-wide and is traceable for 200 ft. Mineralization includes gold, pyrite, chalcopyrite, galena, sphalerite, and arsenopyrite.	Two adits present: 337-ft and 115-ft-long. Reported production is 13 oz gold and 2 oz silver.	Nine chip samples contained from 0.03 to 70 ppm gold, and 0.1 to 25.2 ppm silver. Grab sample contained 52 ppm gold and 22.5 ppm silver. Inferred reserves: 600 tons at 9.54 ppm gold and 3.4 ppm silver. High mineral development potential.
V-68	Bessie Williams; Mammoth Mining Co. (gold, silver) sec. 25, T. 08 S., R. 09 W. CRM	3-ft-wide shear zone contains 1-ft quartz vein and 6-in. gouge on the footwall. No mineralization noted.	25-ft-long adit. No reported production.	Chip sample contained 0.42 ppm gold and 0.3 ppm silver. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-69	Anderson Glacier* (gold, silver) sec. 32, T. 08 S., R. 08 W. CRM	5-ft-wide shear zone contains quartz with gold, galena, chalcopyrite, and pyrrhotite.	None. Newly reported occurrence.	Chip sample contained 0.67 ppm gold and 2.8 ppm silver. Selected sample of float rock contained 5.34 oz gold/ton and 16.7 oz silver/ton. Mineral development potential unknown.
V-70	Gold Standard; Hecla (silver, gold, zinc, lead, copper, arsenic) sec. 33, T. 08 S., R. 08 W. CRM	4-ft-wide quartz vein contains pyrite, arsenopyrite, galena, and chalcopyrite.	Two adits present. One 45-ft-long, length of other unknown (Johnson, 1918b). No reported production.	Two chip samples contained from 0.2 oz silver/ton and 54 ppm silver, 0.019 oz gold/ton and 0.99 ppm gold 0.18 and 0.43% zinc, 580 ppm and 0.11% lead, and 3.3 and 3.4% arsenic. One selective grab sample contained 54 oz silver/ton, 0.461 oz gold/ton, 4.5% zinc, 2.2% lead, 0.19% copper, and 1.7% arsenic. Moderate mineral development potential.
V-71	Palmer; W. H. Palmer Mining Co. (gold, silver) sec. 27, T. 08 S., R. 08 W. CRM	4.5-ft-wide fissure with well-defined hanging wall has a 2.5-ft-wide zone of quartz stringers. Mineralization includes gold and pyrite.	300-ft-long adit reported (Brooks, 1912). No reported production.	Not located. Mineral development potential unknown.
V-72	Big Four Claim; Little Four Claim; Alder (gold, silver) sec. 33, T. 08 S., R. 08 W. CRM	Three quartz veins contain gold, pyrite, arsenopyrite, galena, and chalcopyrite.	No workings. No reported production.	Chip sample contained 0.04 ppm gold and 1.7 ppm silver. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-73	Westbrook Glacier Prospect (gold) sec. 04, T. 09 S., R. 08 W. CRM	0.5- to 2-ft-wide quartz vein present; no mineralization noted.	Open cut. No reported production.	Chip sample contained 0.06 ppm gold. Low mineral development potential.
V-74	Valdez Arm Prospect (gold, silver) sec. 17, T. 09 S., R. 08 W. CRM	Numerous 0.5- to 4-in.-wide quartz veinlets present; no mineralization noted.	100-ft-long adit. No reported production.	Three chip samples contained <0.03 to 50 ppm gold and 0.1 to 11.7 ppm silver. Inferred reserves 200 tons at 34.8 ppm gold and 8.2 ppm silver. Moderate mineral development potential.
V-75	Clear Creek* (gold, tungsten, arsenic) sec. 10, T. 09 S., R. 09 W. CRM	Mineralized quartz stringers contain pyrite, chalcopyrite, and arsenopyrite.	No workings. No reported production.	Five grab samples contained from 0.03 ppm to 2.34 ppm gold, 17 ppm to 0.39% tungsten, and <10 ppm to 4.95% arsenic. Low mineral development potential.
V-76	Anderson Glacier Prospect (silver, gold) sec. 36, T. 08 S., R. 09 W. CRM	2-ft-wide quartz vein contains chalcopyrite and arsenopyrite.	Prospect pit. No reported production.	Chip sample contained 0.2 ppm silver and <0.03 ppm gold. Grab sample contained 1.9 ppm silver and <0.03 ppm gold. Low mineral development potential.
V-77	Gold Prospect; Anderson Pass (gold, silver) sec. 35, T. 08 S., R. 09 W. CRM	6-in.-wide quartz vein contains pyrite.	Prospect pit. No reported production.	Grab sample contained <0.003 oz gold/ton and <0.01 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
V-78	Eagle Claim (gold, silver) sec. 33, T. 08 S., R. 09 W. CRM	6-in.-wide quartz vein contains free gold, chalcopyrite, and galena.	20-ft-long adit; a 15-ft trench. No reported production.	Chip sample contained 0.626 oz gold/ton and 4.1 oz silver/ton. Grab sample contained 4.472 oz gold/ton and 1.0 oz silver/ton. Inferred reserves: 10 tons at 20.84 ppm gold and 136.23 ppm silver. Moderate mineral development potential.
V-79	Columbia; Idle (gold, silver) sec. 14, T. 09 S., R. 10 W. CRM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
V-80	Ticksit; Glory; Oma (gold, silver, copper) sec. 09, T. 09 S., R. 10 W. CRM	0.5-ft-wide vein with vuggy quartz and malachite staining.	No data. No reported production.	Chip sample contained 0.07 ppm gold, 3.9 ppm silver, and 480 ppm copper. Low mineral, development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-1	Keith Claims (copper, gold, zinc) sec. 18, T. 02 S., R. 09 E. SM Latouche Island	Sequence of graywacke, slate, and shale, are locally deformed into similar folds. No mineralization was found.	None reported.	Claims staked by W.G.M. Inc. in 1976 on geophysical anomaly. Mineral development potential unknown.
S-2	Reynolds-Alaska Prospect (copper) sec, 17, T. 02 S., R. 09 E. SM Latouche Island	Interbedded shale and graywacke in area. No mineralization was found.	None reported.	Reported prospect (Grant and Higgins, 1909a, Pl. IV) was not located. Mineral development potential unknown.
S-3	Banta Shaft Patented Claims: Duke, Iron Mtn. No. 6, and amended Iron Mtn. No. 4 (copper, zinc,) gold) sec. 09, T. 02 S., R. 09 E. SM Latouche Island	Massive sulfide lenses occur within a north-east-trending interbedded slate and graywacke sequence. Lenses vary from 4- to 27-ft-wide and are developed along strike for 151 ft. Sulfides are chalcopyrite, pyrrhotite, and pyrite.	110-ft-deep flooded shaft and 311-ft of drifts and crosscuts. Also reported are 2 adits. One 60-ft-long and one 193-ft-long. Small tonnage shipped.	Measured reserves are 68,800 tons at 1.32% copper, .06 oz gold/ton, and .05 oz silver/ton. Additional 200,000 tons of indicated ore are reported (Crosby, 1906; Herdlick, 1953; Stejer, 1956; Townsend, 1917; Webber and Rutledge, 1944b). Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-4	Duchess Claim (patented) (copper, zinc, gold, silver, sulfur) sec. 09, T. 02 S., R. 09 E. SM Latouche Island	A series of steeply-dipping massive sulfide lenses up to 60-ft-wide and 490-ft-long, extend vertically 600 ft, paralleling the enclosing slate and graywacke sequence. Disseminated sulfides form a halo around the massive bodies. Sulfides include pyrite, pyrrhotite, chalcopyrite, and sphalerite.	Two adits reportedly contain a total of 3,000 ft of crosscuts and drifts. Lower adit is flooded; upper one is caved. Recorded production: 2,850 tons producing 215,000 lbs copper at a grade of 3.8%.	Measured reserves are 436,500 tons at 1.4% copper. Indicated reserves: 570,000 tons at 1.2% copper. Inferred reserves: 1,720,000 at 1.2% copper and 0.40% zinc. Also 0.03 oz gold/ton and 0.47 silver/ton. Sulfur: 600,000 tons at 50% sulfur (Townsend, 1917; Webber and Rutledge, 1944b). Moderate mineral development potential.
S-5	Tiger?; W & L? (copper, silver) sec. 10, T. 02 S., R. 09 E. SM Latouche Island	A zone, a few feet wide, of chalcopyrite and pyrrhotite, cuts graywacke. Traces of native copper present.	Open cut in bluff. No production.	20-ft-long chip sample contained 0.14% copper and 19.5 ppm silver. Low mineral development potential.
S-6	Alameda Claims (copper, zinc) sec. 14, T. 02 S. R. 09 E. SM Latouche Island	Small bunches and stringers of chalcopyrite reportedly scattered throughout the graywacke. Best zone said to be 4- to 10-ft-wide and traceable for several hundred feet. To the north, a reported 4-ft-wide mineralized shear zone parallels the strike and dip of the surrounding country rock. Mineralization includes chalcopyrite, pyrrhotite, sphalerite, and quartz.	None reported.	Reported prospect (Johnson 1918a, p. 211) was not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-7	Latouche Island Copper Mining Co. (copper) sec. 11, T. 02 S., R. 09 E. SM Latouche Island	Reported 10-ft-wide mineralized shear zone in graywacke, slate, argillite, and chert sequence, contains "considerable" chalcopyrite (Johnson, 1918b).	Several hundred feet of tunnels; 67-ft-deep two-compartment shaft. Some ore shipped.	Reported prospect (Johnson 1918a, pp. 210-211) was not located. Mineral development potential unknown.
S-8	Unnamed occurrence (copper, zinc) sec. 11, T. 02 S., R. 09 E. SM Latouche Island	Reported reddish-brown and yellow, 4-ft-wide 45-ft-long gossan. Pyrite and chalcopyrite reported.	None.	Prospect not located. Semiquantitative spectrographic analysis (Tysdal, 1978) shows 700 ppm copper and 500 ppm zinc. Mineral development potential unknown.
S-9	Latouche Island Copper Mining Co. Prospect; Alameda Claims (copper, zinc) sec. 11, T. 02 S., R. 09 E. SM Latouche Island	Few stringers of chalcopyrite with minor pyrrhotite and pyrite reported in sandstone.	One adit reported (Tysdal, 1978). No reported production.	Prospect not located. Mineral development potential unknown.
S-10	Latouche Island Copper Mining Co. Prospect; Alameda Claims? (copper, zinc) sec. 11, T. 02 S., R. 09 E. SM Latouche Island	3.5- to 4.5-ft-wide sulfide-rich shear zone in silicified slate and graywacke. Massive pyrrhotite zones contain up to 15% chalcopyrite. Underground, mineralization is exposed intermittently for 80 ft along strike.	64-ft-long adit near shoreline. No reported production.	5-ft-wide chip sample contained 0.74% copper and 0.19% zinc. Inferred reserves: 100 tons. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-11	Alameda Claims (copper, zinc) sec. 02, T. 02 S., R. 09 E., SM Latouche Island	Graywacke with shale interbeds in area of reported prospect (State of Alaska, "Kardex", 1982).	No workings reported. No known production.	Prospect not located. Mineral development potential unknown.
S-12	Carlson Prospect; Latouche Island Copper Mining Co. (copper, zinc, silver) sec. 36, T. 01 S., R. 09 E. SM Latouche Island	Mineralized fracture zone, up to 5-ft-wide, roughly parallels bedding of graywacke. Intense fracturing and brecciation locally. Massive sulfide zone, up to 1-ft-wide, and a surrounding stringer sulfide zone up to 5-ft-wide contains up to 5% chalcopyrite. Mineralization can be traced for 200 ft along strike.	A 100-ft-long adit mostly flooded at high tide (Bateman, 1920). Evidence of blasting at one exposure. No reported production.	Workings not located. 2-ft-wide chip sample collected in the area contained 2.5% copper, 0.15% zinc and 20 ppm silver. Ahother 8.5-ft-wide chip sample contained 0.70% copper. Previously reported reserves: 1,800 tons at 3.5% copper. Low mineral development potential.
S-13	Lin Claims (copper, zinc) sec. 25, T. 01 S., R. 09 E. SM Latouche Island	Several small pyrrhotite, pyrite, chalcopyrite, and sphalerite-bearing shear zones cut sequence of interbedded graywacke, slate, and shale.	No signs of prospecting. No production.	Chip sample from 9x1-ft sulfide lens, contained 0.75% copper and 5.9% zinc. Mineral development potential unknown.
S-14	Unnamed prospect (copper) sec. 04, T. 02 S., R. 09 E. SM Latouche Island	Highly fractured slate and graywacke contains small quartz veins and limonite-staining along fractures.	Adit of unknown length, is caved 150 ft from portal.	No data. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-15	Bazard Tunnel; Claims: West Hillside Lode, Hillside Lode (copper) sec. 04, T. 02 S., R. 9 E. SM Latouche Island	No mineralization at portal. Interbedded shale and graywacke bedrock.	Flooded tunnel, driven S. 72° E., reported to be at least 1,400-ft-long (Grant and Higgins, 1909a, p. 88). It reportedly was driven to intersect a possible southern extension of the Beatson ore body, lying 0.6 mi north.	Not sampled. Mineral development potential unknown.
S-16	Hillside Lode Claim (copper) sec. 04, T. 02 S., R. 09 E. SM Latouche Island	No sulfide mineralization found. Bedrock is graywacke with local shale interbeds. A 3-in.-wide gouge zone roughly parallels bedding.	126-ft-long adit, driven S. 65° E., presumably to cut a southern extension of the Beatson ore zone, which lies 0.5 mi north. No production.	No sulfides found in dump. Low mineral development potential.
S-17	Beatson Mine; patented claims: Big Bonanza and Eagle (copper, zinc, gold, silver) sec. 33, T. 01 S., R. 09 S. SM Latouche Island	Massive and stringer zones of sulfides are concentrated on the footwall of the Beatson fault which cuts across graywackes with interbedded slate. Sulfides: pyrite, chalcopyrite, pyrrhotite, sphalerite, cubanite, and galena. Non-metallic gangue minerals: quartz, sericite, ankerite. Mined ore body dimensions: 400-ft-wide, 500-ft-vertical, and approximately 1,000-ft along strike.	Major mine operated 1903 to 1930. By 1924 over 10 mi of underground workings on five main levels. Underground workings no longer accessible. Recorded production: 5,992,941 tons ore with 182,600,000 lbs copper, 484 oz gold, and 1,466,649 oz silver. Average grades: 1.65% copper, 0.27 oz silver/ton.	At shutdown ore averaged 0.9% copper. No ore reserve data. Moderate to high mineral development potential for low grade and concealed copper and zinc ore bodies at depth along strike.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-18	Chenega Claim (patented) (copper, silver) sec. 34, T. 01 S., R. 09 E. SM Latouche Island	Stringers, blebs, and disseminated pyrite and chalcopyrite are concentrated along a 65-ft-wide zone underground, in black shale and silicified mudstone.	95-ft-long adit driven S. 80° E.; Beatson Mine workings extend under the claim. Production included with Beatson Mine figures.	2.8-ft-wide chip sample contained 1.7% copper and 6.4 ppm silver. Moderate mineral development potential for large low-grade deposit.
S-19	Blackbird Mine; Girdwood; Barrack; Ladysmith (copper, zinc, lead, silver) sec. 34, T. 01 S., R. 09 E. SM Latouche Island	Sulfide-bearing shear zone reportedly cuts graywacke and shale. Massive and stringer sulfide zones in a shear/fault zone up to 35-ft-wide, exposed intermittently along strike for 300 ft. Massive sulfide lenses up to 10-ft-wide. Sulfides: pyrrhotite and chalcopyrite.	Two caved adits with raises and sublevels reported. Several shafts and a short adit total 1,750 ft. Surface development consists of several open cuts and collapsed pits. In 1930, 110,865 tons of 0.82 to 1.10% copper mined. Recorded production: 5,150 tons ore producing 547,118 lbs. copper (at a grade of 5.3%) and 3,980 oz silver.	Chip samples contained 27 ppm to 2.96% copper, 105 ppm to 12.2% zinc, 23 ppm to 1.25% lead, and <0.2 to 22.2 ppm silver. Reported reserves in 1920. Indicated ore: 201,450 tons at 2.2%, or 759,608 at 1.65% copper. Blackbird ore mined and mixed with Beatson (Bateman, 1920). Moderate mineral development potential.
S-20	Unnamed occurrence* (copper) sec. 01, T. 02 S., R. 08 E. SM Elrington Island	Interbedded mudstone and siliceous shale contain 1% pyrite and traces of chalcopyrite near greenstone contact. Sedimentary rocks are rust-colored and exposed intermittently for 400 ft along strike.	No workings. No production.	5.5-ft-wide random chip sample contained 45 ppm copper and 82 ppm zinc. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-21	Lucky Girl Prospect; Murphy Prospect (copper, asbestos) sec. 11, T. 02 S., R. 08 E. SM Elrington Island	Quartz and calcite veins carrying a little pyrrhotite are reported in greenstone and slate. Asbestos veins up to 3-in-wide reported in greenstone fragments. Chalcopyrite and pyrite are reported.	Adit reported (Grant and Higgins, 1910b, p. 79), not located. No recorded production.	Prospect not located. Mineral development potential unknown.
S-22	Unnamed occurrence (copper, zinc) sec. 02, T. 02 S., R. 07 E. SM Bainbridge Island	Greenstone is in contact with siliceous shale and slate with up to 1% pyrite and a trace of pyrrhotite.	None.	Slate reported to contain 200 ppm zinc and 100 ppm copper (Tysdal, 1978). Low mineral development potential.
S-23	Hogg Bay Prospect (copper) sec. 22, T. 01 S., R. 07 E. SM Bainbridge Island	None found.	None located. No reported production.	Reported prospect (Smith, 1926, p. 21) not located. Mineral development potential unknown.
S-24	Shoo Fly Prospect (copper, gold silver) sec. 14, T. 01 S., R. 07 E. SM Bainbridge Island	Shear zones (maximum width 2 ft) exposed in adit contain localized quartz stringers and gouge in silicified mudstone. Greenstone contains 1% pyrrhotite and approximately 1% chalcopyrite.	Two adits, 221-ft and 9-ft-long. Two open cuts, 61-ft and 6-ft-long. A reported (Shepard, 1926), 405-ft-long adit was not found. No known production.	Random chip sample contained 0.07% copper. A 0.9-ft-wide chip sample contained 570 ppm copper, 0.11 ppm gold, and 1.5 ppm silver. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-25	Unnamed prospect (gold) sec. 14, T. 01 N., R. 07 E. SM Whale Bay	6-ft-wide shear zone, exposed in adit, cuts silicified mudstone. Zone consists mainly of 3- to 4-ft-thick hard silicified mudstone breccia that contains approximately 15% quartz veins, lenses, and pods. Up to a 2-ft-wide gouge and breccia zone is along the footwall. Select pieces of quartz breccia on the dump contain trace amounts of gold, galena, pyrite, pyrrhotite, chalcopyrite, and sphalerite.	50-ft-long adit. No known production.	0.2-ft-wide chip sample of gouge contained 1 oz gold/ton and 0.3 oz silver/ton. 3.5-ft-wide chip sample across the shear zone contained 0.3 oz gold/ton. Inferred reserves: 200 tons at 0.12 oz gold/ton. Moderate mineral development potential.
S-26	Happy Jack Copper Mining & Dev. Co.; Copper Queen Prospect; Helena Claim; Ground Hog Claim. (copper) sec. 17, T. 01 N., R. 10 E. SM Knight Island	1- to 4-ft-thick quartz, chalcopyrite, sphalerite, and pyrrhotite vein in slate, graywacke, and greenstone. An approximately 2-ft-thick mineralized zone reported. A N. 25° W. trending 3-in.- to 1-ft-wide gouge and breccia zone locally contains massive pyrite, 5 to 10% chalcopyrite, and 1 to 2% covellite.	One of three reported adits (Moffit and Fellows, 1950, p. 74) located. The only working found was a S. 25° E. trending 40-ft adit. An adit at elevation of 40 ft is reportedly 1,000- to 1,200-ft-long. Adit at 240 ft elevation was driven 260 ft and contained several drifts and short raises. A short upper adit at 450-ft reported. Production 57 lbs copper from 110 tons.	Chip sample over a 1-ft width contained 7.5% copper. Shear zone, <1-ft-wide, near the reported adits contained 2.0% copper. Low mineral development potential.
S-27	Hogan; Hemple; and Egan Prospect; Hemple Prospect (copper) sec. 06, T. 01 N., R. 10 E. SM Knight Island	Several shear zones, up to 5-ft-wide in graywacke, contain sulfide zones with 1 to 5% chalcopyrite stringers, up to 2% pyrite, minor pyrrhotite and bornite, plus some quartz veinlets and lenses up to 1/2-ft-wide.	Three adits, 45-ft, 60-ft, and 140-ft-long. No known production.	Three chip samples: 3-ft, 1.8-ft, and 3-ft-long across the shear zones contained 0.99%, 0.89%, and 0.78% copper respectively. One 3.6-ft-wide chip sample contained 2.2% copper. Moderate mineral

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-28	Wilcox Prospect; Hogan Bay-Knight Claims (copper) sec. 05, T. 01 N., R. 10 E. SM Knight Island	Greenstone and porphyritic greenstone are in contact with slate. Several narrow shears contain quartz stringers but no sulfides. Some disseminated chalcopyrite was reported underground.	680-ft-long N. 72° W. adit at 300 ft elevation. Reported but not located were a 70-ft-long adit at 1,000 ft and a third undescribed opening (Grant and Higgins, 1909a, p. 91). No reported production.	Underground random chip sample contained 60 ppm copper. Low mineral development potential.
S-29	Unnamed prospect (copper, silver) sec. 32, T. 02 N., R. 10 E. SM Knight Island	Sulfide-bearing zones averaging 2-ft-thick and exposed for 20 ft are conformable to flow layers in greenstone. Sulfides include pyrrhotite, chalcopyrite; traces of native copper present.	Two open cuts. One 8 ft x 20 ft and one 6 x 10 ft. No reported production.	2.5-ft-wide chip sample contained 2.2% copper and 4.1 ppm silver. Random chip sample contained 1.4% copper, and 8.2 ppm silver. Low mineral development potential.
S-30	Minnie Prospect (copper) sec. 29, T. 02 N., R. 10 E. SM Knight Island	2.5- to 3-ft-wide chalcopyrite-bearing shear zone cuts greenstone and is exposed for 145 ft underground. Sulfides are concentrated in a 5- to 6-in.-wide band in shear; numerous quartz veinlets present. Minor amounts of native copper.	South-trending 145-ft-long adit. No reported production.	6-in.-wide chip sample contained 0.25% copper. Inferred reserves: 200 tons. Low mineral development potential.
S-31	Unnamed occurrence (copper) sec. 36, T. 02 N., R. 09 E. SM Knight Island	Two 10-ft-wide shear zones in greenstone contain 5% pyrrhotite and trace chalcopyrite.	None.	Chip sample contained 49 ppm copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-32	Unnamed occurrence (copper, zinc, chromium) sec. 35, T. 02 N., R. 09 E. SM Knight Island	Reported limonite-and malachite-stained sheared greenstone.	None.	Prospect not located. Reported analysis (Tysdal, 1978): 100 ppm zinc, 300 ppm chromium, 500 ppm copper. Mineral development potential unknown.
S-33	Home Camp Prospect; Charles Schultz Prospect(?) (copper) sec. 30, T. 02 N., R. 10 E. SM Knight Island	Sheared greenstone schist zone, 6-in.- to 4-ft-wide, cuts greenstone and can be traced on the surface intermittently for 100 ft. Schist contains up to 25% chalcopyrite and minor pyrite.	6 x 8 x 6-ft-deep open cut was located. A 15-ft-long adit reported near the cut and a few tons of ore reportedly taken from a 10x30-ft open cut in the area (Johnson, 1918a, p. 219).	Chip sample across a 4-ft width contained 17.6% copper. A few tons of ore are exposed. Moderate mineral development potential.
S-34	Unnamed occurrence (barium, copper, chromium) sec. 30, T. 02 N., R. 10 E. SM Knight Island	Limonite-stained sheared greenstone.	No signs of prospecting. No production.	Prospect not located. Analysis: 5,000 ppm barium, 500 ppm copper, 300 ppm chromium (Tysdal, 1978). Mineral development potential unknown.
S-35	Kilbourn Prospect (copper, silver) sec. 19, T. 02 N., R. 10 E. SM Knight Island	30-ft-wide shear zone in greenstone. Pyrrhotite, pyrite, chalcopyrite, and bornite in quartz-rich isolated lenses, a few inches wide, occur locally throughout the shear. Chalcopyrite content about 1%, up to 20% locally.	71-ft-long adit and 15-ft-long open cut. No production.	Grab sample from the dump contained 7.1% copper and 18 ppm silver. Two chip samples, 1.5- and 2.5-ft-wide across the shear zone, contained 0.16% copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-36	H. J. Harvey Prospect (copper, nickel) sec. 19, T. 02 N., R. 10 E. SM Knight Island	Diorite(?) surrounded by greenstone contains 2 to 3% disseminated pyrrhotite and chalcopyrite. Nickel-bearing mineral not identified.	Caved adit reportedly 150-ft-long with collapsed area or open cut on the slope above it (Grant and Higgins, 1910b, p. 56). A second 150-ft adit is reported in the area.	Random chip samples from diorite(?) contained from 0.24 to 1.0% copper and 0.36 to 0.48% nickel. Moderate mineral development potential for nickel.
S-37	Hendrix; Reavley; and McMasters Prospect (copper) sec. 18, T. 02 N., R. 10 E. SM Knight Island	None found.	None located. No recorded production.	Reported prospect (Grant and Higgins, 1909a, Pl. IV) not located. Mineral development potential unknown.
S38	J. J. Bettles Prospect (copper, zinc) sec. 16, T. 02 N., R. 10 E. SM Knight Island	3- to 5-ft-wide shear zone in graywacke and slate. Surface is limonite-stained. Sulfides mainly pyrrhotite with lesser amounts of chalcopyrite and sphalerite, with quartz in fractures and breccia zones.	70-ft-long adit. No recorded production.	8-ft-wide chip sample contained 0.37% copper and 0.82% zinc. Select grab sample of float rock contained 2.5% copper and 8.3% zinc. Low mineral development potential.
S-39	Sponberg; Sanberg; and Simpson Prospect (copper) sec. 16, T. 02 N., R. 10 E. SM Knight Island	None found.	None located. No recorded production.	Reported prospect (Grant and Higgins, 1909a, Pl. IV) not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-40	Graham & Harrison Prospect (copper, silver) sec. 16, T.02 N., R. 10 E. SM Knight Island	Shear zone cuts greenstone and contains pyrrhotite, pyrite, and chalcopyrite blebs along shear planes. Sulfides found along a 50-ft strike length, but mineralized shear has reportedly been traced for several hundred feet.	Two open cuts and a 60-ft adit reported (Grant and Higgins, 1909a, p. 92). No production.	Random chip sample from open cut contained 1.4% copper and 20 ppm silver. Low mineral development potential.
S-41	Unnamed occurrence (copper, zinc) sec. 10, T. 02 N., R. 10 E. SM Knight Island	Greenstone encloses slate lenses up to 20-ft-wide x 50-ft-long. Slates contain up to 1% chalcopyrite. 25-ft-wide hyaloclastic, aphanitic volcanic layer within the greenstone contained up to 5% chalcopyrite.	None.	25-ft-wide random chip sample of volcanic chert contained 0.24% copper and 1.1% zinc. Low mineral development potential.
S-42	Unnamed prospect (copper) sec. 07, T. 02 N., R. 10 E. SM Knight Island	None found.	None located. No recorded production.	Reported prospect (Grant and Higgins, 1909a, Pl. IV) not located. Mineral development potential unknown.
S-43	Mallard Group (copper) sec. 11, T. 02 N., R. 09 E. SM Knight Island	20-ft-wide limonite-stained shear zone in greenstone. Series of 1- to 5-ft-wide northeasterly trending shears cut the main zone and are exposed for approximately 200 ft along strike. They contain numerous quartz veinlets <1- in.-wide. Sulfides occur as disseminations and stringers, with up to 10% pyrite/pyrrhotite, <5% chalcopyrite, and trace amounts of native copper.	Shallow shaft (Johnson, 1918a, p. 217). Not located.	Random chip samples contained 21 ppm to 2% copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-44	Larsen Prospect (copper) sec. 14, T. 02 N., R. 09 E. SM Knight Island	None found.	None located. No recorded production.	Reported prospect (Grant and Higgins, 1909a, Pl. IV) not located. Mineral development potential unknown.
S-45	Larson; Erickson; and Allen Prospect (copper, zinc) sec. 10, T. 02 N., R. 09 E. SM Knight Island	Underground workings reportedly driven along shattered greenstone that contains pyrrhotite, chalcopyrite, sphalerite, and pyrite(?).	Reported adit of unknown length was driven just above tideline (Johnson, 1918a, p. 218). No recorded production.	Adit was not located. No ore body was outlined in adit. Little mineralization was seen on the dump. Mineral development potential unknown.
S-46	Cathead Bay Claim (copper, zinc) sec. 10 T. 02 N., R. 09 E. SM Knight Island	Highly fractured, limonite-stained greenstone contains 5 to 10% pyrite, trace amounts of chalcopyrite, and numerous quartz veinlets, up to 1/2-in.-thick.	41-ft-long adit. No recorded production.	15-ft chip sample contained 520 ppm copper; random chip sample contained 0.16% zinc. Low mineral development potential.
S-47	Harry Moore Prospect (copper) sec. 12, T. 02 N., R. 09 E. SM Knight Island	Abundant greenstone float rock contains <1% pyrrhotite. Found no significant base metal mineralization.	None located. One 20-ton ore shipment reportedly yielded 1,452 lbs copper (Fellows, undated).	Prospect not located. Mineral development potential unknown.
S-48	Unnamed occurrence (copper) sec. 01, T. 02 N., R. 09 E. SM Knight Island	Limonite-stained, irregularly mineralized zones in greenstone. Stringers of sulfides are concentrated along narrow shears. Up to 20% sulfides; mainly of pyrrhotite and pyrite, with some chalcopyrite.	No workings. No production.	Three chip samples, 5-ft, 3.5-ft, and 12-ft-long, taken. 54 ppm highest copper value. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-49	Hubbard and Elliot Prospect? (copper, nickel) sec. 06, T. 02 N., R. 10 E. SM Knight Island	Several shear zones, to 10-ft-wide, in greenstone contain traces of malachite; 1 to 2% pyrrhotite and <1% chalcopyrite.	Two adits, 63-ft and 10-ft-long. No recorded production.	Two random chip samples across the greenstone dike contained 0.24% and 0.16% copper, 0.70% and 0.50% nickel. One 2.4-ft-wide chip sample across the shear zone contained 0.14% copper. Moderate mineral development potential.
S-50	Copper Coin Group, Russell Ball Copper Co. Prospect (copper, zinc) sec. 31, T. 03 N., R. 10 E. Knight Island	Limonite-stained shear zone, averaging 4-ft-wide, contains massive and stringer sulfides grading 5 to 10% chalcopyrite, 1% sphalerite, and minor amounts of covellite. Quartz veins, from a few inches to 1/2-ft-wide, occur within the shears and contain most of the sulfides. Mineralization can be traced intermittently for 224 ft along strike.	Three adits, 60-ft, 6-ft and one reported to be 12- to 30-ft-long; small open cut and another reportedly 12- to 30-ft-long. Some small ore shipments reported (Grant and Higgins, 1910b, p. 68; Johnson, 1918a, pp. 216-217).	4-ft and 2-ft-wide chip samples across shear zone contained 2.55% and >1.6% copper, respectively. 13% copper in a 1.2 ft chip. Inferred and indicated reserves: 5,900 tons at 2.4% copper. Moderate mineral development potential.
S-51	Hemple Prospect (copper) sec. 25, T. 03 N., R. 09 E. SM Knight Island	Several 3-ft-wide shear zones along shoreline. Some, intensely fractured and brecciated, contain quartz and epidote veinlets. Minor pyrrhotite noted.	No workings were located. No recorded production.	3-ft chip sample contained 50 ppm copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-52	Knight Island Copper Mining Co. Prospect (copper, nickel) sec. 32, T. 03 N., R. 10 E. SM Knight Island	Major shear zone cuts greenstone. Up to 10% disseminated pyrrhotite and 5% chalcopyrite localized in shear zones.	Three adits, 78-ft, 113-ft, and 117-ft-long. Small prospect pit. A reported 60-ft-deep shaft, 15 ft tunnel, and another long adit (Brooks, 1912, p. 28; Moffit and Fellows, 1950, pp. 71-72) were not located. Production: one ton producing 240 lbs of copper, 3 oz silver, and 2 oz gold.	4-ft chip sample across shear zone contained 1.6% copper. Random chip sample contained 1.0% copper and 0.83% nickel. Moderate mineral development potential.
S-53	Twentieth Century; Knight Island Copper Co. Prospect (copper) sec. 29, T. 03 N., R. 10 E. SM Knight Island	4- to 5-ft-wide shear zone in greenstone encloses 2- to 6-in.-wide pyrrhotite and chalcopyrite-bearing zone. Mineralization is exposed along strike for 30 ft.	68-ft adit in shear zone. No production.	4-ft-wide chip sample contained 2.6% copper. Inferred reserves: 30 tons. Moderate mineral development potential.
S-54	Unnamed prospect; Alhambra, U & I, and Ura Claims (copper) sec. 28, T. 03 N., R. 10 E. SM Knight Island	Shale and slate are locally sheared, limonite-stained and contain quartz veinlets. Trace amounts of pyrite noted.	Two small open cuts on east side of a stream at the 585 ft level. No production.	5-ft chip sample from an open cut contained 68 ppm copper. Low mineral development potential.
S-55	Unnamed prospect (copper) sec. 27, T. 03 N., R. 10 E. SM Knight Island	Several shear zones, locally silicified, and up to 12-in.-wide, cut greenstone, and contain disseminated pyrite and pyrrhotite. Chalcopyrite blebs occur in greenstone.	Superficial pits and trenches are reported (Richter, 1965, p. 24). No production.	Random chip sample of mineralized greenstone contained 1.42% copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-56	Knight Island Alaska Copper Co. (copper, silver, zinc) sec. 28, T. 03 N., R. 10 E. SM Knight Island	Northeast-trending shear zone, up to 20-ft-wide, in greenstone and porphyritic greenstone, is intermittently exposed for 200 ft along strike. Massive sulfide zone, 1-ft-wide, is enclosed within a 5-ft-wide disseminated sulfide zone. Sulfides: pyrrhotite, 5 to 20% chalcopyrite. Trace of native copper.	758-ft-long adit with several open cuts on the hill above. 200 tons of ore on dump.	5-ft-wide chip sample across an open cut contained 0.15% copper. 3-ft chip sample contained 0.20% copper. Selected grab samples of massive sulfides contained 1.3% copper, 11 ppm silver and 0.30% zinc. Low mineral development potential.
S-57	Unnamed prospect (copper) sec. 21, T. 03 N., R. 10 E. SM Knight Island	Silicified, chalcopyrite, and covellite-bearing stratabound(?) zones, 6-in.- to 3-ft-thick, in slates are exposed intermittently for 100 ft. Slates are part of a 300 x 1,600-ft body of sedimentary rocks enclosed within greenstone.	4 x 20-ft open cut. No production.	Random chip sample contained 3.8% copper over a 1-ft width. Low mineral development potential.
S-58	Nellie Group Claims (copper) sec. 21, T. 03 N., R. 10 E. SM Knight Island	9-ft-wide shear zone in greenstone contains 2-in.-wide band of sulfides.	Reported workings consist of five open cuts, a 36-ft-long adit, and a 6-ft-deep shaft (Johnson, 1918a, p. 217).	Prospect not located. Random chip sample of a pyrrhotite-bearing sheared greenstone contained 150 ppm copper. Low mineral development potential.
S-59	Jonesy Claims Bald Eagle Claim (copper) sec. 17, T. 03 N., R. 10 E. SM Knight Island	60-ft-wide set of shear zones in greenstone, with shear zones up to 16-ft-wide, is exposed underground on strike for 150 ft. Shears contain pyrrhotite, and locally up to 5% chalcopyrite.	254-ft of workings in one adit; open cut nearby. Small ore shipments were made. A few tons of ore are stockpiled on the shore below the adit.	4-ft-long chip sample contained 3.3% copper. Inferred reserves: 1300 tons. Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-60	Unnamed occurrence (copper) sec. 18, T. 03 N., R. 10 E. SM Knight Island	Reported outcrop of schistose greenstone contains quartz, pyrite, epidote, and minor chalcopyrite (Richter, 1965, p. 30).	None reported.	Prospect not located. Mineral development potential unknown.
S-61	Knight Island Consolidated Copper Co. Prospect (copper) sec. 18, T. 03 N., R. 10 E. SM Knight Island	5.5-ft-wide shear zone of unknown length contains chlorite schist and massive quartz. Pyrite and a trace of chalcopyrite present in quartz.	10-ft-deep shaft. Small shipment made (Fellows, undated).	5.5-ft-wide sample across shear zone contained 470 ppm copper. Low mineral development potential.
S-62	Monarch Prospect (copper) sec. 18, T. 03 N., R. 10 E. SM Knight Island	Shear zone of unknown length crops out above a caved adit and contains pyrite, covellite, trace chalcopyrite.	Caved adit reportedly contains 350 ft of workings (Grant and Higgins, 1909, p. 89). No production.	1-ft chip sample of shear zone contained 360 ppm copper. No orebody was previously defined. Mineral development potential unknown.
S-63	Unnamed occurrence (copper) sec. 08, T. 03 N., R. 11 E., SM Knight Island	Reported lenses of massive pyrite and minor pyrrhotite up to 2-in.-wide; veinlets of pyrite, quartz, and epidote in schistose greenstone (Richter, 1965, p. 30).	None. No production.	Prospect not located. Mineral development potential unknown.
S-64	Unnamed occurrence (zinc, copper) sec. 09, T. 03 N., R. 10 E. SM Knight Island	Shear zone in a 2.5 x 25-ft outcrop of limonite-stained schistose greenstone contains sphalerite, chalcopyrite, pyrrhotite, and pyrite. Shear zone is exposed intermittently for several hundred feet along strike.	Few minor diggings and scrapings. No production.	2.5-ft-wide chip sample contained 5.0% zinc and 0.8% copper. Moderate mineral development potential for zinc.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-65	Pandora Prospect (copper) sec. 10, T. 03 N., R. 10 E. SM Knight Island	Massive and stringer sulfide zones in sheared greenstone. Zones up to 15-ft-wide with an aggregate width of 90 ft. They are intermittently exposed for 250 ft along strike and contain pyrrhotite, chalcopyrite, pyrite.	95-ft-deep shaft; 150-ft of crosscuts, several open cuts. Reported small ore shipment (Grant and Higgins, 1909a, p. 93).	5-ft-wide chip sample contained 4% copper. Inferred reserves: 85,000 tons at 1.30% copper. Moderate mineral development potential.
S-66	Marsha Bay Claims (copper) sec. 14, T. 03 N., R. 10 E. SM Knight Island	Sheared chert layers cut by basaltic dikes. Dikes locally contain up to 5% disseminated pyrrhotite and traces of chalcopyrite.	Small prospect pit reported (Richter, 1965, p. 24). No production.	Five chip samples from sheared greenstone and basaltic dikes contained up to 340 ppm copper. Low mineral development potential.
S-67	Rua Cove Prospect; Copper Bullion (copper, zinc, iron, sulfur) sec. 13, T. 03 N., R. 10 E. SM Knight Island	Parallel massive and stringer sulfide lenses in sheared greenstone. Thickest lens is up to 50-ft-wide, extends 200-ft vertically, and 400-ft along strike. Sulfides include pyrrhotite, chalcopyrite, and sphalerite.	Upper adit contains 2,420-ft of drift and crosscut; lower adit is 590-ft-long. Open cuts expose mineralization above adits. 1,000 lbs shipped for testing assayed 1.68% copper.	Reserves - Measured: 25,000 tons at 1.25% copper. Indicated: 1,100,000 tons at 1.25% copper. Inferred: 200,000 tons at 1.25% copper. Total 1,325,000 tons of estimated reserves. Sulfide body also contains 42.4% iron, 25.8% sulfur, 0.005 oz gold/ton, and 0.1 oz silver/ton. Two random samples averaged 0.65% zinc. Moderate mineral development potential.
S-68	Unnamed occurrence (copper) sec. 12, T. 03 N., R. 10 E. SM Knight Island	18-ft-wide shear zone is reported (Tysdal, 1978). Diorite (?) near sheared greenstone contains pyrrhotite and chalcopyrite; a 9-in.-thick lens contains 12% sulfides.	None. No reported production.	0.5-ft-wide chip sample of sheared diorite(?) contained 0.45% copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-69	H. A. Claims (copper) sec. 11, T. 03 N., R. 10 E. SM Knight Island	None found.	None located. No recorded production.	Reported prospect (State of Alaska "Kardex", 1982) not located. Mineral development potential unknown.
S-70	Unnamed occurrence (copper) sec. 04, T. 03 N., R. 10 E. SM Knight Island	Minor amounts of pyrite occur at the contact between a narrow chert lens and graywacke.	None. No reported production.	Random chip sample contained 125 ppm copper. Low mineral development potential.
S-71	Fergusson; Johnson and Harvey Prospect (copper) sec. 05, T. 03 N., R. 10 E. SM Knight Island	No mineralization found.	None found. No recorded production.	Reported prospect (Grant and Higgins, 1909a, Pl. IV) not located. Mineral development potential unknown.
S-72	Kaczanowski and Wilson Prospect (copper) sec. 31, T. 04 N., R. 10 E. SM Knight Island	3-in-thick, nearly flat-lying, basalt layer is sub-parallel to pillow flow attitudes. Sulfides: 10% pyrrhotite, 1% chalcopyrite.	19-ft-long adit. No production.	Chip sample contained 175 ppm copper. Low mineral development potential.
S-73	Unnamed prospect (copper, zinc) sec. 28, T. 04 N., R. 10 E. SM Knight Island	80-ft-wide shear zone cutting greenstone contains minor pyrite.	Two adits 5 and 6 ft long. No production.	Random chip sample contained 95 ppm copper and 150 ppm zinc. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-74	Wallace; McPherson, and Valentine Prospect (copper) sec. 27, T. 04 N., R. 10 E. SM Knight Island	No mineralization found.	None found. No recorded production.	Reported prospect (Grant and Higgins, 1909, P. 92) not located. Mineral development potential unknown.
S-75	Unnamed prospect (copper) sec. 26, T. 04 N., R. 10 E. SM Knight Island	No mineralization found.	30-ft-long adit reported (Richter, 1965, p. 30). No recorded production.	Prospect not located. Mineral development potential unknown.
S-76	Crown Copper Co. Prospect (copper, zinc) sec. 21, T. 04 N., R. 10 E. SM Knight Island	Greenstone reportedly contains quartz, pyrite, sphalerite, and chalcopyrite-filled fractures.	25-ft, 30-ft, and 50-ft adits reported (Grant and Higgins, 1909a, p. 93, Johnson, 1918a, p. 212).	Prospect not located. Mineral development potential unknown.
S-77	Unnamed prospect (copper) sec. 21, T. 04 N., R. 10 E. SM Knight Island	No mineralization found.	None located. No recorded production.	Reported prospect (Grant and Higgins, 1909a, p. 93) not located. Mineral development potential unknown.
S-78	Malack Prospect (copper) sec. 21, T. 04 N., R. 10 E., SM Knight Island	No mineralization found.	None located. No recorded production.	Reported prospect (Grant and Higgins, 1909a, p. 88) not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-79	Boyle Prospect (copper) sec. 19, T. 04 N., R. 10 E. SM Knight Island	No mineralization found.	None located. No recorded production.	Reported prospect (Grant and Higgins, 1909a, Pl. IV) not located. Mineral development potential unknown.
S-80	Big Passage Copper Mining Co. Prospect (copper) sec. 14, T. 04 N., R. 10 E. SM Knight Island	No mineralization found.	None located. No recorded production.	Reported prospect (Grant and Higgins, 1909a, Pl. IV) not located. Mineral development potential unknown.
S-81	Knights Island Mining and Development Co. Prospect (copper, zinc, lead) sec. 15, T. 04 N., R. 10 E. SM Knight Island	Shear zones, up to 4-ft-wide, in pillow basalts contain pyrrhotite and, locally, up to 20% chalcopyrite. Pyrite, sphalerite, quartz, epidote, and chlorite occur in minor amounts. One shear zone contains trace amounts of native copper.	Four adits, 28-ft, and 6-ft-long, one reported to be 75-ft-long (Johnson, 1918a, p. 212) is flooded, and one reported to be 160-ft-long (Grant and Higgins, 1909a, p. 93) is caved. No recorded production.	0.8-ft-wide chip sample across massive sulfide lens contained 3.25% copper. 1-ft-wide chip sample across shear zone contained 0.48% copper, 0.97% zinc and 0.83% lead. Moderate mineral development potential.
S-82	Von Gunther or Malack(?) Prospect (copper) sec. 02, T. 04 N., R. 10 E. SM Knight Island	2-in.- to 2-ft-wide quartz-breccia sulfide veins in porphyritic greenstone, contain up to 10% pyrite, <1% chalcopyrite, some pyrrhotite, malachite, epidote, and trace of sphalerite.	Two 10-ft-long adits and a 14-ft open cut. No recorded production.	Three random chip samples contained 0.98%, 1.0%, and 1.9% copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-83	Singletary Prospect (copper) sec. 03, T. 04 N., R. 10 E. SM Knight Island	Mineralization not found.	None located. No recorded production.	Reported prospect (Grant and Higgins, 1909a, Pl. IV) not located. Mineral development potential unknown.
S-84	Unnamed prospect (copper) sec. 26, T. 05 N., R. 10 E. SM Disk Island	2.5-ft-wide, 10-ft-long greenstone breccia zone contains quartz, epidote, pyrite, and chalcopyrite.	10-ft-long adit. No production.	3-ft-long chip sample of brecciated greenstone contained 0.43% copper. Low mineral development potential.
S-85	Unnamed prospect (copper, zinc) sec. 08, T. 05 N., R. 11 E. SM Eleanor Island	Series of mineralized shear zones and faults, averaging 1-ft-wide, cut mudstone and contain pyrrhotite and chalcopyrite.	Two adits connect underground; total 80 ft of workings. No production.	5-ft-wide chip sample contained 515 ppm copper and 460 ppm zinc. Low mineral development potential.
S-86	Unnamed occurrence (gold) sec. 06, T. 02 N., R. 08 E. SM Chenega Island	Quartz vein in sandstone (Tysdal, 1978). Several quartz veinlets, up to 1-in.-wide and extending a few feet, were located. One veinlet contained hematite.	None.	Quartz vein is reported to contain 5 ppm gold. 1-in.-long chip sample of a hematite-bearing quartz veinlet contained <0.03 ppm gold. Low mineral development potential.
S-87	Unnamed occurrence* (chrome, nickel, manganese, iron) sec. 28, T. 03 N., R. 08 E. SM Chenega Island	Greenstone with relict pillow structure is interbedded with shale and contains quartz stringers, epidote blebs, and a trace of pyrite.	None.	Highest values from two random chip samples were 195 ppm chromium, 175 ppm nickel and 1100 ppm manganese. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-88	Unnamed occurrence (iron, manganese, copper) sec. 22, T. 03 N., R. 08 E. SM Chenega Island	15-ft-wide shear zone in greenstone contains minor iron stains and epidote with traces of disseminated pyrite. Few quartz veins and lenses have maximum width of 4-in. and 2-ft length.	None.	15-ft chip sample contained 125 ppm copper and 1400 ppm manganese. Random chip sample contained 115 ppm copper and 1600 ppm manganese. Low mineral development potential.
S-89	Unnamed occurrence (chrome, copper, nickel) sec. 16, T. 03 N., R. 08 E. SM Chenega Island	50-ft-wide area of slightly sheared and massive greenstone. Shale interbed contain disseminated pyrite and some quartz veins, approximately 1-in.-wide, parallel to bedding.	None.	Highest values from three random chip samples were 580 ppm chromium, 100 ppm copper and 150 ppm nickel. Low mineral development potential.
S-90	Unnamed occurrence* (manganese) sec. 12, T. 03 N., R. 08 E. SM Chenega Island	Rhodochrosite, pyroxmangite and magnetite occur within a 6 x 50-ft outcrop of calcareous chert interbedded with calcareous shales and phyllites.	None.	3.5-ft-wide chip sample contained 17% manganese. Select grab sample contained 37% manganese and 200 ppm zinc. Moderate mineral development potential.
S-91	Unnamed prospect (gold, silver, lead, zinc, copper) sec. 29, T. 03 N., R. 07 E. SM Jackpot Bay	Quartz vein 20- to 28-in.-wide, in graywacke and slate, has a 6- to 11-in.-thick central zone that contains arsenopyrite, galena, and sphalerite (Grant, 1909, p. 97).	Reported open cut penetrates 8-ft into quartz vein and extends 12-ft up the cliff side. Not located. No recorded production.	Samples of quartz vein reportedly averaged 1.5 oz gold/ton and 3.1 oz silver/ton. Float rock contained 0.2% copper, 0.5% zinc, and 0.05% lead. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-92	Unnamed occurrence (copper) sec. 27, T. 05 N., R. 05 E. SM Falling Glacier	Limonite-stained, finely laminated siliceous mudstone near granite contact is locally cut by quartz-feldspar veinlets. Mudstone contains approximately 2% pyrite as disseminations and fracture fillings. A trace of chalcopyrite present.	None.	Random chip sample of mudstone contained 96 ppm copper. Low mineral development potential.
S-93	Unnamed occurrence (copper) sec. 35, T. 05 N., R. 05 N. SM Falling Glacier	Limonite-stained granite, with localized bleached zones, and several shears up to 1/2-in.-wide, locally contains up to 2% pyrite, pyrrhotite, and arsenopyrite. Quartz veins, a few inches wide, cut the granite.	None.	Two random chip samples contained 77 ppm and 84 ppm copper. Low mineral development potential.
S-94	Unnamed occurrence (gold, antimony) sec. 01, T. 04 N., R. 06 E. SM Derickson Bay	Granite contains a few small localized limonite-stained zones. Mineralization not noted.	None.	No data. Mineral development potential unknown.
S-95	Blue Fiord Prospect (gold, silver, arsenic) sec. 28, T. 05 N., R. 07 E. SM Port Nellie Juan	Fault exposed for 16-ft underground; barren quartz stringers occur in hanging wall. 4-in.-wide vuggy quartz vein exposed in adit face is terminated by the fault. 1-ft-wide quartz vein exposed near portal contains minor amounts of arsenopyrite and pyrrhotite.	16-ft-long adit with a winze near face. No recorded production.	0.3-ft-long chip sample of vuggy quartz contained <0.005 oz gold/ton and <0.2 oz silver/ton. Random chip sample across a 1-ft-wide quartz vein contained 0.21% arsenic. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-96	Unnamed prospect (gold) sec. 23, T. 05 N., R. 07 E. SM McClure Bay, Port Nellie Juan	Interbedded graywacke and shale locally contain vuggy quartz veinlets which average 1-in.-wide and contain 1 to 5% pyrite localized along fractures.	None found. No recorded production.	Reported prospect (Johnson 1914b, p. 237) not located Mineral development potential unknown.
S-97	Unnamed occurrence (gold, silver, arsenic) sec. 17, T. 05 N., R. 08 E. SM Main Bay	Series of quartz veins, from 3-in.- to 1.3-ft-thick are exposed intermittently for 70-ft along strike. 2-in.-wide zone on one quartz-vein margin contains clots of arsenopyrite and trace amounts of pyrite. Sulfide zone extends for approximately 20 ft along strike.	No workings. No production.	Random chip sample of arsenopyrite-bearing quartz contained 0.54 ppm gold and 0.40 ppm silver, and 7.9% arsenic. Low mineral development potential.
S-98	Unnamed occurrence (tungsten) sec. 15, T. 07 N., R. 09 E. SM Perry Island	Several granite and aplite dikes occur at the contact of granite with silicified mudstone/chert. Minor limonite-staining occurs locally along with some epidote and traces of fine-grained pyrite.	None.	2-ft chip sample from contact zone contained 43 ppm tungsten; random chip contained <5 ppm tungsten. Low mineral development potential.
S-99	Unnamed prospect (copper) sec. 20, T. 07 N., R. 09 E. SM Perry Island	Two 3-in.-wide epidote veinlets, with silicified alteration borders, occur in granite. Limonite-stained zone contains 1/16- to 1/8-in.-wide epidote veinlets.	4 x 8-ft-long open cut.	Random chip and 2.5-ft-wide chip sample contained 1 ppm copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-100	Unnamed occurrence (tungsten) sec. 01, T. 07 N., R. 08 E. SM Perry Island	40-ft-wide quartz stockwork zone in granite contains aplite veins up to 1-in.-wide. Some veins have been brecciated and silicified.	None.	Random chip sample contained 99 ppm tungsten. Low mineral development potential.
S-101	Unnamed occurrence (copper) sec. 32, T. 07 N., R. 08 E. SM Culross Island	20 x 30-ft exposure of quartz diorite(?) contains up to 10% combined pyrite, pyrrhotite, and chalcopyrite, as clots and disseminations.	None.	Random chip sample contained 0.13% copper. Low mineral development potential.
S-102	Culross Mine (gold, silver) sec. 35, T. 08 N., R. 07 E. SM Culross Island	4- to 8-ft-wide shear zone contains banded quartz veins from a few inches to 3-ft-wide. It was mined irregularly for 410 ft along strike. Quartz-chlorite semischist wallrock contains occasional pillow outlines. Quartz veins contain arsenopyrite, sphalerite, galena, chalcopyrite, visible gold, and calcite.	665-ft-long adit has a 180-ft raise to the surface. Second adit is 50-ft-long. Workings were connected by a cable tramway to a 10-ft Lane mill at the shoreline. Reported production: 62 oz gold, 53 oz silver.	BOM chip sampling indicated grades of 0.06 oz gold/ton and <0.2 oz silver/ton. Other samples contained to 14.8 gold and 6.5 ppm silver. Indicated reserves: 8,600 tons at 5.5 ppm gold and 3.4 ppm silver. Moderate mineral development potential.
S-103	John Sells Prospect (gold) sec. 34, T. 08 N., R. 07 E. SM Culross Island	Quartz veins are exposed intermittently for 270 ft along shear zone in mudstone, shale, slate. Vein widths range from a few inches to 13.5 ft, but average approximately 1 ft. Mineralization consists of zones of up to 1% disseminated and stringer pyrite, visible gold; ribbon-banded quartz was found in float rock near quartz outcrop.	100-ft-long adit; 15-ft open cut; several small pits. Reported 32-ft-long adit (Roehm, 1938) was not found. Reportedly a test shipment of gold-bearing quartz was made (Johnson, 1918c, pp. 187-188).	Of eleven samples; nine had <.005 oz gold/ton, one 9-ft chip sample contained 0.086 oz gold/ton, and one 2.5-ft chip sample across a quartz vein contained 0.374 oz gold/ton. Inferred reserves: 180 tons at 0.05 oz gold/ton. Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-104	Unnamed occurrence (silver, copper, lead, zinc, gold, arsenic) sec. 34, T. 08 N., R. 06 E. SM Surprise Cove	3- to 15-ft-wide shear zones, exposed along strike for up to 1,000 ft, contain several quartz and quartz-calcite veins. Sheared metasediments and quartz veins contain disseminated and podiform masses of pyrite, pyrrhotite, chalcopyrite, sphalerite, and galena. Shear zone averages 1% sulfides.	None.	8-in. chip sample across quartz vein contained 130 ppm silver. Float rock sample contained 140 ppm silver, 4.25% copper, 3.5% arsenic, and 0.3% zinc. Moderate mineral development potential.
S-105	Finski Bay (copper) sec. 24, T. 11 S., R. 10 W. CRM	Pyrite occurs in three 0.5- to 1-ft-wide quartz veins in pillow basalts.	70-ft-long adit. No reported production.	Two grab samples contained 11 and 70 ppm copper. Low mineral development potential.
S-106	Nelson, Rystrom, Collins (copper) sec. 30, T. 11 S., R. 10 W. CRM	Quartz and pyrite occur in sheared pillow basalts and greenstones.	No data. No reported production.	Not located. Mineral development potential unknown.
S-107	Jensen, Wallace, Kilborn (copper) sec. 30, T. 11 S., R. 10 W. CRM	Quartz veinlets and disseminated pyrite, chalcopyrite, and pyrrhotite in sheared pillow basalts and greenstones.	12-ft-long trench, adit (caved). No reported production.	Six grab samples contained from 2 ppm to 0.88% copper A chip sample contained 420 ppm copper. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-108	Jensen; Portsmouth; Scotia Bell (copper, silver) sec. 25, T. 11 S., R. 11 W. CRM	0.5- to 10-ft-wide shear zone, contains chalcopyrite and pyrite in quartz veins in pillow basalts and greenstones.	Two adits, 222-ft and 20-ft-long. No reported production.	Two chip samples from 222-ft-long adit contained from 300 and 600 ppm copper. Grab sample contained 3% copper and 40 ppm silver. Three grab samples from the 20-ft-long adit contained from 1.83 to 2.65% copper and 8 to 19 ppm silver. Low mineral development potential.
S-109	Unnamed occurrence (copper) sec. 25, T. 11 S., R. 11 W. CRM	No data.	None.	Not located. Mineral development potential unknown.
S-110	Unnamed occurrence (copper) sec. 03, T. 12 S., R. 11 W. CRM	Quartz veinlets, up to 0.3-ft-wide, in mafic sheeted dikes, contain pyrite and chalcopyrite.	None.	Five grab samples from area contained from 10 ppm to 0.5% copper. Mineral development potential unknown.
S-111	Chamberlain (copper) sec. 33, T. 09 N., R. 11 W. CRM	Chalcopyrite in quartz veins in greenstone.	No data. No reported production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-112	Chamberlain Bay (copper, cobalt) sec. 33, T. 11 S., R. 11 W. CRM	Quartz veins, from a few inches to 2-ft-wide, cut mafic sheeted dikes. Pyrite, pyrrhotite, and chalcopyrite are present as solid streaks and lenses 1/2- to 14-in.-wide in the quartz veins.	Seven trenches, total length 150 ft. No reported production.	Four chip samples contained from 650 ppm to 1.25% copper and 70 ppm to 0.2% cobalt. Six grab samples contained from 60 ppm to 0.5% copper and 50 ppm to 0.1% cobalt. A bulk sample contained 0.85% copper and 0.11% cobalt. Inferred reserves: 400 tons at 0.72% copper. Moderate mineral development potential.
S-113	Byers; Fairmont Island (zinc, copper, gold) sec. 13, T. 09 N., R. 11 E. SM	2-ft-wide shear zone in graywacke. Massive sulfides zones contain pyrrhotite, pyrite, chalcopyrite, and sphalerite.	No data. No reported production.	Chip sample contained 1.7% zinc, 0.1% copper, and 1.59 ppm gold. Inferred reserves: 10 tons at 0.1% copper, 1.7% zinc, and 1.59 ppm gold. Low mineral development potential.
S-114	Gilnow (copper) sec. 23, T. 10 N., R. 12 E. SM	100-ft-wide shear zone, contains disseminated pyrrhotite, cuts slate.	No data. No reported production.	Two grab samples contained 33 and 45 ppm copper. Low mineral development potential.
S-115	Blackjack; Cedar Bay Zinc Mine; Wells Bay Copper & Gold Mining Co. (zinc, copper, lead, silver) sec. 18, T. 10 N., R. 12 E. SM	12-ft-wide shear zone in graywacke is traceable for 1 mi along strike. Zone cuts Cedar Bay granitic pluton. Sulfide mineralization includes pyrite, pyrrhotite, sphalerite, and chalcopyrite.	Two adits, 42-ft and 280-ft-long. No reported production.	Thirteen grab samples contained from 22 ppm to 9% zinc, 6 ppm to 0.57% copper, 10 ppm to 0.29% lead, and 0.3 to 30 ppm silver. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-116	Glendenning (copper) sec. 08, T. 10 N., R. 12 E. SM	6- to 70-ft-wide shear zone in silicified graywacke. Graywacke is in contact with the Cedar Bay granitic pluton. Mineralization consists of veinlets of quartz, pyrite, and chalcopyrite.	700-ft-long adit. No reported production.	Three chip samples contained from 30 to 825 ppm copper. Low mineral development potential.
S-117	Long Bay* (copper, silver) sec. 33, T. 11 N., R. 12 E. SM	10-ft-wide, shear zone contains 1/2-in.-wide veinlets of chalcopyrite.	None.	Grab sample contained 0.6% copper and 26 ppm silver. Low mineral development potential.
S-118	Beachcomber, Anderson (copper, gold, silver, zinc) sec. 05, T. 10 N., R. 11 E. SM	Gold, silver, copper, and zinc occur in quartz vein in limestone.	65-ft-long adit reported. No reported production.	Not located. Mineral development potential unknown.
S-119	Siwash Bay, Wagner (copper) sec. 11, T. 10 N., R. 11 E. SM	No data.	No data. No reported production.	Not located. Mineral development potential unknown.
S-120	H. Wilson (copper) sec. 11. T. 10 N., R. 10 E. SM	12-ft-wide cupriferous vein reportedly cuts graywacke.	One adit reported. No reported production.	Not located. Mineral development potential unknown.
S-121	Stewart & Fish (gold) sec. 36, T. 09 N., R. 09 E. SM	Mineralization reportedly consists of a gold-bearing quartz vein in metasiltstone.	None	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-122	Gray Brothers (gold, silver) sec. 22, T. 09 N., R. 09 E. SM	Extensive quartz vein, which pinches and swells from 2-in.- to 10-ft, occupies a 10in.- to 20-ft-wide shear zone in interbedded slates, phyllites, and metasandstones. Pyrite, arsenopyrite, and pyrrhotite are present.	15-ft-long trench; 40-ft adit; prospect pit. No recorded production.	Four grab and chip samples contained from a trace to 0.02 oz gold/ton, and a trace to 0.01 oz silver/ton. Low mineral development potential.
S-123	Eldorado (gold, silver) sec. 15, T. 09 N., R. 09 E. SM	12- to 48-in.-wide quartz vein in slate and metasandstone traceable for 400 ft along strike. Calcite, arsenopyrite, pyrrhotite, pyrite, and gold are present.	375 ft of workings are reported (Johnson, 1915b, p. 139). No recorded production.	Not located. Three grab samples taken near reported prospect contained a trace of gold and a trace to 0.04 oz silver/ton. Mineral development potential unknown.
S-124	Unnamed occurrence* (gold, silver, arsenic) sec. 2, T. 09 N., R. 09 E. SM	Numerous quartz veins associated with Contact fault. En echelon veins west of the ridge occur in 20- to 200-ft-wide shear zones. Veins contain disseminated and podiform pyrite and chalcopyrite. Veins east of ridge are softer, more poorly exposed, and contain arsenopyrite and pyrite.	None.	Nine samples contained trace amounts of gold, from a trace to 0.03 oz silver/ton, and from <10 to 2,600 ppm arsenic. Low mineral development potential.
S-125	Fish; Collins and Stewart (gold, silver) sec. 31, T. 09 N., R. 08 E. SM	Bluish-white quartz vein, up to 2-ft-wide. Occurs along the contact of the Esther pluton (Johnson, 1914a, p. 235). Quartz occupies a shear zone. Pyrrhotite, chalcopyrite, and gold are present.	40-ft-long adit reported (Johnson, 1914a, p. 234). No recorded production.	Not located. Quartz vein near reported location contained a trace of gold and 0.01 oz silver/ton. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-126	Kavanaugh & Boon; Esther Group (gold, silver) sec. 36, T. 09 N., R. 07 E. SM	Stringers and irregular masses of quartz occur along a 5- to 6-ft-wide shear zone (Johnson, 1914a, p. 234). Vein contains quartz, pyrrhotite, galena, chalcopyrite, pyrite, and gold.	8-ft-long adit reported (Roehm, 1938). No recorded production.	Not located. Assays to 0.75 oz gold/ton reported. Mineral development potential unknown.
S-127	Tolson and Stanton (gold) sec. 23, T. 10 N., R. 08 E. SM	Stringers and lenses of quartz, up to 2-ft-wide, occur in 2- to 5-ft-wide shear zone in slate and metasandstones (Johnson, 1914a, p. 225). Arsenopyrite, sphalerite, pyrite, pyrrhotite, and gold are present.	155-ft-long adit reported (Johnson, 1914a, p. 225); stripping; one arrastre. No recorded production.	Not located. Mineral development potential unknown.
S-128	Carter, OK #1, New York (gold) sec. 23, T. 10 N., R. 08 E. SM	Series of quartz stringers and lenses occupy parallel shears (Johnson, 1914a, p. 225). Vein quartz is reported to carry considerable fine gold and assay "well."	Short open cut reported in 1913 (Johnson, 1914a, p. 225). No recorded production.	Not located. Mineral development potential unknown.
S-129	Golden Eagle (gold, silver) sec. 14, T. 10 N., R. 08 E. SM	Mineralized quartz veins and stringers, up to 4-ft-wide, in slates and metasandstones. Pyrrhotite and arsenopyrite are present.	Two adits, one with 195-ft of workings, and another 45-ft-long. Recorded production is 28 oz gold and 1 oz silver.	Four chip samples contained a trace to 0.06 oz gold/ton and a trace to 0.01 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-130	Keynote and Arrowhead Group (gold, silver) sec. 15, T. 10 N., R. 08 E. SM	At the Keynote Group a shattered quartz vein contains arsenopyrite and pyrite (Johnson, 1914a, pp. 223-225). At the Arrowhead Group, reportedly stringers and masses of quartz along a vertical shear zone are traceable for several hundred feet (Johnson, 1914a, pp. 223-225). An 8-ft-wide quartz vein is exposed along the shore line.	Minor stripping and shallow shaft reported at the Keynote. 20-ft adit and some stripping reported at the Arrowhead Group (Johnson, 1914a, pp. 223-225). No recorded production.	Not located. Stream sediment sample near the Keynote contained 0.06 ppm gold and 10 ppm silver. Mineral development potential unknown.
S-131	Griset (gold, silver) sec. 11, T. 10 N., R. 08 E. SM	A quartz vein averaging 18-in.-wide in a shear zone 33-in.-wide and traceable for 300 ft.	10-ft adit and 6-ft shaft reported (Johnson, 1914a, p. 223). No recorded production.	Not located. Mineral development potential unknown.
S-132	Golden Wonder #1; Lucky Swede (gold, silver) sec. 11, 12, T. 10 N., R. 08 E. SM	At the Golden Wonder, 1- to 10-ft-wide zone of quartz stringers and veins with minor calcite recement slate and metasandstone fragments along a 2 1/2- to 4-ft-wide shear zone. Galena, arsenopyrite, and gold are present. Mineralization at the Lucky Swede is reportedly similar (Johnson, 1914a, p. 222).	10-ft-long adit and surface stripping reported (Johnson, 1914a, p. 222). No recorded production. Minor production reported.	Not located, may be a part of S-133. Mineral development potential unknown.
S-133	Mountain; Golden Wonder (gold, silver) sec. 12, T. 10 N., R. 08 E. SM	Quartz cements crushed slate in shear zone. Quartz lenses, to 3-ft-wide, contain pyrite, arsenopyrite, chalcopyrite, pyrrhotite, sphalerite, and gold.	121-ft adit (accessible), second adit (caved); 30-ft-long open cut. No recorded production. Minor past production possible.	Eight chip samples contained from a trace to 1.6 oz gold/ton, 0.01 to 0.93 oz silver/ton. Grab sample contained 0.20 oz gold/ton and 0.06 oz silver/ton. Reserves: 500 tons. Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-134	Frondenberg & Bloom (gold) sec. 02, T. 10 N., R. 08 E. SM	10- to 18-in.-wide, 45-ft-long quartz vein occurs along a shear zone in metasandstone (Johnson, 1914a, pp. 221-222).	Minor stripping reported (Johnson, 1914a, pp. 221-222). No recorded production.	Not located. Mineral development potential unknown.
S-135	Mayflower (gold, silver) sec. 01, T. 10 N., R. 08 E. SM	2- to 9-in.-wide quartz vein in an 8-ft-wide shear zone in slates and metasandstones contains minor amounts of arsenopyrite.	6 x 9-ft open cut. No recorded production.	Grab sample contained 0.02 oz gold/ton, 0.01 oz silver/ton, and 850 ppm arsenic. Low mineral development potential.
S-136	Nugget (gold, silver) sec. 12, T. 10 N., R. 08 E. SM	Main quartz vein is from 4- to 20-in.-wide and occurs in a 4- to 30-in.-wide shear zone in interbedded calcareous slate and metasandstone. Minor amounts of galena, pyrrhotite, chalcopyrite, pyrite, and gold are present.	160-ft-long adit; one shaft; and surface trenching. No recorded production, but minor production reported.	Ten chip samples contained a trace to 1.38 oz gold/ton and a trace to 0.3 oz silver/ton. Overall grade was low. Reserves: 900 tons. Moderate mineral development potential for a small operation.
S-137	Gold Queen (gold) sec. 06, T. 10 N., R. 09 E. SM	No data.	90-ft-long adit reported (Johnson, 1915b, p. 136).	Not located. Mineral development potential unknown.
S-138	Whistler; Perseverence; Bluebell (gold, silver) sec. 05, T. 10 N., R. 09 E. SM	Several quartz veins, up to 8-ft-wide, and traceable for a considerable distance, contain galena, pyrite, and chalcopyrite (Johnson, 1914a, p. 214).	40-ft-long adit on Bluebell; 10-ft shaft on Whistler; surface trenching reported (Johnson, 1914a, p. 214).	Not located. Two samples from the reported location contained a trace of gold and silver. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-139	Beauty Bird; Mohawk (gold) sec. 06, T. 10 N., R. 09 E. SM	A lenticular group of quartz veins with stringer zones up to 4-in.-wide, and veins up to 3-ft-wide are reportedly present (Stewart, 1931, p. 56).	108-ft-long adit; 50-ft-deep shaft; and 3 surface cuts reported (Stewart, 1931, p. 56).	Not located. Assays prior to 1931 reported up to $50/ton gold. Mineral development potential unknown.
S-140	Sweepstake Mining Co. (gold, silver) sec. 06, T. 10 N., R. 09 E. SM	Quartz and quartz-carbonate veins in slates and metasandstones. A 16- to 18-in.-wide quartz vein occurs along a 5-ft-wide shear zone. Arsenopyrite, pyrite, pyrrhotite, chalcopyrite, and gold are present.	Two adits, 110 and 22-ft in length; one shaft; trenching. No recorded production. Minor production likely.	Five grab samples contained from a trace of gold and silver. A 24-in. chip sample contained 0.25 oz gold/ton and 0.24 oz silver/ton. Select grab sample contained 1.02 oz gold/ton and 1.05 oz silver/ton. Reserves: 500 tons. Moderate mineral development potential for a small mine.
S-141	North Star; Mohawk Group (gold, silver) sec. 31, T. 11 N., R. 09 E. SM	Several quartz veins present. The main development is on 1- to 3-in.-wide vein in slate and metasandstone. Another vein exposed in the shaft is 6-in.-wide and occupies a shear zone. Mineralization is sparse with only minor disseminated galena, pyrite, arsenopyrite, sphalerite, and gold.	270-ft-long adit; flooded shaft. No recorded production. Minor production likely.	Three chip samples contained from a trace to 0.06 oz gold/ton and from 0.01 to 0.10 oz silver/ton. Select grab sample contained 0.24 oz gold/ton and 0.27 oz silver/ton. Low mineral development potential indicated but additional evaluation may be warranted.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-142	Morning Star; Consolidated (gold, silver) sec. 31, T. 11 N., R. 09 E. SM	Two quartz veins, one to 4-ft and other to 2-ft-wide contain galena, pyrite, sphalerite, and gold.	Two shafts 10-ft-deep. No reported production.	Select grab sample contained 0.36 oz gold/ton and 0.69 oz silver/ton. Low mineral development potential indicated but additional evaluation may be warranted.
S-143	Vincent; Golden Sand (gold) sec. 33, T. 11 N., R. 07 E. SM	No data.	None.	Not located. Mineral development potential unknown.
S-144	Anderson & Yannes (gold) sec. 04, T. 10 N., R. 07 E. SM	No data.	None.	Not located. Mineral development potential unknown.
S-145	Harris (gold) sec. 04, T. 10 N., R. 7 E. SM	No data.	None.	Not located. Mineral development potential unknown.
S-146	Unnamed occurrence (gold) sec. 05, T. 10 N., R. 07 E. SM	No data.	None.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-147	Granite Mine; El Primero Mining and Milling Co. (gold, silver) sec. 09, T. 10 N., R. 07 E. SM	Two quartz fissure veins, one generally 3- to 3.5-ft-wide and other 7-in.-wide, in interbedded slates, graywackes, argillites, and granite. Bigger vein cuts both granite and metasedimentary rocks. It is 3-in.- to 4-ft wide and contains shattered country rock recemented by quartz veins or veinlets. This vein pinches to 3-in.-wide in the granite. Smaller vein is well banded and lies entirely in slates 100 to 150 ft from the granite contact. Pyrite, galena, sphalerite, arsenopyrite, stibnite, chalcopyrite, and gold are present.	Three levels with in excess of 8,200 ft of workings. Considerable stripping has taken place. All but the lower level accessible from the surface. Recorded production of 24,940 oz gold and 2,492 oz silver, from 31,919 tons of ore.	Nineteen samples contained from trace to 2.07 oz gold/ton and from a trace to 0.76 oz silver/ton. Records indicate an average grade over the life of the mine of approximately 0.75 oz gold/ton. 0.194 oz gold/ton in some mill tailings yielded 85% recovery in cyanide leach tests. Reserves: 1,860 tons ore, 30,000 tons tailings. Moderate mineral development potential for a small to medium size operation.
S-148	Snowball; Mountain View; Hamilton & Irving (gold, silver) sec. 09, T. 10 N., R. 07 E. SM	A 3- to 12-in.-wide quartz vein is traceable for 100 ft on surface. Host rocks are granite on the east and metasandstone on the west. Pyrite, gold, and angular country rock fragments are present.	20-ft-long adit and 27-ft-deep shaft, both inaccessible, occur above a lower 220-ft-long adit, which is accessible. Small amount of production reported (Stewart, 1931, pp. 57-58).	Sample contained a trace of gold and 0.01 oz silver/ton. Samples taken prior to 1931 by Territorial geologists contained 0.02 and 2.54 oz gold/ton and 0.1 and 0.8 oz silver/ton. Mineral development potential unknown.
S-149	Reed; Gauthier; and Cooper;Joel; Lros (gold) sec. 17, T. 10 N., R. 07 E. SM	Crushed slate and quartz along a 30- to 36-in.-wide fissure contains quartz, carbonate, pyrrhotite, chalcopyrite, and gold.	172-ft crosscut, 25-ft-long adit with 30-ft winze are reported (Johnson, 1915b, p. 138).	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-150	Everson (gold) sec. 17, T. 10 N., R. 07 E. SM	Northeast-striking quartz vein reported by claim holders.	None.	Not located. Mineral development potential unknown.
S-151	Yakima Ledge (gold) sec. 13, T. 10 N., R. 06 E. SM	Banded 10- to 30-in.-wide quartz-calcite vein occurs in a shear zone in slate and metasandstone (Johnson, 1914a, p. 231). Pyrite, sphalerite, arsenopyrite, galena, chalcopyrite, pyrrhotite, and gold are present.	Reportedly a 65-ft-long adit present (Johnson, 1918c, p. 189). No recorded production.	Not located. Mineral development potential unknown.
S-152	Sweepstake; Imp (gold, silver) sec. 09, T. 10 N., R. 06 E. SM	18- to 48-in.-wide, locally banded, carbonate-bearing quartz vein occurs in interbedded metasandstone and slates. Arsenopyrite, sphalerite, galena, chalcopyrite, stibnite, and gold are present.	170-ft-long adit; trenching. No recorded production, minor reported production (Fiedler, 1945).	Six grab and chip samples contained from a trace to 0.08 oz gold/ton and from 0.01 to 0.09 oz silver/ton. Low mineral development potential.
S-153	Singletary-O'Neill (gold, silver) sec. 09, T. 10 N., R. 06 E. SM	Series of subparallel, locally banded, quartz-calcite veins up to 5-ft-wide. Mineralization is spotty, and confined to podiform masses of pyrite, arsenopyrite, chalcopyrite, sphalerite, and galena.	None.	Four chip samples contained from a trace to 0.14 oz gold/ton and from a trace to 0.05 oz silver/ton. Grab sample contained a trace of gold and 0.13 oz silver/ton. Low mineral development potential.
S-154	Skypilot Ledge (gold) sec. 06, T. 10 N., R. 06 E. SM	2- to 5-ft-wide vertical quartz vein in conglomerate and slate traceable for 450 to 500 ft (Johnson, 1914a, p. 229).	None.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-155	Unnamed occurrence, Harriman Glacier (gold) sec. 12, T. 10 N., R. 05 E. SM	*Well-defined quartz vein and stockworks in a carbonaceous, pyritiferous slate and iron-stained conglomerate. Pyrite and minor galena are present.	None.	Country rock contained a trace of gold and silver. Low mineral development potential.
S-156	Mineral King Mine; Merrill; Hermann & Eaton; Brook-Eaton (gold, silver) sec. 14, T. 10 N., R. 06 E. SM	2- to 6-ft-wide quartz vein pinches and swells, lenses are up to 25-ft-long. Vein is hosted in metasediments and granite. Calcite, sphalerite, pyrite, galena, chalcopyrite, gold, pyrrhotite, and arseno-pyrite in vein.	1,488 ft of underground workings. 3 levels, 100, 150, 200 all expose vein for 100, 90, and 50 ft, respectively. 3,500 tons mined 1928-1932, with 2,116.6 oz gold recovered. Total reported production 2,783 oz gold, 826 oz silver.	Nine grab and chip samples contained from a trace to 0.15 oz gold/ton and from 0.01 to 0.13 oz silver/ton. High grade portions of the vein may have been mined out. Reserves: 496 tons. Moderate mineral development potential for a small mine.
S-157	George & McFarland (gold, silver) sec. 24, T. 10 N., R. 06 E. SM	At least 2 quartz veins merge underground and continue along a 4-ft-wide shear zone. Veins range from 3- to 13-in.-wide, are locally banded, and contain arsenopyrite, sphalerite, pyrite, galena, and gold.	47-ft-long adit with a 20- to 30-ft raise to the surface. No recorded production.	Five samples contained from a trace to 0.77 oz gold/ton and a trace to 0.41 oz silver/ton. Low to moderate mineral development potential for a small mine.
S-158	Banner; Christopher (gold, silver) sec. 25, T. 10 N., R. 06 E. SM	Shattered felsic dike recemented by mineralized quartz; from 1- to 8-ft-wide. Quartz contains galena, sphalerite, arsenopyrite, and gold.	Workings reported to include a 400-ft-long adit (Johnson, 1919, p. 150). No recorded production.	Workings not located. Sample collected near reported location contained a trace of gold and silver. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-159	Hummer Vein (gold) sec. 35, T. 10 N., R. 06 E. SM	Quartz stringers, 1-in.- to 1-ft-wide, in sheared slate and sandstone, contain galena, chalcopyrite, and gold.	40-ft-long adit with winze; stripping reported (Johnson, 1914a, p. 232). No recorded production.	0.1 cubic yard placer sample from Hummer Creek contained 3 colors of fine gold. Mineral development potential unknown.
S-160	Bennett, Bailey, & Heintz (gold) sec. 01, T. 09 N., R. 06 E. SM	Several quartz veins up to 3-in.-wide occur along closely spaced fractures in graphitic slates. Veins contain weathered carbonate minerals.	Surface stripping. No recorded production.	Two samples contained trace amounts of gold. Low mineral development potential.
S-161	Alaska Glacier (gold) sec. 25, T. 09 N., R. 06 E. SM	No data.	None.	Not located. Mineral development potential unknown.
S-162	Tomboy Ledge; Pigot Bay # 1-6 (gold) sec. 15, T. 09 N., R. 06 E. SM	Quartz-carbonate vein, 1- to 28-in.-wide, exposed in shear zone in extensively deformed slate and metasiltstone. Vein pinches and swells, locally has well-developed ribbon structure, and contains arsenopyrite, pyrite, chalcopyrite, and galena.	Two adits reported (Johnson, 1915, p. 138). One 40-ft-long with a 20-ft winze, other 35-ft-long. Evidence of stripping and a 105-ft crosscut with 40 ft of drift were located. Recorded production 219 oz gold and 9 oz silver.	Seven chip samples contained from a trace to 1.05 oz gold/ton and a trace to 0.2 oz silver/ton. Reserves: 300 tons. Moderate mineral development potential for a small mine.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-163	Lansing Mine; Hidden Treasure; Homestake 1-4; Blue Fox Group; (gold, silver) sec. 15, T. 09 N., R. 06 E. SM	Three quartz veins up to 18-in.-wide crosscut phyllites and argillites. Veins pinch and swell along strike and contain pyrite, galena, sphalerite, arsenopyrite, and gold. Most of the mineralization is associated with dark gray ribbons in quartz.	Two levels with a total of 230 ft of crosscut and 110 ft of drift. 40-ft shaft; open cuts Recorded production of 81 oz gold and 24 oz silver.	Four samples contained from 0.04 to 0.11 oz gold/ton and a trace to 0.04 oz silver/ton. Reserves: 502 tons. Moderate mineral development potential for a small mine.
S-164	Dunklee & Reilly (gold) sec. 16, T. 09 N., R. 06 E. SM	Banded quartz vein in small, well-defined fissure is traceable for about 250 ft. Vein varies from 1- to 24-in.-wide and contains calcite, chalcopyrite, pyrrhotite, arsenopyrite, sphalerite, and gold.	Short adit and stripping (Johnson, 1914a, p. 233). No recorded production.	Not located. Mineral development potential unknown.
S-165	Unnamed occurrence* Passage Canal (gold, molybdenum) sec. 31, T. 09 N., R. 06 E. SM	Gold and molybdenite-bearing pegmatitic vein in Passage Canal pluton. Anomalous bismuth content.	None.	Two grab samples contained a trace and 0.07 oz gold/ton, a trace and 0.015% molybdenum, and 0.1% bismuth. Low mineral development potential.
S-166	Lone Star (gold) sec. 25, T. 09 N. R. 05 E. SM	No data.	100-ft-long crosscut and 50-ft drift reported (Johnson, 1918c, p. 188). No recorded production.	Not located. Mineral development potential unknown.
S-167	Unnamed occurrence* (gold?) sec. 26, T. 09 N., R. 05 E. SM	3-in.-wide quartz vein contains galena and pyrite.	None.	Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-168	Portage Bay Mine (gold, silver) sec. 15, T. 09 N., R. 05 E. SM	Quartz lenses, up to 20-in.-wide and 20- to 25-ft-long occur in a strong shear zone in slate and metasiltstone. Quartz contains pyrite, pyrrhotite, galena, sphalerite, chalcopyrite, and gold.	278-ft crosscut, 345-ft drift with approximately 220 ft of stoping and 240 ft of raises. Recorded production is 490 oz gold and 60 oz silver.	Thirteen chip, grab, and channel samples contained from a trace to 0.6 oz gold/ton and from a trace to 0.16 oz silver/ton. Reserves: 10,000 tons. Moderate mineral development potential for a small mine.
S-169	Billings Glacier* Molybdenum (molybdenum) sec. 28, 29, T. 09 N., R. 05 E. SM	Molybdenite along margins of quartz monzonite stock apparently mainly associated with fractures. Molybdenite rosettes to 1 1/2-in. diameter are present, minor amounts disseminated chalcopyrite and pyrite present.	None.	Ten of 11 chip samples contained only a trace of molybdenum. Selected sample contained 0.2% molybdenum. Low mineral development potential.
S-170	Billings Glacier* Quartz (quartz crystals) sec. 29, T. 09 N., R. 05 E. SM	Pegmatite up to 12-ft-wide, contains a clay filled vug with euhedral, doubly terminated quartz crystals up to 18-in.-long.	Small pit. Minor extraction of quartz crystals has occurred.	High mineral development potential for quartz crystal specimens.
S-171	Golden Giant Group; Collins; Fish, and Barry (gold, silver) sec. 29, T. 09 N., R. 05 E. SM	1.5- to 5-ft-wide dike in contact metamorphosed sedimentary rocks recemented by quartz-carbonate veins containing arsenopyrite, sphalerite, galena, and gold. Similar dikes occur on both sides of Billings Creek.	None.	Grab sample of quartz contained a trace of gold 0.01 oz silver/ton, and 0.07% tungsten. Placer gold in creek. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-172	Bullion Ledge (gold, silver) sec. 29, T. 09 N., R. 05 E. SM	Quartz stringers, 1- to 18-in.-wide, in a belt of slate reported to be 3,000-ft-long and 1,100-ft-wide (Johnson, 1914a, pg. 223), containing minor arsenopyrite, chalcopyrite, galena, and sphalerite.	None.	Samples taken nearby, see S-171. Mineral development potential unknown.
S-173	Unnamed occurrence* Upper Carmen River Divide (gold, silver) sec. 19, T. 09 N., R. 05 E. SM	Vertical 3-ft-wide, limonite-stained quartz vein in slates and metasandstones contains arsenopyrite, pyrite, and chalcopyrite. Other veins occur nearby.	None.	Grab sample contained a trace amount of gold and 0.016 oz silver/ton. Low mineral development potential.
S-174	Hillside; Banta and Sullivan (gold) sec. 01, T. 08 N., R. 04 E. SM	Quartz veins reported in metasandstone contain pyrrhotite, chalcopyrite, sphalerite, galena, and gold (Johnson, 1914a, p. 234). Float rock in area contains minor chalcopyrite and pyrrhotite.	None.	Not located. Mineral development potential unknown.
S-175	Unnamed occurrence (gold) sec. 12?, T. 08 N., R. 04 E. SM	No data.	No data.	Not located. Mineral development potential unknown.
S-176	Earnest King (gold) sec. 15, T. 08 N., R. 04 E. SM	Numerous quartz veins, 3- to 36-in.-wide, in slate and metasandstone. Arsenopyrite, pyrite, chalcopyrite, and galena were found in float rock.	None.	Grab sample contained a trace amount of gold and silver. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-177	Unnamed occurrence* Emerald Bay (gold, silver) sec. 09, T. 08 N., R. 05 E. SM	2- to 6-in.-wide quartz vein contains pyrite and pyrrhotite.	None.	Two 4-in. chip samples contained a trace of gold and 0.01 oz silver/ton. Low mineral development potential.
S-178	Singleton, O'Neil (gold?) sec. 15, T. 08 N., R. 05 E. SM	Several thin quartz veins reported in sheared metasiltstone and sandstone (Tysdal, 1978). Spatially associated with the Port Wells Fault.	None.	Not located. Mineral development potential unknown.
S-179	Unnamed occurrence* Cove Creek (gold, silver) sec. 13, T. 08 N., R. 04 E. SM	Two quartz veins up to 16-in.-wide in slate and metasandstone contain pyrite, and pyrite, pyrrhotite, and chalcopyrite, respectively.	None.	Seven grab samples contained a trace to 0.08 oz gold/ton and a trace to 0.02 oz silver/ton. Low mineral development potential.
S-180	Portage Pass Mining Co. (gold) sec. 21, T. 08 N., R. 04 E. SM	No data.	None.	Not located. Mineral development potential unknown.
S-181	Portage Pass (copper) sec. 20, T. 08 N., R. 04 E. SM	No data.	None.	Not located. Mineral development potential unknown.
S-182	Unnamed occurrence* Northland Glacier (gold, silver) sec 23, T. 07 N., R. 04 E. SM	En echelon 3- to 6-in.-wide quartz veins and stockworks. Veins contain minor chalcopyrite and pyrrhotite, are thin, discontinuous, and associated with Port Wells fault.	None.	Three samples contained a trace of gold and 0.01 oz silver/ton. Anomalous placer gold values from creeks draining the area. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-183	Unnamed occurrence* Kings River (gold, silver) sec. 24, T. 05 N., R. 03 E. SM	Quartz veins recement numerous felsic dikes in carbonaceous slates and metasandstones. Dikes vary from 1- to 5-ft-wide and contain up to 15% quartz-calcite veins which contain arsenopyrite, chalcopyrite, pyrite, and pyrrhotite.	None.	Grab sample contained 0.02 oz gold/ton and 0.11 oz silver/ton. Low mineral development potential.
S-184	Kings Bay (gold) sec. 10, T. 04 N., R. 04 E. SM	No data.	Overgrown trail. Workings believed to exist nearby.	Prospect not located. Mineral development potential unknown.
S-185	Unnamed occurrence* Wolverine Glacier (gold, silver) sec. 10, T. 03 N., R. 03 E. SM	Vertical dikes are recemented by quartz-calcite veins that contain pyrrhotite, pyrite, and chalcopyrite.	None.	Sample contained trace of gold and 0.07 oz silver/ton. Low mineral development potential.
S-186	Unnamed occurrence W. Talus Bay (chromium) sec. 14, T. 02 S., R. 01 E. SM	Mineralization reported to occur in the marginal phase of gabbro near its contact with sheeted dikes (Tysdal, 1978).	None.	USGS sample contained 0.1% chromium. Low mineral development potential.
S-187	Unnamed occurrence Talus Bay (chromium, nickel) sec. 13, T. 02 S., R. 01 E. SM	Shear zone, several yards wide, in gabbro.	None.	USGS sample contained 0.15% chromium and 0.03% nickel. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-188	Unnamed occurrence, N. Talus Bay (chromium, nickel) sec. 12, T. 02 S., R. 01 E. SM	Serpentinized dunite, possibly along a fault zone.	None.	USGS sample contained 0.5% chromium and 0.3% nickel. Low mineral development potential.
S-189	Unnamed occurrence, Day Harbor (chromium, nickel) sec. 07, T. 02 S., R. 02 E. SM	Serpentinized dunite.	None.	USGS sample contained 0.3% chromium and 0.5% nickel. Low mineral development potential.
S-190	Copper Chief; Iron Cap; Real Thing (copper) sec. 10, T. 02 S., R. 01 E. SM	At the Copper Chief, a 6-ft-wide shear zone in pillow basalt contains quartz veinlets with disseminated pyrite, chalcopyrite, hematite, and epidote. Iron Cap deposit contains disseminated sulfides including chalcopyrite and pyrite with magnetite traceable for 4,500 ft along the glacier. The Real Thing deposit is a 10-ft-wide massive sulfide vein 450- to 650-ft-long containing chalcopyrite with irregular patches of pyrite on one side of the vein and magnetite with scattered chalcopyrite on the other side.	None.	Not visited. Mineral development potential unknown.
S-191	Day Harbor Prospect (copper) sec. 05?, T. 02 S., R. 02 E. SM	Disseminated sulfides reported in a 4-ft-wide shear zone between gabbro and peridotite (Grant and Higgins, 1910a, p. 170). Some gabbro in the zone contains pyrrhotite, pyrite, and minor amounts of chalcopyrite.	None.	Not visited. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-192	Unnamed occurrence, Godwin Glacier (vanadium, copper) sec. 19, T. 01 S., R. 02 E. SM	Small limonite-stained disseminated sulfide-bearing zone in medium-grained gabbro (Tysdal, 1978).	None.	USGS sample contained 0.01% copper and 0.2% vanadium. Low mineral development potential.
S-193	Unnamed occurrence, 4th of July Creek (copper, zinc) sec. 14, T. 01 S., R. 01 E. SM	Disseminated pyrite in a limonite-stained zone in pillow basalts (Tysdal, 1978).	None.	USGS sampled contained 0.03% copper and 0.053% zinc. Low mineral development potential.
S-194	Redman & Guyot (copper) sec. 10, T. 01 S., R. 01 E. SM	Vein, up to 9-ft-wide, with a well-defined gossan containing malachite, azurite, and chalcopyrite (Grant and Higgins, 1909b, p. 103).	None.	Not visited. Mineral development potential unknown.
S-195	Prospect #69; Godwin (copper, gold) sec. 34, T. 01 N., R. 01 E. SM	Massive sulfide vein contains mainly pyrrhotite, minor chalcopyrite. Nearby quartz vein, up to 8-ft-wide, reportedly contains copper and gold (Martin and others, 1915, p. 233).	None.	Not visited. Mineral development potential unknown.
S-196	Rusty (gold) sec. 12, T. 01 S., R. 01 W. SM	No data.	None.	Not visited. Mineral development potential unknown.
S-197	Resurrection Bay Mining Company (gold, silver) sec. 09, T. 01 S., R. 01 W. SM	Quartz-calcite veins and stringers up to 3-ft-wide, occupy shear zones in slate and metasandstone. Arsenopyrite, sphalerite, pyrite, chalcopyrite, galena, and gold in veins.	Four adits reported, lengths unknown (Martin, and others, 1915, p. 142). No recorded production.	Not visited. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-198	Northern Light; Tozier-Lane (gold, silver) sec. 09, T. 01 S., R. 01 W. SM	Several quartz veins occupy well-developed, nearly parallel joints in a thick massive metasandstone bed (Martin and others, 1915, pp. 14143). Vein widths vary from 3 to 14 in. Chalcopyrite, pyrrhotite, pyrite, galena, sphalerite, arsenopyrite, and gold present in veins.	Three adits with more than 165 ft total length; 12-ft-deep shaft reported (Martin and others, 1915, pp. 142-143). No recorded production.	Not visited. Mineral development potential unknown.
S-199	Kana Gold Mine; Last Chance (gold, silver) sec. 10, T. 01 S., R. 01 W. SM	Fissure vein, 60- to 74-in.-wide, contains arsenopyrite, pyrite, and gold.	Three shafts reported, total depth less than 70 ft (Jasper, 1957). No recorded production.	Not visited. Reported average assays of 0.14 oz gold/ton. Mineral development potential unknown.
S-200	Cannibal and Dimpy; Lucky Mona; Caffel; and others (gold?) sec. 21, 22, T. 01 N., R 01 W. SM	No data.	None.	Not located. Mineral development potential unknown.
S-201	Mile 4 (gold, silver) sec. 14, T. 01 N., R. 01 W. SM	Quartz stringers and pods up to 43-in.-wide, irregularly distributed in slate (Martin and others, 1915, p. 144). Arsenopyrite, galena, sphalerite, pyrite, pyrrhotite, chalcopyrite, and gold present in quartz.	115-ft-long adit; 23-ft-deep inclined shaft; 75-ft of surface stripping reported. No recorded production.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-202	Seward Limestone (limestone) sec. 14, T. 01 N., R. 01 W. SM	4.5 x 10 x 90-ft limestone bed crops out in a small stream. Limestone is pure and porous, similar to the Russian River deposits (S-237).	None.	Low mineral development potential.
S-203	Mile 7.5 (gold, silver) sec. 02, T. 01 N., R. 01 W. SM	No data.	None.	Not located. Mineral development potential unknown.
S-204	Homestake Ledge (gold, silver, arsenic) sec. 35, T. 02 N., R. 01 W. SM	Stringers and lenses of quartz, up to 14-in.-wide, in a 33-in.-wide shear zone in slates (Martin and others, 1915).	Inaccessible adit; stripping. No recorded production.	Two grab samples contained a trace and 0.07 oz gold/ton, a trace and 0.01 oz silver/ton and 1,300 and 9,400 ppm arsenic. Mineral development potential unknown.
S-205	Brewer Alaska Syndicate (gold, silver, arsenic) sec. 26, T. 02 N., R. 02 W. SM	12- to 20-in.-wide quartz vein, traceable for at least 300 ft, parallels foliation of slate. Arsenopyrite, galena, sphalerite, and gold present in vein.	Three accessible adits occur near creek level. Less than 230 ft of total workings. No recorded production.	Eight samples contained from a trace to 0.83 oz gold/ton, a trace to 0.06 oz silver/ton, and 43 to 4,700 ppm arsenic. Reserves: 1,100 tons. Moderate mineral development potential for a small mine.
S-206	Redman Creek (gold, silver) sec. 31, T. 02 N., R. 02 W. SM	Three parallel quartz veins, total 6-ft in width in 40-ft-wide limonite-stained shear zone, in slate and metasandstone. Fresh sulfides not found.	None.	6-ft chip sample contained 0.01 oz gold/ton, 0.04 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-207	Unnamed occurrence, Placer Creek (gold, silver, copper, lead, zinc) sec. 23, 24, T. 02 N., R. 03 W. SM	*Quartz veins, with local concentrations of massive sulfide pods, in interbedded metasiltstones and calcareous metasandstones. Sulfides include galena, sphalerite, and chalcopyrite.	None.	Selected grab sample contained 0.57 oz gold/ton, 11.34 oz silver/ton, 1.25% copper, 1.75% lead, and 2.6% zinc. Moderate mineral development potential.
S-208	Grayson Lode (gold, silver, arsenic) sec. 22, T. 02 N., R. 01 W. SM	12-in.-wide quartz vein in sheared slate contains large, disseminated crystals of arsenopyrite; traceable for 150 ft along strike.	Small prospect pit and trench present. No recorded production.	Sample contained no detectable gold, 0.06 oz silver/ton, and 1,850 ppm arsenic. Low mineral development potential.
S-209	Mizpah Ledge; Kennedy; Pullen; and Davis (gold, silver, arsenic) sec. 15, T. 02 N., R. 01 W. SM	Quartz stringers and pods up to 6-in.-wide, occur along a 2- to 4-ft-wide shear zone in interbedded metasiltstone and sandstone. Arsenopyrite, chalcopyrite, galena, sphalerite, pyrite, and gold are present.	28-ft-long adit located at northern end of 5 x 30-ft open cut.	3- 4-in. chip sample contained 0.3 oz gold/ton, 0.02 oz silver/ton, and 3,500 ppm arsenic. Grab sample contained 3.48 oz gold/ton, 2.8 oz silver/ton, and 6,500 ppm arsenic. Reserves: 10 tons. Moderate mineral development potential for a small mine.
S-210	Hale; Peel & Lyngholm (gold?) sec. 01, T. 02 N., R. 01 W. SM	No data.	None.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-211	Porcupine Quartz #1; Schoonover (gold, silver) sec. 10, T. 02 N., R. 01 W. SM	Quartz-calcite stringers, 1- to 15-in.-wide, in interbedded slate and metasandstone (Johnson, 1912, p. 155). One vein is reportedly 9-ft-wide and traceable for 125 ft. Chalcopyrite, galena, sphalerite, pyrite, and gold are present.	One adit reported (Johnson, 1912, p. 155). No recorded production.	Adit not located. Grab sample of quartz in vicinity of reported prospect contained 0.01 oz gold/ton and 0.06 oz silver/ton. Mineral development potential unknown.
S-212	Unnamed occurrence* Porcupine Creek (gold, silver) sec. 33, T. 03 N., R. 01 W. SM	Several quartz veins, 1- to 3-in.-wide, in metasandstone and slate. Arsenopyrite and minor amounts of galena present.	None.	Three samples contained trace amounts of gold and up to 0.2 oz silver/ton. Low mineral development potential.
S-213	Overland (gold, silver) sec. 35, T. 03 N., R. 01 W. SM	No data - claims located near the Primrose Mine (S-214).	No data.	Not visited. See data for Primrose Mine (S-214). Mineral development potential unknown.
S-214	Primrose Mine (gold, silver, arsenic) sec. 35, T. 03 N., R. 01 W. SM	At least 5 quartz veins, from narrow stringers to 7-ft-wide, are present in highly fractured slates and graywackes. Quartz displays ribbon structure, sulfides and gold concentrate along the dark gray bands in quartz. Sulfides include arsenopyrite, pyrite, chalcopyrite, galena, sphalerite, and pyrrhotite. Malachite and covellite noted.	Three levels, total of 450 ft of workings, all inaccessible. Recorded production of 659 oz gold and 138 oz silver. Reported production of >4,000 oz gold (Burnette, 1931).	Two samples from upper portal contained 1.166 and 1.572 oz gold/ton, 0.6 oz silver/ton, and 3,500 and 9,200 ppm arsenic. Reserves: 1,275 tons. High mineral development potential for a small mine.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-215	Porcupine; Graystone; Homestake Ledge (gold) sec. 23 & 24, T. 03 N., R. 01 W. SM	At Porcupine Prospect, a 6- to 9-in.-wide quartz-calcite vein in slate and metasandstone contains arsenopyrite, galena, sphalerite, pyrite, pyrrhotite, and gold. At the Graystone Prospect a sulfide bearing felsic dike is present. Homestake Ledge is made up of a few scattered and discontinuous quartz stringers containing arsenopyrite, pyrite, and pyrrhotite.	Open cut reported on the Homestake Ledge (Martin and others, 1915, pp. 147-148). No recorded production.	Not visited. Mineral development potential unknown.
S-216	Peak 5309 #1* (gold, silver) sec. 23, T. 03 N., R. 02 W. SM	Mineralized veins, from 2- to 48-in.-wide in interbedded slates and metasandstones contain calcite, and minor pyrite, pyrrhotite, chalcopyrite, and galena. Longitudinal quartz-calcite veins contain pyrite and possibly sulfosalts.	None.	Six samples contained no detectable or only trace amounts of gold, and a trace to 0.02 oz silver/ton. Low mineral development potential.
S-217	Peak 5309 #2* (gold, silver) sec. 22, T. 03 N., R. 02 W. SM	6-in.- to 6-ft-wide (average 2 ft) quartz vein is exposed for 300 ft in interbedded metasiltstone and slate. Minor amounts of arsenopyrite, pyrite, and malachite in quartz vein.	None.	Four samples contained no detectable or only trace amounts of gold, and a trace to 0.02 oz silver/ton. Low mineral development potential.
S-218	Peak 5309 #3* (gold, silver) sec. 15, T. 03 N., R. 02 W. SM	Several parallel, vuggy, hematite-coated quartz-calcite veins cross-cut metasiltstone at a low angle. Fresh sulfides were not noted.	None.	Samples contained no detectable gold and a trace of silver. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-219	Devil Club Ledge; Lakeside (gold) sec. 30, T. 03 N., R. 01 E. SM	Two veins at Devil Club Ledge, 15-in. and 4- to 8-in.-wide, occur along joints in slate; both contain arsenopyrite. At Lakeside, 4- to 10-in.-wide quartz vein contains minor amounts of arsenopyrite and pyrite.	Several open cuts reported on Devil Club Ledge (Martin and others, 1915, p. 148). 30-ft of stripping reported on the Lakeside claims. No reported production.	Not located. Mineral development potential unknown.
S-220	Brown Bear (gold) sec. 19, T. 03 N., R. 01 E. SM	1.5- to 5-in.-wide, banded quartz-calcite vein roughly parallels foliation of slate host rock. Arsenopyrite, galena, sphalerite, and gold are present.	Short adit reported (Martin and others, 1915, p. 148). No recorded production.	Not located. Mineral development potential unknown.
S-221	Seward Bonanza, Kenai Lode (gold, silver) sec. 06, T. 03 N., R. 01 E. SM	1.5- to 6-ft-wide quartz vein in shear zone in slate and metasandstone. Arsenopyrite, chalcopyrite, galena, pyrite, sphalerite, and gold are present.	Two adits present, one 200-ft-long (accessible) and other reportedly with 65 ft of workings is caved at portal. Recorded production 65 oz.	Seven chip samples contained from a trace to 0.14 oz gold/ton and from 0.02 to 0.73 oz silver/ton. Reserves: 7,400 tons. Moderate mineral development potential for a small mine.
S-222	Unnamed occurrence, Andy Simons Mtn. (gold, silver) sec. 33, T. 04 N., R. 01 E. SM	*1.0- to 1.5-ft-wide vertical quartz vein cuts slate and metasiltstone. Chalcopyrite, galena, pyrite, and sphalerite are present.	None.	Two grab samples contained 0.06 and 0.08 oz gold/ton, and 0.16 and 0.25 oz silver/ton. Low mineral development potential.
S-223	Dunrovin (gold, silver) sec. 23, T. 04 N., R. 01 E. SM	6-in.- to 4-ft-wide quartz vein contains pyrite and pyrrhotite. Free gold recovered by panning crushed quartz.	Two campsites, now in ruin, were located. No recorded production.	Sample contained a trace of gold and 0.01 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-224	Falls Creek Mine; California-Alaska (gold, silver) sec. 21, T. 04 N., R. 01 E. SM	8-in.- to 4-ft-wide quartz vein occupies a 5-ft-wide shear zone in slate and metasandstone. Arsenopyrite, galena, pyrite, sphalerite, and gold are present.	960 ft of underground workings reported, all inaccessible. Recorded production 65 oz gold and 13 oz silver. Additional past production possible.	6-ft chip sample contained 0.09 oz gold/ton and 0.07 oz silver/ton. Mineral development potential unknown.
S-225	Skeen-Lechner Mine (gold, silver) sec. 16, T. 04 N., R. 01 E. SM	Two quartz veins in graywacke. Upper vein, is from 20- to 45-in.- wide in the workings. Lower vein averages about 2-ft in width. Veins contain arsenopyrite, galena, and gold.	Three levels with a total of approximately 2,000 feet of underground workings reported. Only the middle level is now accessible. Considerable stoping has taken place. Recorded production 1,796 oz gold and 582 oz silver, some of which may have come from the Falls Creek Mine, (S-224).	Nineteen chip samples contained from a trace to 10.5 oz gold/ton and from 0.03 to 0.87 oz silver/ton. Average grade for all samples from upper vein was 0.4 oz gold/ton and 0.26 oz silver/ton. Reserves: 10,000 tons. Moderate mineral development potential for a small mine.
S-226	East Point Mine (gold, silver) sec. 09, T. 04 N., R. 01 E. SM	Quartz vein along a shear zone in slate contains pyrite, arsenopyrite, minor galena, sphalerite, and gold.	Caved inclined shaft with reported 170 ft of workings and stope development (O'Neill, 1960). Recorded production 1,725 oz gold, 479 oz silver.	A grab and 4-in. chip sample contained 2.2 and 5.83 oz gold/ton and 0.1 and 0.8 oz silver/ton respectively. Smelter returns averaged 4.92 oz gold/ton and 1.37 oz silver/ton. Reserves: 3,700 tons. High mineral development potential for a small mine.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-227	Crown Point Mine; Kenai Alaska (gold, silver) sec. 09, T. 04 N., R. 01 E. SM	Quartz veins up to 25-in.-wide, occupy 20- to 30-in.-wide shear zones. Post-mineralization movement along the veins. Developed quartz vein contains arsenopyrite, galena, sphalerite, and free gold.	Four adits present; lower two are accessible. Total workings in excess of 1,500 ft. Recorded production 3,125 oz gold, 634 oz silver.	Seven chip and channel samples contained from a trace to 2.83 oz gold/ton and from 0.04 to 0.57 oz silver/ton. Six grab samples contained from a trace to 1.6 oz gold/ton and from 0.03 to 0.42 oz silver/ton. Reserves: 15,339 tons. High mineral development potential for a small mine.
S-228	Solars (gold) sec. 34, T. 05 N., R. 01 E. SM	Gold-bearing quartz veins reportedly parallel cleavage in slates and graywackes (Tuck, 1933).	None.	Not located. Mineral development potential unknown.
S-229	Unnamed occurrence, Grant Lake (silver?) sec. 26, T. 05 N., R. 01 E. SM	Red-stained schist along a shear zone associated with Placer River fault.	None. Reported by the USGS in 1978 (Tysdal, 1978).	USGS sample contained 0.09 oz silver/ton, 0.05% chromium, 0.01% nickel, 0.02% zinc, 0.03% cobalt, 0.1% copper, and 0.07% vanadium. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-230	Unnamed occurrence (?) sec. 30, T. 05 N., R. 02 E. SM	Limonite-stained zone more than 30-ft-wide in greenschists.	None.	USGS sample contained 0.3% manganese, 70 ppm chromium, and 60 ppm zinc. Low mineral development potential.
S-231	Grant Lake; Case Mine (gold, silver) sec. 29, T. 05 N., R. 01 E. SM	Three sets of quartz veins in interbedded slates and graywackes. Two highly mineralized veins average 14- to 16-in.-wide throughout workings. Arsenopyrite, pyrite, galena, and chalcopyrite are present locally in veins.	Three adits, 10, 170, and 40-ft-long. 30-ft-long section of vein has been stoped to surface. Recorded production 792 oz gold and 123 oz silver.	Four grab samples contained from a trace to 0.22 oz gold/ton and from a trace to 0.5 oz silver/ton. Two chip samples from the upper level contained from a trace to 1.11 oz gold/ton and from 0.04 to 0.3 oz silver/ton. Reserves: 270 tons. Moderate mineral development potential for a small mine.
S-232	Rec. 3-9 (haydite) sec. 13, T. 04 N., R. 01 W. SM	Pure, black, fine-grained argillite.	None.	No samples taken. Favorable bloating characteristics reported at 2,200-2,300° F. Reserves 50 million tons. High mineral development potential.
S-233	Ballaine & Nelson (gold) sec. 22, T. 04 N., R. 01 W. SM	No data.	No data.	Not located. Mineral development potential unknown.
S-234	Unnamed occurrence* Kenai Lake (antimony) sec. 27, T. 04 N., R. 02 W. SM	Mineralization similar to that of K & T Prospect (S-236) is suspected. Stream sediment values are higher than those from streams draining the K & T Prospect.	None.	Stream sediment sample contained 0.0215% antimony. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-235	Vindicator (gold) sec. 19, T. 04 N., R. 03 W. SM	No data.	No data.	Not located. Mineral development potential unknown.
S-236	K & T; Victory (antimony) sec. 08, T. 04 N., R. 02 W. SM	Fractured and altered felsic dike, averaging 2-ft-wide and traceable for at least 500 ft along strike, has been recemented by quartz containing disseminations and stringers of stibnite.	Small trench. No recorded production.	Five chip samples contained from 0.015 to 0.34% antimony, trace of gold, and from 0.01 to 0.10 oz silver/ton. Analyses of samples from a previous report indicated 1.7 to 4.38% antimony. Low mineral development potential.
S-237	Good Luck; Rec. 1 & 2 (limestone) sec. 04, T. 04 N., R. 04 W. SM	Two travertine deposits on interbedded slates and graywackes. Southern deposit is banded, 2- to 6-ft-thick. Northern deposit is up to 9-ft-thick, buff colored, and cellular.	Small prospect pit on southern deposit. Some drilling at the northern deposit. No recorded production.	Reserves: 96,000 tons of agricultural lime. High mineral development potential for a small mine.
S-238	Black Devil; Lyngholm (antimony) sec. 31, T. 05 N., R. 02 W. SM	Highly fractured and altered dike, 6- to 9-ft-wide, cuts slate. Quartz recements dike rock and contains both disseminated acicular crystals and stringers of stibnite. Dike is probably a continuation of the mineralized dike at the K & T prospect (S-236).	None.	Not located. Similar to K & T (S-236) occurrence. Low mineral development potential.
S-239	Snowshoe (gold) sec. 31, T. 05 N., R. 02 W. SM	No data.	No data.	Not located. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-240	Goodnews Claim; Wheelbarrow Lode (gold, silver) sec. 29, T. 05 N., R. 02 W. SM	Sulfide-bearing quartz specimen provided by owner contained arsenopyrite, pyrite, and chalcopyrite. No other data.	One caved adit, length unknown. No recorded production.	Sample contained 0.29 oz gold/ton, and 0.04 oz silver/ton according to the owner. Mineral development potential unknown.
S-241	Crescent Lode (gold) sec. 22, T. 05 N., R. 02 W. SM	No data.	None.	Not visited. Placer samples collected nearby contained up to 0.03 oz gold/cy. Mineral development potential unknown.
S-242	Nakoa Lode (silver) sec. 15, T. 05 N., R. 02 W. SM	Quartz vein in slate is up to 4-ft-wide with 300 ft along strike. Quartz contains slate fragments, pyrite, and minor galena.	Some stripping; prospect pits. No recorded production.	Three chip samples contained only traces of gold and silver. Silver assays up to 56 oz/ton, reported by owner. Low mineral development potential.
S-243	Yellow Jacket (gold) sec. 09, T. 05 N., R. 02 W. SM	Quartz vein 6-in.- to 3-ft-wide is traceable for 1,500 ft along strike.	35-ft adit reported in 1915 (Martin and others, 1915, p. 163). No recorded production.	Assays to 0.4 oz gold/ton reported. Overall grade apparently is low. Mineral development potential unknown.
S-244	Kaffir; Buster; (gold, silver) sec. 09, T. 05 N., R. 02 W. SM	At the Kaffir, quartz lenses, up to 1-ft-wide in slate and meta-sandstone contain arsenopyrite, chalcoyprite, galena, pyrite, pyrrhotite, sphalerite, and gold. At the Buster, quartz lenses and veins, up to 18-in.-wide, contain arsenopyrite and gold.	On the Kaffir, caved adit, reportedly 20-ft-long (Martin and others, 1915, p. 163). No recorded production.	Three grab samples contained 0.01 to 0.11 oz gold/ton and 0.02 to 0.06 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-245	Golden Zenith (gold) sec. 03, 10, T. 05 N., R. 02 W. SM	Quartz veins similar to those on the Kaffir and Buster properties (S-244).	None.	Not visited. Mineral development potential unknown.
S-246	Lois Lode; John's Creek Lode (gold, silver) sec. 01, T. 05 N., R. 02 W. SM	No data.	No data.	Not located. Mineral development potential unknown.
S-247	J & J Mine (gold?) sec. 31, T. 06 N., R. 01 W. SM	Several quartz-calcite veins in metasandstone and slates. Two veins examined contained no visible sulfides.	None.	Two chip samples contained no gold and trace amounts of silver. Low mineral development potential.
S-248	Juneau Lake (gold) sec. 29, T. 06 N., R. 03 W. SM	Limonite-stained, vuggy quartz veins in sandstone.	None.	Not visited. Mineral development potential unknown.
S-249	McMillan Mine; Columbia; Ophir (gold, silver) sec. 23, T. 06 N., R. 02 W. SM	Several narrow quartz veins, 3-in.- to 2-ft-wide, in interbedded slates and coarser metaclastics containing galena, sphalerite, arsenopyrite, and gold.	170-ft-long adit; several trenches; prospect pits. Estimated production 25 oz gold.	Twelve chip samples contained from a trace to 1.48 oz gold/ton and from a trace to 0.8 oz silver/ton. Three grab samples contained from 0.32 to 5.04 oz gold/ton and from 0.09 to 1.7 oz silver/ton. Inferred reserve base is 250 tons. Moderate mineral development potential for a small mine.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-250	Henry Creek (gold, silver) sec. 20, T. 06 N., R. 02 W. SM	Fractured felsic dike recemented by quartz vein containing minor arsenopyrite. Dike can be traced 1,000 ft along strike.	Prospect pits. No recorded production.	Chip sample contained 0.01 oz gold/ton and 0.08 oz silver/ton. Low mineral development potential.
S-251	Swetmann (gold, silver) sec. 14, T. 06 N., R. 02 W. SM	Quartz vein, up to 12-in.-wide, contains arsenopyrite, pyrite, chalcopyrite, malachite, azurite, minor chalcocite, and gold.	Two adits, partially caved, one 120-ft and other 260-ft-long. No recorded production.	Two samples contained 0.005 oz gold/ton and trace amounts of silver. Low mineral development potential.
S-252	Hatcher; Slate; Meat-in-the Pot, and others (gold, silver) sec. 13, T. 06 N., R. 02 W. SM	Several quartz veins of varying widths and attitude in metamorphosed sandstones and slates spacially associated with the southern extension of the Gilpatrick Dike. Quartz contains galena, sphalerite, arsenopyrite, and pyrite.	Numerous trenches and open cuts. No recorded production.	Grab sample contained 0.08 oz gold/ton and 0.31 oz silver/ton. Mineral development potential unknown.
S-253	Gilpatrick Dike (gold, silver) sec. 14, T. 06 N., R. 02 W. SM	Quartz veins 2- to 12-in.-wide, generally parallel Gilpatrick Dike. Veins are at the contact of the dike and also up to 10-ft away, separated by slate and graywacke country rock. Dike is fractured and recemented by auriferous quartz. Sulfides include arsenopyrite, pyrite, galena, and sphalerite. Extent of fracturing of the dike and subsequent vein filling is highly irregular. Gold distribution tends to be erratic.	Three adits, total length in excess of 500 ft, considerable stoping. All workings caved. Recorded production 3,405 oz gold and 1,099 oz silver.	Five grab samples contained from 0.06 to 8.51 oz gold/ton and from 0.02 to 3.2 oz silver/ton. Two chip samples, 14-in.- and 10-in.-long, contain 0.88 and 0.89 oz gold/ton and 0.73 and 0.65 oz silver/ton. Reserves: 1,942 tons. High mineral development potential for a small mine.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-254	Summit Vein (gold, silver) sec. 14, T. 06 N. R. 02 W. SM	Quartz vein generally 12- to 14-in.-wide over a strike length of at least 235 ft, in folded slates and graywackes. Quartz, locally vuggy with some calcite contains galena, arsenopyrite, sphalerite, pyrite, and gold.	Trenching along vein. No recorded production, however a small amount, of past production possible.	Three grab samples contained from 0.24 to 5.15 oz gold/ton and from 0.01 to 3.5 oz silver/ton. Two 18-in.-long chip samples contained 1.18 and 1.35 oz gold/ton and 0.84 and 1.4 oz silver/ton. Two 8-in.-long chip samples of hanging and footwalls contained a trace of gold and 0.02 and 0.12 oz silver/ton, respectively. Average grade of vein material is 2.4 oz gold/ton and 1.6 oz silver/ton. Reserves: 3,400 tons. High mineral development potential for a small mine.
S-255	Heaston-Oracle Mine Alaska Oracle (gold, silver) sec. 12, T. 06 N., R. 02 W. SM	Quartz vein in fracture in interbedded slates and graywackes. Post-mineralization movement generally parallel to vein. Quartz vein contains arsenopyrite, galena, sphalerite, molybdenite, minor chalcopyrite, and gold.	Three adits. Main level with a total of 900 ft of crosscuts, 550 ft of drifting, 215 ft of raises, 25-ft winze and considerable stoping. Two other adits lengths unknown. All workings now inaccessible. Reported production 1,274 oz gold, 256 oz silver. Total production believed to be higher.	Chip sample of vein at main level portal contained 1.64 oz gold/ton and 0.71 oz silver/ton. Two chip samples of wallrock contained from a trace to 0.05 oz gold/ton and 0.01 to 0.09 oz silver/ton. Two grab samples from nearby dumps contained from 0.02 and 0.04 oz gold/ton and 0.02 and 0.04 oz silver/ton. Moderate mineral development potential for a small mine.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-256	Ronan & James Mine Champion; Gladiator (gold, silver) sec. 14, T. 06 N., R. 02 W. SM	12-in.-wide quartz vein in interbedded slates and graywackes contains arsenopyrite, pyrite, galena, sphalerite, chalcopyrite, and gold. Vein reported to be largely stoped out (Tuck, 1933, p. 510).	Adit with 427 ft of workings. One 30 ft shaft. All workings now inaccessible. Recorded production 557 oz gold and 137 oz silver.	Five grab samples contained from 0.08 to 1.17 oz gold/ton and from 0.05 to 0.64 oz silver/ton. Selected grab sample contained 2.97 oz gold/ton and 2.73 oz silver/ton. Mineral development potential unknown.
S-257	Apex and Nightingale (gold) sec. 11, T. 06 N., R. 02 W. SM	Northwest striking, steeply dipping quartz veins, in close proximity to an 8-ft-wide north-striking felsic dike. Dike was fractured and recemented by vuggy quartz-calcite veins. Veins contain minor arsenopyrite, galena, and gold.	Two caved adits, length unknown. No recorded production.	Two samples contained a trace and 0.73 oz gold/ton and 0.009 and 0.038 oz silver/ton. Moderate mineral development potential for a small mine.
S-258	Johnson (gold) sec. 12, T. 06 N., R. 02 W. SM	Quartz-calcite stringers recement a fractured, 4- to 8-ft-wide, felsic dike. Stringers contain arsenopyrite, pyrite, and gold.	40-ft-long adit; prospect pits. No recorded production.	Not sampled. Mineral development potential unknown.
S-259	Colorado (gold, silver) sec. 02, T. 06 N., R. 02 W. SM	Quartz-calcite veins, up to 8-in.-wide, recement fractured portions of 4- to 15-ft-wide Gilpatrick Dike. Veins contain arsenopyrite, pyrite, galena, sphalerite, and gold.	Three adits present, two are caved; numerous pits, trenches. No recorded production.	Grab sample contained a trace of gold and 0.15 oz silver/ton. Two other grab samples and one chip sample contained only a trace of gold and 0.01 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-260	North Star (gold, silver) sec. 08, T. 06 N., R. 02 W. SM	Vuggy quartz-calcite vein.	Caved adit. No recorded production.	Grab sample contained trace amounts of gold and silver. 6-in.-long chip sample contained 0.08 oz gold/ton and a trace of silver. Mineral development potential unknown.
S-261	Chickaloon River (molybdenum) sec. 01, T. 06 N., R. 04 W. SM	Quartz veins contain small flakes of molybdenite.	None.	Not located. No known potential host intrusive in the area. Low mineral development potential.
S-262	Johnson and Skeen; Billy-Jim 1 (gold, silver) sec. 35, T. 07 N., R. 03 W. SM	Two northwest-striking quartz veins, vary from a few inches to several ft wide, cut north striking slates and graywackes.	Three adits, reported to be 50- to 90-ft in length (Tuck, 1933, p. 519), are inaccessible. Four ounces of gold produced in 1914 by use of rocker box.	Two grab samples from dump contained from 0.34 and 1.5 oz gold/ton and 1.8 and 1.9 oz silver/ton. Moderate mineral development potential for a small mine.
S-263	Mascot; Iron Mask (gold) sec. 27, T. 07 N., R. 02 W.	Quartz veins recement fractured felsic dikes. Veins contain pyrite and minor arsenopyrite.	8-ft-long adit.	Not sampled. No visible mineralization. Low mineral development potential.
S-264	Independence; Peel and Iverson (gold) sec. 36, T. 07 N., R. 02 W. SM	Fractured felsic dike, up to 4-ft-wide, recemented by quartz stringers.	Few prospect pits. No recorded production.	Grab sample contained a trace of gold and 0.01 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-265	Fresno 1 and 2; June Mine (gold) sec. 25, T. 07 N., R. 02 W. SM	Quartz veins recement fractured felsic dike. Veins are limonite-stained, up to 8-in.-wide, and contain arsenopyrite, galena, and minor gold.	Numerous prospect pits and trenches. No recorded production; reportedly some ore was milled in 1912 (Tuck, 1933, p. 517).	Not sampled. Mineral development potential unknown.
S-266	Shell Mine (gold, silver) sec. 25, T. 07 N., R. 02 W. SM	Several quartz veins and at least 2 felsic dikes on property. Developed vein contains arseno-pyrite, galena, pyrite, and free gold.	Caved adit; shaft; num-erous prospect pits. No recorded production.	Six grab samples contained from a trace to 0.4 oz gold/ton and from 0.01 to 0.37 oz silver/ton. Reserves: 400 tons. Moderate mineral development potential for a small mine.
S-267	Teresa 1-6 (gold) sec. 35, 36, T. 07 N., R. 01 W. SM	Several 1- to 3-in.-wide quartz veins parallel bedding of meta-mudstones and sandstones. Veins pinch and swell; contain minor pyrite. Quartz float contains galena.	Hand tools and dynamite present. No workings noted. No recorded production.	Two grab samples contained trace amounts of gold. Low mineral development potential.
S-268	Seward Gold; Telluride (gold, silver) sec. 04, T. 06 N., R. 01 E. SM	Quartz-calcite vein, up to 1-ft-wide, in a shear zone in slate and metasiltstone. Vein contains host rock fragments, pyrite, arsenopyrite, sphalerite, galena, and gold.	Caved 90-ft-long adit with 23 ft winze; 15 ft shaft,; trenching. No recorded production.	Two chip samples contained a trace and 0.02 oz gold/ ton, and a trace and 0.23 oz silver/ton. Two selec-ted grab samples contained 0.79 and 0.99 oz gold/ton and 0.08 and 0.46 oz silver/ton. Grab sample of dump material contained a trace of gold and 0.02 oz silver/ton. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-269	Sunrise Uranium; Uraluck Exploration (uranium) sec. 02, T. 05 N., R. 02 E. SM	No data.	No data.	Not visited. Mineral development potential unknown.
S-270	Unnamed occurrence* Bench Creek (gold) sec. 35, T. 07 N., R. 01 E. SM	2-ft-wide quartz vein in fractured metasandstone contains minor arsenopyrite.	None.	24-in.-long chip sample contained 0.14 oz gold/ton and 0.02 oz silver/ton. Low mineral development potential.
S-271	Brewster (gold) sec. 27, T. 07 N., R. 01 E. SM	Narrow discontinuous quartz vein roughly parallels foliation of country rock. Quartz vein contains chalcopyrite, galena, pyrite, arsenopyrite, and gold.	65-ft-long adit and small mill reportedly present (Wimmler, 1926). Reported production 5 to 10 oz gold.	Not located. Mineral development potential unknown.
S-272	Ready Bullion (copper, gold, silver) sec. 20, T. 07 N., R. 01 E. SM	Massive sulfide lenses and pods, 1- to 4-ft-wide, occupy a well-developed 3- to 10-ft-wide shear zone in carbonaceous, phyllitic host rocks along an exposed strike length of 110 ft. Mineralization appears to be terminated at both ends by transverse faults. Lenses and pods contain pyrrhotite, pyrite, chalcopyrite, ± sphalerite and arsenopyrite.	Two adits. Lower reportedly is 800-ft-long and caved (Paige and Knopf, 1907, pp. 124-125). Upper consisting of 335-ft of crosscut and 110-ft of drifts, minor stope development and a flooded winze of unknown depth. Small prospect pit is present above the upper level. No recorded production.	Average grades of samples are 2.5% copper, 0.1% zinc, 0.01 oz gold/ton, and 0.3 oz silver/ton. Samples contained from 0.002 to 4.4 % copper, trace to 0.41% zinc, trace to 0.116 oz gold/ton, and trace to 0.75 oz silver/ton. Reserves: 6,000 tons. Moderate mineral development potential for a small mine.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-273	Keno and Hiway (gold) sec. 09, T. 07 N., R. 01 W. SM	No data.	No data.	Not located. Mineral development potential unknown.
S-274	Tributary Creek (gold) sec. 18, T. 07 N., R. 01 W. SM	Fractured felsic dike recemented by slightly mineralized quartz veins.	None.	Not located. Mineral development potential unknown.
S-275	Gilpatrick; Frenchy Creek (gold, silver) sec. 05, T. 07 N., R. 01 W. SM	Fractured felsic dike averaging 6-ft-wide, recemented by quartz-calcite veins and pods, up to 10-in.-wide. Vein contains arsenopyrite, chalcopyrite, galena, and sphalerite. Arsenopyrite also occurs in dike.	50-ft inclined shaft with caved winze at bottom. No recorded production.	Selected dump sample contained 0.42 oz gold/ton and 24.21 oz silver/ton. 3 chip samples from the incline contained a trace of gold and 0.02 to 0.22 oz silver/ton. Low mineral development potential.
S-276	Hillside Quartz; Frenchy Creek Mine (gold, silver) sec. 29, T. 08 N., R. 01 W. SM	Several quartz veins in metasiltstone contain arsenopyrite, pyrite, and minor gold.	Prospect pits. No recorded production.	Grab sample contained a trace of gold and 0.02 oz silver/ton. Low mineral development potential.
S-277	Donaldson Creek (gold) sec. 20, T. 08 N., R. 01 W. SM	Reportedly a slightly mineralized felsic dike cuts slate and graywacke (Tuck, 1933, p. 517).	None.	Not located. Mineral development potential unknown.
S-278	Silvertip Quarry (stone) sec. 26, T. 08 N., R. 01 W. SM	Fractured metasandstone used for rip rap and facing stone.	Open cut.	Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-279	Gold Leaf (gold) sec. 23, T. 08 N., R. 01 W. SM	Several quartz veins in slate and graywacke contain arsenopyrite and pyrite.	None.	Chip sample contained a trace of gold and silver. Low mineral development potential.
S-280	Julia; Silvia (gold) sec. 13, 23, 24, T. 08 N., R. 01 W. SM	No data.	Prospect pit. No recorded production.	Not sampled. Mineralization not exposed. Low mineral development potential.
S-281	Gulch Creek #1* (silver, gold, antimony) sec. 20, T. 08 N., R. 01 E. SM	At least two 2- to 5-in.-wide quartz veins in interbedded graywacke pebble conglomerate, and minor slate. Veins contain galena, stibnite, sphalerite, chalcopyrite, and arsenopyrite.	None.	Twelve samples contained from a trace to 0.05 oz gold/ton, from 0.01 to 20.41 oz silver/ton and from a trace to 0.23% antimony. Moderate mineral development potential for a small mine.
S-282	Robin #1 (gold?) sec. 19, T. 08 N., R. 01 E. SM	No data.	None.	Not visited. Mineral development potential unknown.
S-283	Gulch Creek #2* (gold, silver) sec. 19, T. 08 N., R. 01 E. SM	Two subparallel quartz-calcite veins in slates and metasiltstones average 1.5-ft-wide and can be traced to 200 ft along strike. Quartz displays well-developed ribbon structure and contains arsenopyrite and chalcopyrite along the contact with the wallrock.	None.	Four samples contained trace amounts of gold and up to 0.01 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-284	Gulch Creek #3* (gold, silver) sec. 16, R. 08 N., R. 01 E. SM	Quartz stringers and pods, up to 2-ft-wide, in well-developed shear zones averaging 4-ft-wide in slate and metasiltstone. Veins are limonite-stained and contain arsenopyrite.	None.	Five samples contained traces of gold and a trace to 0.01 oz silver/ton. Low mineral development potential.
S-285	SS Lode, Double Lode, SS Discovery (gold?) sec. 35, T. 08 N., R. 01 E. SM	No data.	No workings. No recorded production.	Not located. Placer gold present in Bertha Creek. Mineral development potential unknown.
S-286	Lyon Den #1 (gold?) sec. 24, T. 08 N., R. 01 E. SM	No data.	None.	Vein mineralization not located. 0.1 cy gravel sample from Lyon Creek yielded coarse gold. Mineral development potential unknown.
S-287	Babe (radium) sec. 29, T. 08 N., R. 02 W. SM	No data.	No data.	Not visited. Mineral development potential unknown.
S-288	Unnamed prospect (?) sec. 23, T. 08 N, R. 02 W. SM	Several quartz veins and pods in interbedded metasiltstone and graywacke.	None.	USGS sample contained 0.13% manganese, 0.2% boron, and 70 ppm zinc. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-289	Hirshey-Lucky Strike Swetmann (gold, silver) sec. 24, T. 08 N., R. 02 W. SM	Quartz vein in slate, varies from a few in. to 5-ft-wide, averages 18-in. Vein contains quartz, minor calcite and ankerite, arsenopyrite, pyrite, galena, sphalerite, and fine gold.	Three adits, all inaccessible, reported total length in excess of 2,000 ft (Roehm, 1937, p. 2). Considerable stoping reported. Recorded production 5,545 oz gold and 4,699 oz silver.	Five chip samples contained from 0.01 to 2.9 oz gold/ton and 0.02 to 1.9 oz silver/ton. Considerably higher grades were reported previously. Reserves: 2,000 tons. High mineral development potential for a small mine.
S-290	Teddy Bear (gold, silver, copper) sec. 13, T. 08 N., R. 02 W. SM	Fractured 3-ft-wide felsic dike recemented by quartz-calcite veins containing arsenopyrite, chalcopyrite, galena, sphalerite, and minor gold. Dike can be traced for 3 mi along strike.	65-ft-long adit; surface trenching. No recorded production.	Chip sample of dike contained a trace of gold and silver. Select grab sample contained 0.117 oz gold/ton and 0.2 oz silver/ton. Large low grade reserves possible. Moderate mineral development potential.
S-291	Unnamed prospect (gold, silver, copper) sec. 14, T. 08 N., R. 02 W. SM	Several quartz veins in graywacke.	None.	USGS sample contained 0.09 oz silver/ton and 0.04% copper. Low mineral development potential.
S-292	Hirshey & Carlson; Swetmann-New Hope; (gold, silver) sec. 07, T. 08 N., R. 01 W. SM	Two quartz veins, up to 10-in.-wide, in slate, contain sphalerite, arsenopyrite, pyrite, galena, and gold.	2 adits with total of 640 ft of workings; 120 ft of trenching; 30-ft horizontal cut. Recorded production 408 oz gold and 24 oz silver.	Test shipment in 1936 assayed 2.3 oz gold/ton. Four chip samples contained from 0.07 to 28.08 oz gold/ton and <0.2 to 9.3 oz silver/ton Reserves: 500 tons. Moderate mineral development potential for a small mine.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-293	Sunshine Mine (gold, silver) sec. 01, T. 08 N., R. 02 W. SM	Two quartz veins, 2- to 12-in.-wide, in metasandstone contain pyrite, chalcopyrite, and gold.	Three adits. Lower level caved; middle level 300-ft long, partially caved; upper level 110-ft-long, accessible. No recorded production.	Two grab samples contained trace amounts of gold and a trace and 0.01 oz silver/ton. Four chip samples from upper adit contained from nil to 0.73 oz gold/ton and nil to 0.3 oz silver/ton. Low to moderate mineral development potential.
S-294	Downing Mine; Francisco; Hershey; Bonanza Whistler; (gold, silver) sec. 31, T. 09 N., R. 01 W. SM	Several small quartz-calcite veins in metasiltstone.	Two adits 55-ft and 36-ft-long; 3 open cuts. Recorded production 150 oz gold.	Two select grab samples and a chip sample contained from nil to 0.39 oz gold/ton and 0.2 oz silver/ton. Low mineral development potential.
S-295	Robin Red Breast (gold) sec. 29, T. 09 N., R. 01 W. SM	Discontinuous 1- to 6-in.-wide quartz veins in a 10-ft-wide shear zone in slates. Quartz contains pyrite.	Underground workings, now inaccessible. Open cuts present. No reported production.	Not sampled. Mineral development potential unknown.
S-296	Kenai Star; French Mine (gold, silver) sec. 30, T. 09 N., R. 01 W. SM	Fractured felsic dike, up to 6-ft-wide, recemented by slightly mineralized quartz-calcite veins. Veins contain quartz, calcite, arsenopyrite, pyrite, chalcopyrite, sphalerite, galena, and gold. Dike contains arsenopyrite and pyrite.	Two adits - upper 60-ft-long (accessible), lower 120-ft-long (inaccessible); trenches. No recorded production.	Two chip samples contained a trace and 0.15 oz gold/ton and a trace and 0.06 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-297	Robinson & Bowman; Lost Frontier (gold) sec. 22, T. 09 N., R. 02 W. SM	Quartz vein, up to 6-in.-wide, in slates and graywackes contains arsenopyrite, galena, and minor gold.	220-ft-long adit, partially caved. No recorded production.	Not sampled. Mineral development potential unknown.
S-298	Red Hat (gold) sec. 16, T. 09 N., R. 02 W. SM	No data.	No data.	Not visited. Mineral development potential unknown.
S-299	Nearhouse (gold, silver) sec. 18, T. 09 N., R. 01 W. SM	Banded and brecciated quartz vein, averaging 20-in.-wide, in meta-siltstone and sandstone contains arsenopyrite, galena, sphalerite, pyrite, and gold. Vein faulted off at both ends.	Two adits, lower 35-ft-long, upper 450-ft-long, and an 80-ft winze. Recorded production 102 oz gold and 3 oz silver. Additional past production possible.	Six chip samples contain from a trace to 0.45 oz gold ton and from 0.02 to 0.13 oz silver/ton. Selected grab samples contained from a trace to 0.2 oz gold/ton and from 0.01 to 0.35 oz silver/ton. Reserves: 7,000 tons. Moderate mineral development potential for a small mine.
S-300	Mighty (gold, silver) sec. 12, T. 09 N., R. 02 W. SM	Quartz veins, up to 12-in.-wide, recement fractured felsic dike. Dike contains pyrite and arseno-pyrite.	90-ft-long adit. No recorded production.	Three chip samples contained only trace amounts of gold and less than 0.05 oz silver/ton. Grab sample of dump material contained 0.05 oz gold/ton and 0.03 oz silver/ton. Low mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-301	Gold Stamp (gold,silver) sec. 07, T. 09 N., R. 01 W. SM	Quartz vein (not currently exposed) up to 16-in.-wide reportedly cuts graywacke and a felsic dike (Moffit, 1907, pp. 47-48). Pyrite, arsenopyrite, galena, sphalerite, chalcopyrite, and gold are present in vein.	30-ft-deep two compartment shaft, currently flooded. No recorded producton.	Two grab samples of dump materials contained 0.03 and 0.18 oz gold/ton, and 0.05 and 0.72 oz silver/ ton. Mineral development potential unknown.
S-302	Coon and Plowman (silver) sec. 12, T. 09 N., R. 02 W. SM	Quartz veins, 2- to 12-in.-wide, in graywackes and slates contain minor calcite, arsenopyrite, pyrite, and galena.	40-ft-long adit. No recorded production.	Not sampled. Mineral development potential unknown.
S-303	Taylor (gold) sec. 01, T. 09 N., R. 02 W. SM	A 10-in.-wide banded quartz vein in slate contains arsenopyrite, sphalerite, galena, and gold.	130-ft-long adit driven in 1931, inaccessible. No reported production.	Not sampled. Mineral development potential unknown.
S-304	Lucky Lode; Busted Flat (gold,silver) sec. 12, T. 09 N., R. 02 W. SM	Quartz vein with trace amounts of gold and silver reported (Mitchell, 1979, p. 105).	Several small prospect pits. No recorded production.	Not visited. Mineral development potential unknown.
S-305	Wildhorse Quarry (ornamental stone) sec. 04, T. 09 N., R. 02 W. SM	6-ft-wide dike with an orange color-staining.	None.	Not visited. Mineral development potential unknown.
S-306	Cowan Mountain Stone (ornamental stone) sec. 34, T. 10 N., R. 02 W. SM	No data.	None.	Not visited. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-307	Johnson Creek Mine (gold) sec. 14, T. 10 N., R. 3 W. SM	No data.	Collapsed buildings present.	Not visited. Mineral development potential unknown.
S-308	Hope Mountain Greenstone (ornamental stone) sec. 20, T. 10 N., R. 02 W. SM	No data.	None.	Not visited. Mineral development potential unknown.
S-309	Hope Road Quarry (facing stone) sec. 25, T. 10 N., R. 02 W. SM	Metasandstone with well-developed cleavage breaks into slabs; suitable for facing stone.	Small quantities sold between 1977 and 1980 for fireplace facing stone.	Limited quantities of rock with suitable splitting characteristics remain. High mineral development potential.
S-310	Connoly (gold) sec. 11, T. 09 N., R. 01 W. SM	No data. Possibly refers to a placer operation active in early 1900's.	No data.	Not located. Mineral development potential unknown.
S-311	Tina Baby (gold) sec. 02, T. 09 N., R. 01 W. SM	No data.	None.	Not visited. Mineral development potential unknown.
S-312	Kenai Lu; Kirsten 1 and 2 (gold, silver) sec. 10, T. 09 N., R. 01 E. SM	Quartz veins, up to 4-ft-wide in slate and metasiltstone contain arsenopyrite, pyrite, sphalerite, galena, and gold. Main vein is displaced by faults on both ends.	60- to 70-ft-long adit (inaccessible). Twenty-five ounces gold produced in 1906. Additional production possible.	Four samples contained a trace to 0.04 oz gold/ton and a trace to 0.04 oz silver/ton. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-313	Slate Creek #1 (gold) sec. 15, T. 09 N., R. 01 E. SM	Two quartz veins associated with faults in slate.	None.	Not sampled. Mineral development potential unknown.
S-314	Slate Creek #2 (gold) sec. 11, T. 09 N., R. 01 E. SM	Quartz stringer 1- to 2-in.-wide in 4-ft-wide fault zone in slate contains quartz, calcite, minor pyrite, and arsenopyrite.	None.	Chip sample contained trace amounts of gold a silver. Low mineral development potential.
S-315	Indian (gold) sec. 05, T. 10 N., R. 01 W. SM	Fractured felsic dike is re-cemented by quartz and calcite containing pyrite (Capps, 1916, p. 192).	No data.	Not visited. Mineral development potential unknown.
S-316	Bird Point; Conway, Centennial (gold, silver) sec. 30, T. 10 N., R. 01 E. SM	Currently not exposed. Reportedly 2- to 16-in.-wide quartz-calcite vein parallels foliation in slate and metasiltstone (Capps, 1916, pp. 191-192). Pyrite, chalco-pyrite, galena, sphalerite, and gold are present.	22-ft-deep shaft, collar below current sea level. Mill test of 4,200 lbs in 1912 yielded 2 1/2 oz gold/ton.	Grab sample contained 0.28 oz gold/ton and 0.06 oz silver/ton. Mineral development potential unknown.
S-317	Peterson Creek Quarry (rock) sec. 11, T. 09 N., R. 02 E. SM	Dark carbonaceous argillite and phyllite.	Quarry. Used for construction of leach field at the Girdwood sewage treatment plant.	High mineral development potential for rip rap and fill.
S-318	Peterson Creek (gold) sec. 02, T. 09 N., R. 02 E. SM	3-ft-wide quartz vein in slate and graywacke.	None.	Not sampled. Mineral development potential unknown.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
S-319	Unnamed occurrence (copper, silver) sec. 04, T. 09 N., R. 12 E. SM	600-ft-wide limonite-stained zone in granite.	None.	USGS grab sample contained 0.5% copper and 30 ppm silver. Mineral development potential unknown.
S-320	Unnamed Prospect (gold, silver) sec. 09, T. 09 N., R. 06 E. SM	Quartz vein(s?) contain pyrite and arsenopyrite.	No known underground workings. Building and equipment present. No known production.	Two USGS grab samples contained 7 ppm silver, and 300 and >10,000 ppm arsenic. Mineral development potential unknown.
S-321	Mills Creek Slate* (slate) sec. 11, T. 06 N., R. 01 W.	Interbedded green and purple slate.	None.	Suitable for use as a decorative stone. Mineral development potential unknown.
S-322	R S and S Quarry (building stone) sec. 11, T. 05 N., R. 02 W.	Interbedded slate and metasandstone suitable for use as building stone.	75-ft-long, 50-ft-wide borrow pit. Rock for reconstruction of Sterling Highway in early 1960's. Minor amounts have been used since 1977 for building stone.	More than 73,000 tons reserves of suitable building stone present. Moderate mineral development potential for use as building stone.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
P-1	Whale (placer gold) sec. 06, T. 20 S., R. 05 E. CRM	Beach Sands.	No data. No reported production.	0.075 cy placer sample contained 0.05 ppm gold in concentrate. Low mineral development potential.
P-2	Copper River (placer gold)	Quaternary alluvial sands and gravels in Copper River.	None.	Five 0.1 cy samples contained from 0.0004 to 0.005 oz gold/cy. One 0.33 cy sample contained 0.003 oz gold/ton. Moderate mineral development potential.
P-3	Shiels Glacier* (placer gold) sec. 27, T. 11 S., R. 04 E. CRM	Alluvial and colluvial gravels in drainage that drains metasedimentary rocks.	None.	0.1 cy sample contained 0.0007 oz gold/cy. Low mineral development potential.
P-4	Copper River Tributary* (placer gold) sec. 22, T. 11 S., R. 04 E. CRM	Alluvial gravels in a drainage that drains metasedimentary and metavolcanic rocks.	None.	0.1 cy sample contained 0.0009 oz gold/cy. Low mineral development potential.
P-5	McCune Glacier* (placer gold, lead) sec. 24, T. 11 S., R. 03 E. CRM	Alluvial gravels in a drainage that drains metasedimentary and metavolcanic rocks. Shear zone containing quartz, galena, and pyrrhotite, crops out in the drainage.	No data.	A 0.1 cy sample contained 0.0006 oz gold/cy. One sample from a shear zone contained 0.14% lead. Low mineral development potential.
P-6	Tasnuna River* (placer gold) T. 10 S., R. 03 E. CRM	Quaternary alluvial gravel derived from metasedimentary and metavolcanic rocks.	None.	Fifteen 0.1 cy samples contained from <0.03 ppm to 0.028 oz gold/cy. Moderate mineral development potential.

Locality No.	Name/owner (resource) location	Summary of mineralization	Workings and production	Sample data and resource assessment
P-7	Cleave Creek* (placer gold) T. 09 S., R. 02 E. CRM	Quaternary alluvial gravel derived from metasedimentary and metavolcanic rocks.	None.	Five 0.1 cy samples contained 0.0001 to 0.004 oz gold/cy. Six grab samples of float contained <0.03 to 0.03 ppm gold. Moderate mineral development potential.
P-8	Marshall Glacier* (placer gold, copper) T. 09 S., R. 02 W. CRM	Quaternary alluvial gravels derived from metasedimentary and metavolcanic rocks. 4-ft wide malachite-stained greenstone crops out on the north side of the river.	None.	0.1 cy sample contained 0.14 oz gold/cy. Chip sample of stream float contained 0.45% copper. High mineral development potential.
P-9	Deserted Glacier* (placer gold) T. 09 S., R. 02 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks.	None.	0.1 cy sample contained 0.00055 oz gold/cy. Low mineral development potential.
P-10	Heiden Creek* (placer gold) T. 09 S., R. 02 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks.	None.	0.1 cy sample contained 0.00055 oz gold/cy. Low mineral development potential.
P-11	Bench Creek* (placer gold) T. 09 S., R. 03 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks.	None.	0.1 cy sample contained 0.0023 oz gold/cy. Moderate mineral development potential.
P-12	Wortmann Creek (placer gold) T. 09 S., R. 03 W. CRM	Quaternary alluvial gravels.	Placer gold operation. No reported production.	0.1 cy sample contained 0.0003 oz gold/cy. Low mineral development potential.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-13	Lowe River (placer gold) T. 09 S., R. 05 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks. Mineralization consists of fine-grain gold and reported scheelite near the mouth.	No data.	Two 0.1 cy samples contained 0.56 to 1.25 ppm gold; two 0.1 cy placer samples contained from 0.0002 to 0.0004 oz gold/cy. No tunsten values obtained in sample analysis. Low mineral development potential.
P-14	Black Bear No. 1-4 (placer platinum) sec. 21, T. 09 S., R. 05 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks.	Placer operation. No reported production.	Not looked for. Mineral development potential unevaluated.
P-15	Brown Creek* (placer gold) T. 20 S., R. 04 W. CRM	Quaternary alluvial gravels derived from metasedimentary and metavolcanic rocks.	None.	Two 0.1 cy samples contained from 19 ppm to 0.0005 oz gold/cy. Three-pan sample from bedrock contained 0.019 oz gold/cy. Moderate mineral development potential.
P-16	Sulfide Gulch (placer gold) T. 09 S., R. 05 W. CRM	Quaternary alluvial gravels derived from metasedimentary and metavolcanic rocks. Other minerals present in heavy fraction include garnet, pyrite, chalcopyrite, magnetite, zircon, and scheelite.	Placer operation. No reported production.	0.1 cy sample contained 0.044 oz gold/ton. R. H. Sanders took two pan samples on the West Fork which yielded 0.25 to 0.35 mg of gold/double pan. Low mineral development potential.
P-17	Dead Creek* (placer gold) T. 11 S., R. 04 W. CRM	Quaternary alluvial gravels contain slate, graywacke, phyllite, greenstone, and andalusite schist cobbles and boulders. 1% garnet in concentrate.	None.	Five 0.1 cy samples contained from 0.28 ppm to 0.0007 oz gold/cy. Low mineral development potential.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-18	Red Head #1 (placer gold) sec. 04, T. 14 S., R. 07 W. CRM	1-ft thick beach sand over a sandy pebbly layer. Pebbles are felsic intrusives, greenstones, graywackes, and slates. 10% garnet in concentrate.	No data. No reported production.	Two 0.1 cy samples contained from <0.03 ppm to 0.0002 oz gold/cy. Low mineral development potential.
P-19	Port Fidalgo* tributary (placer gold) T. 11 S., R. 05 W. CRM	Quaternary alluvial gravels consist of slate, graywacke, greenstone, and quartz cobbles and boulders.	None.	Six 0.1 cy samples contained from 0.0003 to 0.002 oz gold/cy. Moderate mineral development potential.
P-20	Silver Lake Trib.* (placer gold) sec. 32, T. 10 S., R. 07 W. CRM	Quaternary alluvial gravels in drainage that drains slates and graywackes.	None.	0.1 cy sample contained 0.002 oz gold/cy. Moderate mineral development potential for a small mining operation.
P-21	Jack Bay Trib.* (placer gold) sec. 25, T. 10 S., R. 07 W. CRM	Quaternary alluvial gravels in drainage that drains slates and graywackes.	None.	0.1 cy sample contained 0.0012 oz gold/cy. Low mineral development potential.
P-22	Solomon Gulch, Solomon Falls Placer, Huckleberry Placer (placer gold) T. 09 S., R. 06 W. CRM	Quaternary alluvial gravels derived from metasedimentary and metavolcanic rocks.	Placer gold operation. No reported production.	Two 0.1 cy samples contained 0.018 oz gold/ton and 0.0008 oz gold/cy. Moderate mineral development potential.
P-23	Salmon Creek* (placer gold) T. 09 S., R. 07 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks.	None.	0.1 cy sample contained 0.00755 oz gold/cy. Moderate mineral development potential.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-24	Rainy Day; Jackson; Allison (placer gold) sec. 18, T. 09 S., R. 06 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks.	Placer gold operation. No reported production.	Alyeska Oil Terminal is built on prospect site. Low mineral development potential.
P-25	Mineral Creek; The Harley-Davidson; Ethel; High Ore; Icy Creek; Fine Chance (placer gold) T. 08 S., R. 06 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks.	Placer gold operation. No reported production.	Gravel flats drilled in 1914; reported to contain 0.012 to 0.0145 oz gold/cy. Moderate mineral development potential.
P-26	Gold Creek, Bud Mining Co. (placer gold) T. 08 S., R. 07 W. CRM	Quaternary alluvial gravels contain 5% clay, and slate, graywacke, and quartz pebbles and cobbles. Gravel are 9 to 50 ft thick.	Placer gold operation. No reported production.	0.1 cy sample contained 0.0005 oz gold/cy. Low mineral development potential.
P-27	McAllister Creek* (placer gold) T. 08 S., R. 08 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks.	None.	0.1 cy sample contained 0.001 oz gold/cy. Low mineral development potential.
P-28	Big Creek* (placer gold) T. 08 S. R. 08 W. CRM	Quaternary alluvial gravels derived from metasedimentary rocks.	None.	0.1 cy sample contained 0.00055 oz gold/cy. Low mineral development potential.
P-29	Lake No. 1* (placer gold) T. 08 S., R. 09 W. CRM	Quaternary alluvial gravels.	None.	0.1 cy sample contained 0.0005 oz gold/cy. Low mineral development potential.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-30	Columbia Glacier* (placer gold) T. 09 S., R. 10 W. CRM	Quaternary alluvial gravels.	Placer gold occurrence. No reported production.	0.1 cy sample contained 0.0005 oz gold/cy. Low mineral development potential.
P-31	Miners Bay Discovery* (placer gold) sec. 29, T. 12 N., R. 12 E. SM	Quaternary alluvial gravels.	None.	0.1 cy sample contained 0.005 oz gold/cy gold. Moderate mineral development potential.
P-32	Western Tributary to Unakwik Inlet (placer gold) Anchorage A2 T. 11 N., R. 10 E. SM	Fine gold is disseminated in poorly washed fluvial glacial gravels containing boulders to 5 ft. and moderate clay hardpan. Grade is likely low but local concentrations of economic significance may exist.	No recorded production.	Alluvial sample contained 0.0021 oz gold/cy. Low to moderate development potential for suction dredging and small mechanized operations.
P-33	Northwestern Tributary to Jonah Bay (placer gold) Anchorage A2 T. 11 N., R. 10 E. SM	Fine gold is disseminated in poorly washed fluvial glacial gravels derived from a glacier on the north and east flanks of Unakwik Peak. Large boulder are present.	No recorded production.	Alluvial sample contained 0.0013 oz gold/cy. Low mineral development potential for small mechanized and suction dredging operations.
P-34	Siwash Bay Creek (placer gold) Seward D2 T. 10 N., R. 10 E. SM	Upper Siwash Creek descends rapidly with little gravel accumulation. Lower section occupies a relatively wide valley with a braided channel and flood plain developed. Gravel contains considerable clay. Anomalous concentrations of fine gold occur at the lower end of the steep section of the creek.	None.	0.1 cy samples contained 0.0036 and 0.0009 oz/cy. Mid-section of Siwash Creek has low to moderate mineral development potential for suction dredging and small mechanized operations.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-35	Eaglek Bay (placer gold) Seward D3 T. 10 N., R. 9 E. SM	Uppermost section descends rapidly from its glacial sources followed by a wide braided portion about 1 1/2 mi long. Lower section occupies a steep narrow bedrock canyon below which a braided channel has developed. Very fine gold occurs in gravels accumulating below lower falls.	None.	0.1 cy sample contained 0.001 oz gold/cy. The gold required amalgamation to recover. Low mineral development potential for suction dredging and small mechanized operations.
P-36	Avery River (placer gold) Seward D3 T. 10 N., R. 9 E. SM	Lower half of Avery River occupies a relatively broad gentle U-shaped valley filled with considerable alluvium. Middle section flows through a narrow, steep bedrock canyon with little gravel accumulation. Upper section occurs in a broad U-shaped valley with poorly washed fluvial glacial gravels containing highly anomalous concentrations of fine gold with particles up to 1/8 in recovered. Upper gravels contain numerous boulders and considerable clay.	Possibly some hand placer activity and suction dredging has occurred.	Three samples from the upper section contained from 0.0001 to 0.008 oz gold/cy; sample collected just below the canyon 0.0002 oz gold/cy; other samples, trace amounts of gold. Upper section has moderate potential for a small mechanized operation. More than 200,000 cy gravel present. Canyon section has moderate mineral development potential for suction dredging.
P-37	Lafayette Glacier (placer gold) Anchorage A3 T. 11 N., R. 9 E. SM	Very fine-grained gold is disseminated in poorly washed fluvial-glacial gravels associated with Lafayette Glacier. Large boulders are present. A large volume of gravel occurs along the stream.	No recorded production.	Alluvium sample contained 0.001 oz gold/cy. Lafayette drainage has low mineral development potential for small-medium sized mechanized operations.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-38	Northwest Fork Coghill River (placer gold) Anchorage A2 T. 12 N., R. 10 E. SM	Gold is disseminated in thin, poorly to moderately sorted alluvial gravels and concentrated on and in slate bedrock exposed in the canyon portion of the northwest fork of the Coghill River. Minor gravel occurs in the canyon but has accumulated above its junction with the main fork of the Coghill River. Grades are low to marginal with good possibilites of identifying local economic concentrations of gold. Gold up to 1/16 in. in diameter was recovered.	No recorded production.	The three alluvium samples contained 0.0004 to 0.0063 oz gold/cy. Considerable arsenopyrite was also recovered. Moderate mineral development potential for suction dredging in the canyon section, and low potential for a small operation below the canyon.
P-39	Bettles Bay stream draining Mineral King Mine (#140) (placer gold) Seward D4 T. 10 N., R. 6 E. SM	Gold is disseminated throughout gravels with some concentration on bedrock. Creek occupies a steep narrow bedrock channel with little accumulation of gravel except at its extreme lower end. Gravel contains considerable clay and boulders.	Minor prospecting reported. No known production.	Samples collected near the mouth of the canyon contained 0.0009 and 0.018 oz/cy. The second sample was collected on bedrock. Gravel volume is limited. Low to moderate mineral development potential for a small mechanized operation and suction dredging
P-40	Pirate Cove (placer gold) Seward D4 T. 9 E., R. 6 E. SM	Gold is fine with a few small flakes to 1/16 in. recovered. The main tributary to Pirate Cove occupies a short U-shaped valley which has a steep gradient in its upper portion and a relatively gentle gradient along its middle and lower sections. Gravel contains numerous boulders.	None.	0.1 cy sample of alluvial gravels contained 0.001 oz gold/cy. Low mineral development potential for economic placer mining.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-41	Billings Creek (placer gold) Seward D5 T. 9 N., R. 5 E. SM	Billings Creek occupies a relatively short, wide, gently sloping U-shaped valley. Central section has a short bedrock canyon below which gravel bars containing fine disseminated gold accumulations. Gravels consist of a wide variety of metasedimentary and granitic clasts and have a high clay content.	None.	3-in. dredge sample yielded 0.0014 oz gold/hr of very fine gold requiring amalgamation to recover. Low to moderate mineral development potential for a small mechanized or suction dredge operation.
P-42	Carmen River, (North Fork) (placer gold) Seward D5 T. 9 N., R. 4 E. SM	Upper segment of Carmen River occupies a relatively broad, gently sloping U-shaped valley except in its uppermost forks entrenched in steep walled bedrock canyons. Little gravel has accumulated in the canyons. The flood plain gravels grade from boulder and clay rich at the upper portion to increasingly well-washed sandier sections near Carmen lake. Gold is present in slightly anomalous concentrations in the alluvial gravels of the upper section.	None.	Three 3-in dredge samples yielded from a trace to 0.0001 oz gold/hr. One 0.1 cy channel sample collected in the east fork bedrock canyon contained 0.0014 oz/cy. Sniping on bedrock yielded traces of gold. Carmen River has low mineral development potential for economic mining operations.
P-43	Cotterell Glacier Creek (placer gold) Seward C5 T. 6 N., R. 5 E. SM	Cotterell Glacier Creek occupies a relatively broad glacial valley with flood plain developed along most of its course. Gravel is somewhat compacted, with a high clay and boulder content. Gold is fine and required amalgamation to recover.	None.	0.1 cy sample collected near the terminus of Cotterell Glacier contained 0.0005 oz/cy. Low mineral development potential for placer mining.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-44	Taylor Glacier Creek (placer gold) Seward C5 T. 5 N., R. 5 E. SM	Taylor Glacier Creek occupies a very short broad valley and has a braided channel consisting of compacted gravels with a high clay and boulder content. Gold up to 1/8-in diameter was recovered.	None.	0.1 cy sample collected below a small waterfall contained 0.0044 oz/cy. Low to moderate mineral development potential for a small mechanized operation or suction dredging. Boulders would be a problem.
P-45	Claremont Glacier Creek (placer gold) Seward C5 T. 5 N., R. 5 E. SM	Claremont Glacier Creek occupies a short, steep, narrow glaciated valley in its upper section with a braided alluvial channel along its lower portion. The gravel is compacted with a high clay and boulder content. The gold is fine and required amalgamation to separate from concentrate.	None.	0.1 cy sample gold contained 0.0013 oz/cy. Low mineral development potential for placer commercial mining.
P-46	Kings River (placer gold) Seward B5 and C5 Quads. T. 4 N., R. 4. E. SM	Kings River is fed by two short steep gold-bearing headwater tributaries. Below their junction the river flows through a relatively wide gently sloping valley with a 1/4 to 1/2 mile wide flood plain. The gravels contain considerable clay with coarse angular bedrock boulders in the upper section and become better sorted, less compacted and finer grain as Kings Bay is approached. Coarse gold, up to 3/16-in diameter, was recovered in the upper section of the stream. Fine grain gold in anomalous quantities was found in surface gravels up to 5 mi from the headwaters.	None.	Three 0.1 cy samples contained from 0.0003 to 0.0083 oz gold/cy. Dredge sample yielded 0.0017 oz gold/hr. Upper section of Kings River has moderate mineral development potential for suction mechanized operations. Boulders would be a significant problem. Flood plain gravels (greater than 6 million cy) could support a medium to large mechanized operation.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-47	Kings River tributary (placer gold) Seward B5 Quad T. 5 N., R. 3 E. SM	This tributary occupies a short steep, narrow bedrock canyon in its upper section. The remainder has a narrow flood plain consisting of clay-rich gravels which contain anomalous gold values. The gold recovered was up to 1/8 in. diameter.	None.	Sample collected 150 ft below the canyon mouth contained 0.0035 oz gold/cy. Sample from near junction with the Kings River contained only traces of gold. Low to moderate mineral development potential for suction dredging or a small mechanized operation in the section just below the canyon mouth. Gravel reserves in the high grade portion of the stream are estimated to be less than 25,000 cy.
P-48	Wolverine Creek (placer gold) Seward B6	Wolverine Creek descends through a short narrow bedrock canyon with minor gravel accumulating until near its junction with the Nellie Juan River. Gravels contain considerable clay, numerous boulders and small amounts of fine gold and sulfides.	None.	0.1 cy placer sample from surface gravels contained 0.0002 oz/cy gold. Low mineral development potential for small mechanized and suction dredge operations.
P-49	Sheppard 1A, 1B, 2 Puget Bay (placer gold) sec. 18, T. 2 S., R. 6 E. SM	Quaternary alluvial sand and gravels consist of graywacke with some disseminated pyrite and small quartz veins.	No data.	Four 0.1 cy placer samples contained from .04 ppm to 1.34 ppm gold. Low mineral development potential.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-50	Snow River (placer gold) Seward B6 and B7	Snow River occupies a long relatively wide glacial valley with a well-developed flood plain. Gravel contains considerable clay and very fine grain gold dispersed throughout. Best values are obtained below bedrock canyons above Lower Paradise Lake.	None.	Five placer samples contained from a trace to 0.0464 oz gold/cy. Dredge sample yielded 0.0001 oz/hour. Gold required amalgamation to separate it from the concentrate. Low to moderate mineral development potential for medium or large mechanized operations. Greater than 5 million cy of gravel are estimated to occur along the upper 9 mi of the Snow River.
P-51	Victor Creek (placer gold) Seward B6 and B7 T. S. N., R. 1 E. SM	Victor Creek occupies a steep, narrow, bedrock-walled, avalanche debris-filled valley along most of its length. Narrow flood plain and alluvial fan have developed along lower 1/2 to 3/4 mi section. Gravels contain considerable clay and large boulders. Fine gold has been recovered in samples. Coarser gold has been reportedly recovered.	Prospecting on lower section of Victor Creek reported between 1900 and 1916 when a shaft was dug, and again during the 1950's. Some suction dredging since 1977. Total production is estimated to be less than 50 oz.	Three 0.1 cy samples contained 0.0002 to 0.0043 oz gold/cy. Moderate potential for suction dredging in its lower canyon; low to moderate mineral development potential for small mechanized operations on alluvial fan.
P-52	Porcupine Creek (placer gold) Seward B7 T. 3 N., R. 1 W. SM	Porcupine Creek occupies a deep, narrow, steep bedrock-walled canyon along most of its course with narrow flood plain and an alluvial fan developed along its lower portion. Gravel bars and channel deposits accumulated in the canyon in favorable locations which contain fine placer gold.	Minor suction dredging since 1975. Total estimated production is less than 25 oz.	Two samples contained 0.0008 and 0.0022 oz gold/cy. Low to moderate mineral development potential for suction dredging.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-53	Martin Creek (placer gold) Seward A7, A8 and B7 T. 2 N., R. 2 W. SM	Upper Martin Creek occupies a moderately-steep narrow shallow bedrock gorge with small amounts of gravel accumulating below plunge pools. Middle section, beginning about 1/2 to 3/4 miles below the junction with Mt. Ascension tributary, occupies a steep, narrow, deep bedrock gorge with numerous falls and little accumulation of gravel. Narrow flood plain has developed beginning about 1 1/2 miles above its junction with the Resurrection River. Coarse gold (up to 1/4 in.) was recovered in gravels resting on and in bedrock fractures located just below the Mt. Ascension tributary. Significant gold was not located elsewhere along the drainage.	Minor prospecting has occurred along the lower section of Martin Creek. No known production.	Five dredge samples yielded from 0.0001 to 0.0278 oz gold/hr. Three 0.1 cy sluice samples contained from a trace to 0.0106 oz gold/cy. Pan samples of bedrock gravels yielded 0.1537 oz gold/cy. Middle section of Martin Creek has high mineral development potential for suction dredging and small hand placer operations. Lower section has low mineral development potential for small equipment operations.
P-54	Ship Creek (placer gold) Seward B7 T. 3 N., R. 1 W. SM	Most of Ship Creek occupies a very narrow, steep avalanche-debris filled bedrock valley. A short narrow flood plain and alluvial fan have formed at its lower end near Kenai Lake. Gravel is poorly sorted with abundant slate fragments and some hard packed clay near bedrock. Coarse gold (3/16 in.) was identified on the east fork of the stream 3/4 mi above large western tributary.	Some evidence of prospecting exists on the lower end of Ship Creek. Limited suction dredging occurred in 1982. Total estimated production is less than 25 oz.	Four suction dredge samples yielded from a trace to 0.0081 ozgold/hr. Three 0.1 cy sluice samples contained 0.0001 to 0.0304 oz gold/cy. Moderate potential for suction dredging. Alluvial fan and lower section has low to moderate mineral development potential for a small mechanized operation.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-55	Falls Creek (placer gold) Seward B6 and B7 Quads T. 4 N., R. 1 E. SM	Falls Creek descends in a series of steps. The uppermost section descends rapidly along a bedrock canyon followed by the development of a relatively gentle portion with a narrow flood plain. A second canyon area begins just below the Falls Creek Mine and continues to within a mile of its junction with the Trail River. Anomalous amounts of gold have been identified in silty gravels 1/2 miles above the Falls Creek Mine and in alluvial fan gravels below the lower canyon. Coarse gold has reportedly been recovered by suction dredges in the lower canyon. Grade recovered by a mechanized operation near the mouth of the lower canyon was reported to be about 0.002 oz/cy.	Drilling and prospect pits were dug in early 1900's and 1950's on the alluvial fan. Small mechanized operation worked alluvial gravels near mouth of the lower canyon in 1980, without significant success. Suction dredging has occurred in the canyon area during each year since at least 1977. Total production is estimated to be between 200 and 300 oz.	Two 0.1 cy samples yielded 0.0022 and 0.0077 oz gold/cy. Dredge sample near the Falls Creek Mine yielded only traces of mercury-coated gold. Lower canyon has high mineral development potential for suction dredging, based on previous mining history. Upper flood plain and alluvial fan deposits have low to moderate mineral development potential for a small operation. In excess of 400,000 cy of gravel are estimated to occur in the alluvial deposits below the lower canyon.
P-56	Grant Lake Headwaters (placer gold) Seward B6 Quad T. 4 N., R. 2 E. SM	Headwaters of Grant Lake occupy a relatively wide valley with some flood plain development, along portions of its channel, interspersed with bedrock canyons. Gravels contain considerable clay and locally contain fine grain gold concentration on bedrock.	None.	Two dredge samples yielded 0.0002 and 0.006 oz gold/hr. 0.1 cy placer sample from surface gravels yielded only a trace of gold. Low to moderate mineral development potential for placer mining.
P-57	Unnamed Tributary to Trail Creek (placer gold) Seward C6 T. 6 N., R. 2 E. SM	This creek occupies a very steep narrow bedrock canyon with gravel accumulating only near its junction with Trail Creek valley. Gravels are unconsolidated, poorly sorted with numerous boulders, and a high clay content. Gold is disseminated throughout	None.	Dredge sample, which did not reach bedrock yielded, 0.0006 oz gold/hr. Low mineral development potential for suction dredging and small mechanized operations near canyon mouth

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-58	Trail Creek (placer gold) Seward C6 T. 5 N., R. 1 E., T. 6 N., R. 2 E. SM	Trail Creek occupies a relatively wide, U-shaped valley and has a well-developed flood plain along most of its length. Upper Trail Creek has a narrow bedrock walled section containing coarse gravels with numerous boulders. Alluvium generally has a high clay content but becomes increasingly well-washed and sorted downstream. Fine grain gold is distributed throughout the gravels for several miles below Trail Glacier. Some concentration appears to occur on bedrock. Grades tend to decrease downstream. Gold up to 1/8-in. diameter was recovered, amalgamation was required to recover much of the gold from the samples.	None.	Three dredge samples yielded from 0.0005 to 0.0012 oz gold/hr. Three sluice samples from gravels adjacent to the stream channel contained from a trace to 0.0015 oz/cy. Low mineral development potential for small to large mechanized operations and suction dredging. In excess of 7 million cy of gravel are estimated within the flood plain of Trail Creek, between Trail Glacier and Moose Creek.
P-59	Placer River, section between Bartlett and Skookum Glaciers (placer gold) Seward C6 Quad T. 7 N., R. 2 E. SM	Upper portion of the Placer River occupies a narrow relatively steep valley much of which is filled with avalanche debris and till. A deep bedrock gorge extends for a mile above its confluence with Spencer Glacier valley. From there the river occupies a broad U-shaped glacial trough with a 3/4 to 1 1/2 mi wide flood plain. Auriferous gravels occur from the terminus of Bartlett Glacier to at least Spencer Glacier valley but tend to be low in volume except at the mouth of the canyon. Gravels contain numerous large boulders and extensive clay. Gold is fine though particles up to 3/16 in were recovered.	Minor production from recent suction dredging. Total estimated production is less than 25 oz.	Four dredge samples yielded from 0.0001 to 0.0028 oz/hour. Four 0.1 cy samples of gravels adjacent to stream channel contained 0.001 to 0.0028 oz gold/cy. Evaluation of the 10 million cy gravel deposits in the main valley is recommended. Moderate mineral development potential for small mechanized and suction dredging operations between Bartlett Glacier and Placer River Valleys.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-60	Groundhog Creek including 1/2 mile of Bench Creek below Groundhog Creek (placer gold) Seward C6 and C7 T. 7 N., R. 1 E. SM	Groundhog Creek occupies a steep narrow avalanche-debris filled glacial valley and has a V-shaped bedrock gorge characterized by numerous falls and cascades for a 1/2 mile stretch above Bench Creek. Small amounts of gold-bearing alluvial gravels have accumulated at the junction of Groundhog and Bench Creeks. Gold is disseminated throughout gravels but concentrated on bedrock. Particles up to 3/16 in. in diameter were recovered, but most of the gold is finer grained.	Some evidence of suction dredging and hand placering exists in the junction area. Total estimated production is less than 25 oz.	Two dredge samples collected from the junction area yielded 0.0006 and 0.0042 oz gold/hr. One 0.1 cy sample of gravels adjacent to the channel and on bedrock contained 0.0012 oz gold/cy. Small copper nugget (natural?) was recovered in one sample. Samples collected from the middle and upper portions of Groundhog Creek contained trace amounts of gold. Gravel volume is very limited. The junction area of Groundhog and Bench Creeks is believed to have low to moderate mineral development potential for suction dredging or a small hydraulic operation.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-61	Lynx Creek (placer gold) Seward C7 T. 7 N., R. 1 E. SM	Lynx Creek occupies a steep narrow canyon cut into glacial till, poorly washed glacial-fluvial gravels and bedrock. Terraces mantled with avalanche debris extend along most of the creek. A well-developed alluvial fan has formed between the canyon mouth and its junction with Bench Creek. The auriferous bench deposits consist of poorly stratified and washed, partially cemented gravels, in excess of 15 ft. thick, resting on bedrock. The alluvial fan consists of well-stratified and washed gravels containing fine grained particles of disseminated gold near the surface.	Pick and shovel operations occurred between 1897 and 1904. Hydraulic operations began in 1915 and mined bench deposits sporadically until 1980. Total estimated production is 6,000 to 8,000 ounces of gold, with less than 100 ounces produced since 1975.	Fourteen samples collected from Lynx Creek. Four 3-in. dredge samples yielded 0.001 to 0.0149 oz gold/hr. Seven 0.7 cy bench samples contained 0.0013 to 0.074 oz gold/cy. Three gravel bar 0.1 cy samples contained 0.0004 to 0.0412 oz gold/cy. Lynx Creek has high mineral development for small hydraulic or mechanized operations and moderate to high mineral development potential in its upper section. Inferred reserves at one test location were 5,000 cy with a grade of 0.015 to 0.02 oz/cy. Lower portion, including the alluvial fan has low to moderate mineral development potential for a medium sized mechanized operation. Alluvial fan contains in excess of 1.5 million cy of gravel.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-62	Petes Creek (placer gold) Seward C6 and C7 T. 7 W., R. 1 E. SM	Similar to Spokane Creek (P-63).	Similar to Spokane Creek.	Two samples of alluvial fan gravels contained a trace and 0.007 oz/cy. Low mineral development potential for commercial placer mining due to lack of gravel and low grade.
P-63	Spokane Creek (placer gold) Seward C6 and C7 T. 8 N., R. 1 E. SM	Spokane Creek occupies a U-shaped valley in its upper portion a steep V-shaped bedrock canyon in its middle portion and an alluvial fan in its lower section. Little stream-washed gravel has accumulated except on the fan where the gravel is moderately stratified and composed of considerable slate fragments with increasing clay content on bedrock. Gold appears to be concentrated on bedrock.	No commercial mining has occurred. Evidence of prospecting is present along its lower portions. Recreational mining, including suction dredging, has occurred in recent years. Total estimated production is less than 25 oz.	Dredge sample yielded 0.0022 oz/hr. Surface sample of bench gravels from the alluvial fan contained 0.0001 oz gold/cy. Quantities of gravels are limited. Moderate mineral development potential for small mechanized operations, hand placer, and suction dredge mining.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-64	Bertha Creek (placer gold) Seward D6 and C6 T. 8 N., R. 1 E. SM	Bertha Creek occupies a U-shaped valley in its upper portion and a steep narrow canyon cut mostly in glacial debris and bedrock in its middle section. Below the canyon an alluvial fan has been deposited which has been the major source of gold produced to date. Gravels are poorly to moderately stratified with a high clay and boulder content. Gold appears to be concentrated near bedrock.	Hand placer and hydraulic mining occurred between 1902 and 1904. Recreational mining has been popular on lower Bertha Creek since 1975. A suction dredge operation occurred near the power line in 1981. Total production since 1902 is estimated to be 300 to 600 oz with less than 35 oz has been produced since 1975.	Three samples were collected from lower Bertha Creek. Dredge sample yielded 0.0142 oz/hr from channel deposits. Bedrock was not reached. Two bench samples contained 0.0006 and 0.0129 oz gold/cy. Traces of gold were recovered from surface gravels on upper Bertha Creek. Quantities of gravel are limited. Moderate to high mineral development potential for small mechanized, suction dredging, and hand placer activities.
P-65	Taylor Creek (placer gold) Seward D6 T. 8 N., R. 1 E. SM	Taylor Creek is a short drainage similar to Bertha Creek and other eastern tributaries to Granite Creek. Along its lower section it cuts glacial till, believed to be a lateral moraine.	None.	Sample collected near lower end of Taylor Creek contained 0.0011 oz gold/cy. Low mineral development potential for commercial mining.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-66	Lyon Creek (placer gold) Seward D6 T. 8 N., R. 1 E. SM	Lyon Creek occupies a narrow avalanche-filled glacial trough for most of its length prior to cutting a steep bedrock gorge and flowing onto an alluvial fan which coalesces with that formed by Tincan Creek. Alluvial gravels thinly mantle bedrock in the lowermost canyon section. Relatively coarse gold (3/16 in.) was recovered on bedrock.	Evidence of prospecting is present near the mouth of the canyon. No known production.	Dredge sample yielded 0.0132 oz gold/hr from channel gravels near the mouth of the canyon. Channel deposits are very limited in quantity. Moderate to high mineral development potential for suction dredging and moderate mineral development potential for a small mechanized operation. The alluvial fan should be evaluated.
P-67	Tincan Creek (placer gold) Seward D6 T. 8 N., R. 1 E. SM	Tincan Creek is similar in character to Lyon Creek (P-66) except that its upper valley is broader.	Hand placer operations occurred in the 1930's or earlier. Suction dredging has occurred since 1975. Total production is estimated between 50 to 100 oz.	Dredge sample yielded 0.0114 oz gold/hr from a previously mined area. 0.1 cy sample yielded 0.0023 oz gold/cy from the upper portion of the creek. Lower Tincan Creek has moderate to high mineral development potential for suction dredging and hand placer operations and moderate mineral development potential for a small mechanized operation. The alluvial fan should be evaluated.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-68	Wolverine Creek (placer gold) Seward D6 T. 8 N., R. 2 E. SM	Wolverine Creek is the main tributary to and is similar in configuration to upper Ingram Creek (P-69). Packets of moderately washed gravels have accumulated in favorable sites and contain gold concentrated with tan clay on bedrock. The gold was a mixture of fines, requiring amalgamation to recover, and relatively coarse gold.	Evidence of prospecting was located about 1/2 mile above its junction with Ingram Creek. No known production.	Dredge samples yielded 0.0018 and 0.0036 oz gold/hr. Quantities of gravel are limited. Moderate mineral development potential for suction dredging and low potential for mechanized operations.
P-69	Ingram Creek (placer gold) Seward D6 T. 9 N., R. 2 E. SM	Upper Ingram Creek occupies a steep, narrow avalanche-debris filled glacial valley. The middle section is in a narrow, steep bedrock canyon with numerous falls and cascades. The lower 2 mi has a narrow flood plain developed. The gravels range from well-washed on the surface to angular blocky boulders mixed with considerable clay near bedrock. Fine grained gold is disseminated throughout but is concentrated near bedrock.	Evidence of prospecting is present along Ingram Creek but apparently no early attempts were made to mine the creek. Suction dredging with doubtful success occurred in 1981 and 1982. Total estimated production is less than 25 ounces.	Dredge sample from upper Ingram Creek yielded 0.0011 oz gold/hr. Other samples contained trace amounts of gold. Quantities of gravel are limited except possibly along its lower end where in excess of 100,000 cy of gravel are estimated to occur. Low mineral development potential.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-70	Seattle Creek (placer gold) Seward D6 T. 9 N., R. 2 E. SM	Seattle Creek occupies a long relatively narrow U-shaped valley with schist bedrock canyons developed along some sections. Gold occurs throughout the channel gravels but is concentrated on bedrock and in bedrock fractures. Gold also occurs as disseminated particles in bench deposits along the lower section of the stream. The gold is relatively fine grain through particles up to 3/16 in. diameter were recovered. The bench deposits contain considerable sand with boulders to 2 ft. resting upon a 6 to 12-in. thick clay layer.	A hydraulic pit occurs on the west side of Seattle Creek about 1 mile south of Turnagain Arm. Small amounts of hand placering and suction dredging have occurred since 1975. Total estimated production is less than 300 oz.	Six suction dredge samples yielded from a trace to 0.0048 oz/hr. Two pan samples collected on bedrock contained 0.0136 and .0301 oz/cy. Two bench gravel samples contained 0.001 and 0.0048 oz/cy respectively but neither were taken on bedrock. Over 250,000 cy of gravel are estimated to occur along lower Seattle Creek. Lower Seattle has moderate mineral development potential for small mechanized operations. Much of Seattle Creek has moderate mineral development potential for suction dredging.
P-71	Sawmill Creek (placer gold) Seward D6 and D7 T. 9 N., R. 1 E. SM	Sawmill Creek occupies a short, steep, narrow, avalanche-debris filled valley. Very little gravel has accumulated along the channel. Gold occurs in poorly sorted gravels sampled near the mouth of the stream.	None.	Suction dredge sample yielded 0.0007 gold oz/hr and a pan sample yielded 0.0029 oz gold/cy. Due to the limited quantity of gravel the creek has low mineral development potential for commercial placer mining.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-72	Sixmile Creek below Canyon Creek including tributaries (placer gold) Seward D7 T. 08 N., R. 01 W. T. 09 N., R. 01 W. SN	Sixmile Creek occupies a relatively broad alluvial filled valley with periodic development of bedrock canyons along its channel. Alluvial terraces, partially covered with avalanche debris, parallel the stream channel. Gold is relatively fine grain with nuggets coarser than 1/4 in. diameter rarely recovered. Flood plain deposits appear to be relatively thick with depths to bedrock in excess of 70 ft. reported near the junction with Canyon Creek. Small auriferous alluvial fan deposits are associated with several western tributaries of Sixmile Creek, including Alder Creek, Cub Creek, and Old Woman Creek.	Several small operations produced gold from Sixmile Creek between 1897 and 1917. Prospecting, drilling and limited hydraulic mining occurred in the 1930's. Recently, the gravels just below Canyon Creek have been tested by backhoe and 12-in suction dredge. Results are unknown. Several small suction dredge operations have occurred within the last 3 years. Total estimated production since 1897 is 1,500 to 2,000 oz of which less than 250 oz have been produced since 1975.	0.1 cy sample from Alder Creek contained 0.0017 oz gold/cy. One from Cub Creek contained 0.0073 oz gold/cy. Two suction dredge samples, which yielded 0.002 and 0.0182 oz gold/hr, and one bedrock pan sample, containing 0.0214 oz gold/cy, were collected from channel deposits. Three bench placer samples contained 0.0005 to 0.0028 oz gold/cy. Bench gravels and channel volumes are estimated to exceed 5 million cy. Sixmile Creek is believed to have moderate mineral development potential for small and medium sized mechanized operations and high potential for suction dredging. The bench gravels and the flood deposits near the junction of Sixmile and Canyon Creeks may also have significant mineral development potential.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-73	Gulch Creek, and East Fork Creek below Gulch Creek (placer gold) Seward D7 T. 08 N., R. 01 W. SM	Gulch Creek and Lower East Fork Creek occupy narrow bedrock canyons along most of their length and contain thin discontinuous high-grade gravel deposits. At least one abandoned channel on Gulch Creek was mined in the early 1900's and others may occur along lower Gulch Creek and East Fork Creek. Channel gravels range from loose and sandy on the surface to clay cemented with boulders to 5 ft or more on bedrock. Fine grained gold is disseminated throughout the gravels but the pay streak occurs on and in bedrock fractures accompanied by a sticky tan clay. Relatively coarse gold, up to 5 oz nuggets, have reportedly been recovered from Gulch Creek.	Hydraulic and hand placer operations on lower Gulch Creek and on the east side of East Fork Creek accounted for most of the production prior to 1917. Suction dredging has become popular along most of Gulch Creek and lower East Fork Creek in the past three years. Total estimated production is 1,000 to 2,500 oz of which up to 250 oz have been produced since 1975.	Three suction dredge samples collected from the headwaters of Gulch Creek yielded 0.0006 to 0.0034 oz gold/hr. Two additional samples collected from upper Gulch Creek contained from 0.0008 to 0.0296 oz gold/cy. Nine placer samples consisting of surface alluvium, collected from within the canyon of lower East Fork Creek, contained from 0.0019 to 0.015 oz gold/cy. The quantity of gravel is limited. East Fork Creek and Gulch Creek have high mineral development potential for suction dredge operations and moderate mineral development potential for small mechanized operations at selected locations.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-74	East Fork Creek above Gulch Creek and Granite Creek to Tincan Creek. (placer gold) Seward D7 and D6 T. 7 N., R. 1 E., T. 8 N., R. 1 W., T. 8 N., R. 1 E. SM	Granite and upper East Fork Creeks occupy a relatively wide valley over most of their lengths with bedrock exposed in only a few locations. East Fork Creek occupies a narrow canyon beginning about 3/4 mile below Silvertip Creek. Stream gravels are loose and unconsolidated on the surface with increasing clay at depth. Bench deposits occur along portions of these drainages which are unevaluated except where they were mined at the mouth of Bertha Creek.	Significant production has not occurred along these drainages. Suction dredging has occasionally been attempted without success.	Three surface gravel samples from East Fork Creek contained trace amounts of very fine grain gold. Two suction dredge samples on Granite Creek yielded 0.0007 and 0.0011 oz gold/hr of very fine grain gold requiring amalgamation to recover. Significant gravel reserves occur along much of Granite Creek and East Fork Creek. East Fork Creek above Gulch Creek and Granite Creek have low mineral development potential for small to medium sized placer operations and suction dredging with moderate mineral development potential near their confluence with placer producing drainages such as Silvertip, Lynx, and Bertha Creeks.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-75	Silvertip Creek (placer gold) Seward C7 T. 7 N., R. 1 E. SM	The upper portion of Silvertip Creek occupies a steep narrow bedrock canyon partially filled with avalanche debris. The lower sections occupy a slightly wider channel with bedrock near the surface covered by poorly washed and stratified clay rich gravels containing gold. The lower most section occupies an alluvial fan consisting of moderately well-stratified and washed gravels which supplied fill for construction of the Seward Highway.	Pick and shovel operations occurred between 1897 and 1904. A small hydraulic operation was attempted in 1911. Small mechanized operations have mined sporadically since 1950 and suction dredges since 1975. Total estimated production is 750 to 1,000 oz of which 50 to 100 oz is estimated to have been recovered since 1975.	One sample Silvertip Creek contained 0.0019 oz gold/ton. Reserves are limited along the main stream. The alluvial fan should be tested as significant quantities of gravel reside there. High mineral development potential for small mechanized and suction dredge operations based upon past activity.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-76	Canyon Creek including Mills Creek below Juneau Creek (placer gold) Seward C7-D7 T. 07 N., R. 01 W. T. 08 N., R. 01 W. SM	Canyon Creek occupies a bedrock canyon deeply cuts into a broader U-shaped glacial valley. Placer gold occurs in alluvial gravels associated with the current channel of Canyon Creek and in bench gravels at elevation up to at least 100 ft. above present stream level. The bench gravels are locally compacted and cemented and contain considerable clay. Channel gravels are low in volume but reported to be of high grade. Gold is flaky with recovery of particles up to 3/16 in. in diameter common.	Considerable hand placer and hydraulic placer mining occurred on Canyon Creek, especially at its junction with Mills Creek between 1895 and 1940. Several small mechanized and hydraulic operations mined intermittently during 1955-1961 and in 1977-78. In recent years (1970-1982) suction dredging has become popular and likely accounts for 100 to 200 oz of production/year at the present time. Total estimated production is 35,000 to 40,000 oz since 1895.	Three samples from bench deposits in the old hydraulic pit, located just below the junction of Mills and Canyon Creeks on the west side of Canyon Creek, contained from 0.0001 to 0.14 oz gold/cy. Bench gravels are estimated to exceed 2 million cy. Potential for locating relatively high grade abandoned channels in the benches is good. Canyon Creek has high mineral development potential for suction dredge and small hand placer operations and moderate mineral development potential for small to medium sized mechanized and hydraulic mining operations.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-77	Juneau Creek above Mills Creek (placer gold) Seward C7 T. 7 N., R. 1 W. SM	Juneau Creek occupies a narrow, avalanche-debris filled glacial valley. A thick bench deposit, consisting of glacial till and poorly washed glacial-fluvial gravels occurs just above the junction of Juneau and Mills Creek. A pay streak is reported to occur near the top of an old hydraulic cut in the bench. Gravels are tightly cemented by clay and contain clay lenses and layers. Bedrock channel is believed to be very deep and covered with thick avalanche deposits and/or poorly washed gravels.	A single hydraulic operation apparently mined the bench deposit in the 1950's. Some exploration work including the excavation of a large prospect pit has occurred recently. No records of production are available.	Only trace amounts of gold have been identified in pan samples and 0.1 cy samples. Low mineral development potential for commercial placer mining.
P-78	Fresno Creek (placer gold) Seward C7 T. 7 N., R. 1 W. SM	Fresno Creek occupies a steep narrow avalanche-debris filled glacial valley with a bedrock canyon along much of its course. Little gravel has accumulated along the stream. Fine grained gold is sparsely disseminated throughout the poorly washed gravel samples.	None.	One sample contained 0.0006 oz gold/cy from surface gravels. Low mineral development potential for commercial mining because of low volume and grade.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-79	Mills Creek above junction with Juneau Creek (placer gold) Seward C7 T. 05 N., R. 01 W. T. 07 N., R. 01 W. SM	High and low grade placer gold occur. High-grade alluvial deposits occured in and along the current channel and narrow flood plain of Mills Creek; lower grade deposits occurred on benches. Gravels are poorly to moderately sorted and contain considerable clay. Gold is concentrated close to and in bedrock associated with a tan sticky clay which fills bedrock fractures. Gold particles are relatively coarse compared to other drainages on the Kenai Peninsula. Flakes and small gold nuggets up to 1 pennyweight are common in Mills Creek gravels below Timberline Creek. Only fine grain gold has been collected above the junction of Timberline Creek. Production grades in the channel gravels are estimated to average 0.0125 to 0.015 oz/cy.	Hydraulic operations began in Mills Creek, about 1/2 mi above Juneau Creek in 1938. One hydraulic or small mechanized operation has mined intermittently since that time. Total estimated production is 3,000 to 5,000 oz though no records are available.	Ten placer samples were collected from Mills Creek. Seven samples 4 bench samples and three stream channel samples, were collected below the junction of Timberline Creek. Bench samples contained from a trace to 0.0044 oz gold/cy. A suction dredge sample yielded 0.0554 oz gold/hr. Two samples collected next to the stream channel contained 0.0011 to 0.0869 oz gold/cy. Three suction dredge samples above Timberline Creek yielded from 0.0005 to 0.0012 oz gold/hr. Below Timberline Creek bench deposits are estimated to exceed 0.5 million cy and unworked channel gravels are estimated to range from 50,000 to 150,000 cy. High mineral development potential for small to medium sized mechanized and hydraulic operations and for suction dredging below Timberline Creek. Low to moderate mineral development potential above Timberline Creek.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-80	Colorado Creek (placer gold) Seward C7 T. 7 N., R. 2 W. SM	Colorado Creek occupies a steep narrow avalanche-debris filled glacial valley with a bedrock gorge developed near its lower end and a well-developed alluvial fan near its terminus. Gravels are poorly stratified and contain considerable clay. Gold is disseminated throughout the gravels with minor concentration on bedrock. Gold is generally quite fine though small nuggets up to 3/8 in. in diameter have been recovered. Production grades of approximately 0.0015 oz/cy were reported.	A small mechanized operation mined sporadically on Colorado Creek between 1977 and 1982 with little success. Total estimated production is less than 50 oz.	Two samples yielded 0.0002 and 0.0022 oz/cy. In excess of 200,000 cy of gravel are estimated to occur in the lower section of the creek. Low to moderate mineral development potential for small mechanized operation and suction dredging.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-81	Quartz Creek (placer gold) Seward C7 and C8 T. 6 N., R. 1 W., T. 6 N., R. 2 W. SM	Upper Quartz Creek occupies a steep, narrow, avalanche debris-filled valley partially cut into bedrock. An alluvial fan has developed between the mouth of the canyon and the Seward Highway. Alluvial fan deposits are poorly washed and stratified with fine gold disseminated throughout and concentrated on bedrock. Gold up to 1/8 in. in diameter was recovered. The remainder of Quartz Creek occupies a broader more gentle valley with a bedrock canyon formed along a 1/2 mile stretch above Devils Creek. High-grade channel deposits and bench deposits have been successfully mined in the canyon section. Production grades of 0.015 oz/cy are typical. Bench gravels are locally stratified and typically compacted. They have a high clay content; boulders to 3 ft in diameter are common. Gold is mostly of the flake variety with nuggets coarser than 1/4 in. in diameter rarely present.	Some prospecting indicated by pits and trenches occurred in the early 1900's and 1950's-60's. Total estimated production is less than 25 oz from upper Quartz Creek. A hand placer and hydraulic operation mined bench deposits about 1/3 mile above Devils Creek between 1904 and 1915. Several hand placer, suction dredge, and one small mechanized operation have mined mostly in and just above the canyon section since 1971. Total estimated production is 1,000 ounces of which up to 400 ounces have been produced since 1975.	Two samples from upper Quartz Creek at the mouth of the canyon. 0.1 cy sample contained 0.0024 and a pan sample collected on bedrock contained 0.0384 oz/cy. Upper Quartz Creek is believed to have moderate potential for small mechanized and suction dredge operations. Several surface samples from untested bench gravels contained from a trace to 0.0024 oz gold/cy. One sample of mine run gravels contained 0.0384 oz gold/cy average through 4 ft of gravel resting on bedrock. In excess of 750,000 cy of bench and channel gravels are estimated to occur between Devils Creek and Johns Creek. Portions are likely currently feasible to mine. Quartz Creek is believed to have high mineral development potential for small mechanized hydraulic, hand placer, and suction dredge operations for about a 1 1/4 mi stretch above Devils Creek and moderate mineral development potential in other areas.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-82	Hargood Creek (placer gold) Seward C7 and C8 T. 05 N., R. 02 W. SM	Hargood Creek (name given by present mine owner) occupies an abandoned channel in a narrow valley, possibly related to an earlier Quartz Creek channel. A broad alluvial fan has developed near the mouth of the valley and extends to Quartz Creek Valley, by which it is truncated. Gold is concentrated in distributary channels within the fan and occurs along certain horizons within each channel. Bench gravels are also present. Gold occurs as flakes with little gold coarser than 3/16 in. present.	An old hydraulic excavation is present on the alluvial fan just south of Crescent Creek trailhead. A small mechanized operation tested the alluvial fan and bench gravels in 1981 and 1982. Total estimated production is less than 350 oz of which up to 150 oz have been produced since 1980.	Three alluvial fan gravel samples contained from 0.0004 to 0.0315 oz gold/cy. Systematic evaluation of alluvial fan and bench deposits is recommended. Alluvial fan gravels are estimated to exceed 350,000 cy. High mineral development potential for a small mechanized placer operation.
P-83	Crescent Creek (placer gold) Seward B7, B8, C7, and C8 T. 05 N., R. 02 W. SM	Crescent Creek occupies a relatively steep, narrow, avalanche-debris filled valley. The creek descends in a series of steps with auriferous gravels deposited below each drop. The gravels are clay-rich with numerous boulders to 3 ft. diameter. Gold is disseminated throughout the gravels but concentrated on bedrock. Bench gravels contain anomalous gold values. Gold occurs as flakes and is fine grain in the lower part of the creek but nuggety and coarse in the upper section. Production grades of 0.015 oz/ton are estimated.	Evidence of early hand mining exists. A small mechanized operation has worked the lower end of Crescent Creek since 1978. Numerous prospect pits have been dug on the alluvial fan below the lower canyon of Crescent Creek. Suction dredging has been tried with some success on upper Crescent Creek. Total estimated production is less than 500 oz of which up to 200 oz have been produced since 1975.	Three samples from lower Crescent Creek contained 0.01 to 0.031 oz gold/cy. The area sampled has since been mined. One bedrock sample collected from the middle section of Crescent Creek contained 0.0127 oz gold/cy. High mineral development potential for small mechanized and suction dredge operations.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-84	Dry Creek (placer gold) Seward B7, B8 T. 5 N., R. 2 W. SM	Dry Creek occupies a steep narrow avalanche-debris filled valley. The lower end cuts through alluvial gravels believed to be associated with a higher level of Quartz Creek. These bench gravels contain anomalously high gold values.	Very minor prospecting and no significant production has occurred.	0.1 cy sample of surface gravels collected at the lower end of Dry Creek yielded 0.0005 oz gold/cy. Gravels are limited in volume. Low mineral development potential for placer mining. Bench gravels are present in large volumes and have low potential for a small to medium size mechanized operation.
P-85	Stetson Creek (placer gold) Seward B8 T. 04 N., R. 03 W. SM	Stetson Creek occupies a very steep, narrow, avalanche-debris filled valley with a bedrock gorge developed along its lower section. Gravel deposits below several sets of falls are reported to contain relatively abundant coarse gold. Alluvial fan gravels deposited during an earlier and higher stage of Stetson Creek remain well above the current creek level near its junction with Cooper Creek. Auriferous alluvial fan gravels are at least 50 ft. thick, moderately stratified, and have a high clay content.	Hydraulic mining of the alluvial fan deposits occurred in the 1950's. Suction dredging has occurred near the junction of Stetson and Cooper Creeks. Total estimated production is less than 300 oz of which up to 100 oz have been produced since 1975.	Two samples of channel gravels from the middle portion of Stetson Creek yielded from a trace to 0.0043 oz gold/cy. Small amounts of gold were obtained in 3 samples collected from the old hydraulic pit in the alluvial fan. Gravels are limited in volume. Low to moderate mineral development potential for a small hydraulic operation and moderate to high potential for suction dredging.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-86	Cooper Creek (placer gold) Seward B8 T. 04 N., R. 03 W. SM	Cooper Creek occupies a very narrow bedrock-walled gorge nearly to its junction with the Kenai River. An alluvial fan has been deposited along the last 1/2 mi section of the creek. Auriferous alluvial gravels associated with Cooper Creek locally form bench deposits 60 ft above the current creek level. Gold occurs as flakes, with some of it up to 3/16-in size. Nuggets up to 0.025 oz have been recovered.	Bench and alluvial fan gravels at the mouth of Cooper Creek were worked by pick and shovel and later by hydraulic mining techniques between 1899 and 1917. Only minor production has occurred since, mostly in the form of recreational mining including suction dredging. Total production may have exceeded 1,000 ounces of which less than 50 have been produced since 1975.	Four 0.1 cy samples from bench and bar deposits near the mouth of Cooper Creek contained 0.0018 to 0.019 oz gold/cy. The portion of the creek has high potential for a small mechanized or hydraulic operation. Limited quantities of unmined gravel remain. Cooper Creek below Stetson Creek, has moderate to high mineral development potential for suction dreging.
P-87	Kenai River between Cooper Creek and Schooner Bend (placer gold) Seward B8 T. 05 N., R. 04 W. SM	This stretch of the Kenai River has a well-developed flood plain containing considerable quantites of moderately sorted and stratified alluvium. Fine flakes gold are disseminated throughout the gravels and is sometimes found in high concentrations near the heads of river bars during periods of low water. Overall grades are believed to be low. Production grades in 1911 & 1912 were reported to be 0.004 oz/cy.	Doroshin prospected the area in 1851. A small bucket line dredge operated during 1911 and 1912. Prospecting using dozers and drilling occurred between 1935 and 1956. Only recreational panning has occurred recently. Total estimated production is less than 200 oz.	Three point bar gravel samples collected in the area just above Schooner Bend, yielded from 0.0135 to 0.0449 oz gold/cy. Two samples collected above Cooper Creek yielded only trace amounts of gold. The Kenai River between Cooper Creek and Schooner Bend is estimated to contain in excess of 5 million cy of alluvial gravel. This section has moderate mineral development potential for a medium to large scale mechanized operation and locally for the use of large suction dredges.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-88	Falls Creek (placer gold) Seward C8 T. 6 N., R. 3 W. SM	The upper portion of Falls Creek occupies a relatively broad U-shaped valley containing little alluvial gravel. The middle section descends through a steep bedrock-walled canyon and empties out onto an alluvial fan at its junction with Juneau Creek valley.	Small prospect pit was located near the canyon mouth. No production known.	Pan sample from bedrock yielded 0.0042 oz gold/cy. Three 0.1 cy bulk placer samples of surface gravels contained traces of very fine grain gold. Low mineral development potential for commercial placer mining.
P-89	Chickaloon River (upper section) (placer gold) Seward C8 T. 7 N., R. 4 W SM	The upper section of the Chickaloon River occupies a narrow steep-sided avalanche-debris filled valley. Alluvial gravels samples contained no large boulders and a moderate to low clay content. Gold is very fine grain.	None.	0.1 cy sample of surface gravels yielded 0.00063 oz gold/cy. Low mineral development potential for commercial placer mining in its upper portions.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-90	Resurrection Creek Palmer Creek (placer gold) Seward D7 and D8 T. 09 N., R. 02 W. SM	Alluvial gravels occupy a flood plane 1,000 ft. wide along Resurrection Creek below Palmer Creek. High bench deposits flank the flood plain along both sides. Gravels average 7 ft. thick and typically rest upon a tan-yellow clay hard-pan with streaks of blue clay present. Gold is disseminated throughout the gravels but is concentrated on the clay hard-pan and on bedrock in the few locations where it is exposed. The auriferous gravels are moderately well washed and contain boulders generally less than 3 ft. in diameter. Production grades of 0.01 oz/cy are typically reported for several operations though higher grades occur locally. Upper Palmer Creek flows through a relatively broad valley filled in with avalanche and glacial debris, including large boulders. Lower Palmer Creek occupies a narrow canyon cut partly in bedrock and partly in gravel terraces associated with Resurrection Creek.	Operations on Resurrection and lower Palmer Creeks date back to 1888. Extensive hydraulic and hand placer mining began in 1895 and continued intermittently into the 1950's. Mechanized mining replaced hydraulic mining in the 1960's. Considerable recreational mining currently occurs on Resurrection Creek below Palmer Creek. Limited production has occurred from Resurrection Creek above Palmer Creek. Little mining has occurred on Palmer Creek above the lower canyon area. However, evidence of prospecting is evident up to Bonanza Creek. Total estimated production since 1895 is 30,000 to 40,000 oz. Approximately 2,000 to 3,000 oz have been produced since 1980.	Due to the current level of mining on Resurrection Creek and because the drainage occurs outside of the study area, placer samples were not collected Pan samples from Palmer Creek contained traces of gold. The bench deposits are extensive and may eventually prove to have high potential for gold production. Considerable evaluation is needed prior to their development. Based on mining history, the flood plain deposits are believed to have high mineral development potential for small and medium size mechanized operations, for hand placer mining, and suction dredging.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-91	Bear Creek (placer gold) Seward D7 T. 10 N., R. 02 W. SM	Bear Creek occupies a steep, narrow valley for most of its length and is filled in with avalanche and glacial debris containing large boulders. Lower portion of Bear Creek rests upon an alluvial fan consisting of better sorted and washed gravels. Gold is relatively coarse with nuggets up to 10 oz reportedly recovered gold is less than gold obtained from most Kenai Peninsula streams.	Mining began in 1894 on Bear Creek. Early mining was restricted to pick and shovel operations with hydraulic mining becoming more prevalent by 1904. Mechanized operations have been mining intermittently since 1975. Total estimated production since 1894 is 4,000 to 6,000 oz of which 1,000 to 1,500 oz have been produced since 1975.	0.1 cy sample of surface channel gravels from upper Bear Creek contained 0.0021 oz gold/cy. Upper Bear Creek will be difficult to mine due to the large boulders present. The alluvial fan deposits at the mouth of Bear Creek and may have significant gold development potential. Lower Bear Creek is believed to have high mineral development potential for small mechanized mining, hand placer methods, and suction dredging.
P-92	California Creek (placer gold) Anchorage A6 and Seward D6 T. 10 N., R. 02 E. SM	California Creek occupies a steep, narrow avalanche-debris filled glacial valley with little accumulation of gravel. An alluvial fan deposited at the lower end of the creek contains disseminated fine grain gold. Middle section of the creek occupies a bedrock gorge. Gravels exposed along California Creek contain considerable clay and in large part are probably glacial till. Grades are reported to be extremely variable.	Hand placer operations worked intermittently between 1898 and 1914. Some hand placer activity has also occurred since 1975. Total estimated production since 1898 is 400 oz.	Two 0.1 cy bench samples collected at the canyon mouth, yielded 0.0006 and 0.0007 oz gold/cy. Low to moderate mineral development potential for a small scale mechanized operation at lower end, and for hand placer mining and suction dredging operations.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-93	Crow Creek (placer gold) Anchorage A6 T. 11 N., R. 02 E. SM	Placer gold is found in four types of gravels on Crow Creek: high bench gravels, recent stream deposits, glacial gravels, and avalanche debris. Bench deposits and recent stream deposits are the highest in grade and have historically produced most of the gold. Glacial deposits and avalanche debris are low grade but may locally contain significant concentrations of gold. The highest grades appear to be associated with old channels in high benches which likely consist of gravels deposited prior to the most last glacial advance. The presence of numerous large boulders and cemented gravels may cause mining difficulties. Gold is relatively course with 0.025-0.05 oz nuggets common and nuggets up to 1 oz occassionally obtained by recreational miners.	One large and one small hydraulic operation accounted for the majority of the production from Crow Creek prior to 1940. Several historic buildings are maintained at the Erickson Gold Mine and numerous mining artifacts occur along the banks of Crow Creek. One mechanized operation mined intermittently in 1981 and 1982. Recreational mining is currently popular at the Erickson Gold Mine. Total estimated production since 1898 is 45,000 oz. Production since 1979 is estimated to be aprpoximately 400 oz.	Eleven bench and alluvium samples from Crow Creek contained from 0.0013 to 1.17 oz gold/cy. High mineral development potential for suction dredging, small hand placer operations, for small to medium mechanized and hydraulic mining operations.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-94	Winner Creek (placer gold) Seward D6 T. 10 N., R. 02 E. SM	Winner Creek occupies a relatively wide and gentle U-shaped valley along most of its length with a short bedrock canyon and falls near its junction with Glacier Creek. Gravel deposits consist of well-stratified and washed alluvium within the channel and in some bench deposits and also as clay rich, cemented glacial or fluvial-glacial bench deposits in other locations. Clay rich gravels contained relatively coarse (3/16 in.) gold at one sample site.	Hand placer and a hydraulic operation recovered gold between 1898 and 1917. Hand placer methods and suction dredges have been used sporadically since 1975. Total estimated production, all of which has come from the lower 1/4 mile of the creek, is 400 oz of which less than 25 oz has been produced since 1975.	Sampling on bedrock yielded gold at 0.002 oz/hour. A bench deposit sample contained 0.0283 oz gold/cy. Both samples were collected from the lower end of Winner Creek. Samples collected from the middle and upper portions contained only trace amounts of gold. Winner Creek is believed to have moderate to high mineral development potential along its lower section for small mechanized or hydraulic operations and for suction dredging. The remainder of the creek has low mineral development potential for commercial mining.
P-95	Kern Creek (placer gold) Seward D6 T. 10 N., R. 2 E. SM	Kern Creek occupies a steep narrow avalanche-debris filled valley with numerous falls and cascades allowing for little accumulation of alluvial gravels until its junction with Turnagain Arm.	Minor production reported.	Samples collected contained only trace amounts of gold. Kern Creek is believed to have low mineral development potential for mechanized operations and suction dredging.

Locality No.	Name (resource) (location)	Summary of mineralization	Workings and production	Sample data and resource assessment
P-96	Peterson Creek (placer gold) Seward D6 T. 9 N., R. 2 E. SM	Similar to Kern Creek (P-95) except with larger alluvial fan near its terminus. Significant quantities of gold reportedly have been found on bedrock and in bedrock fractures.	Minor production reported. Prospecting has occurred since 1975.	Samples contained only trace amounts of gold. Low to moderate mineral development potential for small mechanized and suction dredge operations.
P-97	Upper Twenty Mile River (placer gold) Anchorage A5 T. 11 N., R. 3 E. SM	Placer gold is disseminated in currently uneconomic quantities in poorly to moderately washed glacial-fluvial gravels along the upper portions of the Twentymile River. Numerous large boulders are present. Pockets of higher grade material may occur within and adjacent to the river channel.	No recorded production.	Five alluvium samples from the upper portions the Twentymile River contained from a trace to 0.0073 oz gold/cy. The upper Twentymile River has low to moderate mineral development potential for small mechanized hand placer and suction dredge operations.