UNITED STATES DEPARTMENT OF THE INTERIOR

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TABLES DESCRIBING METALLIFEROUS AND SELECTED NONMETALLIFEROUS MINERAL DEPOSITS IN THE PETERSBURG AND EASTERN PORT ALEXANDER QUADRANGLES, ALASKA

BY

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(To accompany open-file map 80-793)

By S. M. Karl, H. C. Berg, D. Grybeck, and B. S. Abramson

EXPLANATORY STATEMENT

These tables briefly describe known deposits and principal occurrences of metallic and certain nonmetallic mineral commodities in the Petersburg and eastern Port Alexander quadrangles of southeastern Alaska. The tables and accompanying map are a progress report of an interdisciplinary geologic mapping and mineral resource appraisal investigation now underway by the U.S. Geological Survey in that area. The purpose of this report is to provide a background of current and historic mineral deposit data that ultimately will be integrated with other geological, geochemical, and geophysical data for the resource assessment.

This report is based on an extensive literature search, consultations with colleagues, recent field examinations by U.S. Geological Survey geologists, and unprocessed geochemical analytical data from samples collected during those examinations. U.S. Bureau of Mines maps depicting locations of mining claims were also used extensively. The U.S.G.S. and U.S.B.M. data were updated and augmented where possible with information obtained from other public sources. Even so, large disparities exist in our information about the deposits, which ranges from well-documented reports of modern studies to vague descriptions in the old literature. No attempt is made in this report to evaluate the extent or economic significance of these deposits. However, some information regarding their significance can be inferred from the tables. A future report will provide an assessment of the area's mineral endowment and potential mineral resources.

Table 1 is the product of a comprehensive literature search through U.S. Geological Survey, Alaska Division of Geological and Geophysical Surveys, and U.S Bureau of Mines publications, maps, and records. It notes the type of deposit, minerals present, available information about the geology, and past production or extent of development for each locality plotted on the map. It does not include any data from current studies.

Table 2 is the product of fieldwork during 1978 and 1979 and complements and updates the material in Table 1; the data in table 2 supercede those in table 1 where there are conflicts. Table 2 also describes several new occurrences discovered during our investigations and several new mineral occurrences discovered by private interests. Table 2 includes brief descriptions of the localities that we visited, and raw geochemical data for samples collected at those localities.

The most important data given in tables 1 and 2 are presented synoptically on the map. Locations with data from table 1 only are shown by a location number not in parentheses followed by the commodities reported for that location. Locations with data in both tables 1 and 2 are indicated by the

location number and commodity information as above followed by the table 2 location number in parentheses. Locations with data in table 2 only are shown by a location number in parentheses followed by a list of those elements that are anomalously high. The threshold values for anomality were determined subjectively by inspection of the raw data and histograms of those data.

EXPLANATION FOR TABLE 1

MAP NO. refers to locality numbers not in parentheses on the map.

NAME(S) (if known) of mines or prospects are derived from published sources or from general usage. In some cases, more than one mine or prospect are grouped under the same map number. Names in parentheses are alternate and generally less valid names than the one preceding the parentheses.

LOCATION is given in latitude and longitude to the nearest minute.

CATEGORY refers to the classification of the deposit by conventional terminology. The terms mine, prospect, claim, and occurrence are used as follows:

M--Mine: a mineral deposit with recorded production. In some cases, ore may have been mined, but not necessarily shipped. Claims may or may not be active.

P--Prospect: a deposit that has been staked and, in most cases, has been scantily explored, but lacks evidence of production. Probably some of the gold deposits that are listed as prospects have had at least meager production, but because of lack of substantive evidence they are classified as prospects. Claims may or may not be active.

C--Claim: a deposit for which the only available information consists of a claim reported on U.S. Bureau of Mines Claim Maps (1976, 1978). According to Bureau of Mines usage, the term "lode" refers to any form of mineral deposit other than a placer deposit.

O--Occurrence: a deposit that is unclaimed, as far as is known, and is mainly known from published early reports, or from recent U.S. Geological Survey, Alaska Division of Geological and Geophysical Surveys, or U.S. Bureau of Mines field investigations. Numerous occurrences apparently only of pyrite are not included in the map and table, nor are unevaluated or unchecked occurrences of apparently anomalous metals in rock geochemical samples.

FORM OF DEPOSIT denotes the physical aspect of a deposit.

RESOURCE(S) indicates the mineral commodity or commodities that are known or reported at each locality. Question marks are used where the presence of a commodity is inferred from indirect evidence or based on unverified reports. Commodities are listed in alphabetical order, without implying abundance or commercial value. Metalliferous commodities are shown by standard chemical symbols; nonmetalliferous commodities are abbreviated by appropriate lower case letters.

BRIEF DESCRIPTION provides condensed descriptions of the geology and mineralogy of the deposits, and, in some instances, production and historical data. Information about deposits known only from U.S. Bureau of Mines Claim Maps (1976, 1978) generally is limited to reported commodities and form of deposit.

PRINCIPAL REFERENCES cites sources for information used in the table and map. A list of references follows the table.

ABBREVIATIONS USED

ppm--parts per million
sq.--square
cu.--cubic
m --meter
cm --centimeter
in.--inch
ft.--foot
yd --yard
mi.--mile
oz.--ounce
lb --pound
Cu, Fe, etc.--standard chemical symbols: for example, Cu, copper; Fe, iron, etc.
REE--rare-earth elements
RA --radioactive mineral or other material

Minerals

ap -- apatite
aspy -- arsenopyrite
ba -- barite
bn -- bornite
bt -- biotite
calc -- calcite
cb -- cubanite
cp -- chalcopyrite
cr -- chromite
ep -- epidote
fl -- fluorite
gn -- galena
gp -- graphite
gr -- garnet
hem -- hematite
mag -- magnetite
mo -- molybdenite
ms -- marcasite
musc -- muscovite
mz -- monazite
pent -- pentlandite
po -- pyrrhotite
pow -- powellite
ps -- phosphate
py -- pyrite
qz -- quartz
sb -- stibnite
sc -- scheelite
sl -- sphalerite
td -- tetrahedrite
th -- thorite
tn -- tennantite
wi -- witherite
zr -- zircon

EXPLANATION FOR TABLE 2

MAP LOCALITY refers to numbers in parentheses on map.

LOCALITY NAMES are derived from published sources or general usage.

COBB LOCALITY refers to corresponding locality numbers on the map and on table 1.

FIELD STATION NUMBER refers to samples collected by geologists at the locality indicated.

SAMPLE DESCRIPTION refers to sample for which analytical data are listed.

LOCALITY DESCRIPTION refers to brief descriptions of the geology and mineralogy of the occurrence or deposit made by the geologist who collected the sample.

ABBREVIATIONS USED

AA -- atomic absorption analysis
SS -- semiquantitative spectrographic analysis
cm -- centimeter
m -- meter
ft. -- foot
Au, etc.--standard chemical element symbols: for example, Au = gold

Minerals

aspy -- arsenopyrite
bn -- bornite
calc -- calcite
cp -- chalcopyrite
gn -- galena
gr -- garnet
hem -- hematite
mag -- magnetite
mo -- molybdenite
po -- pyrrhotite
py -- pyrite
qz -- quartz
sl -- sphalerite

REFERENCES CITED: refer to references following table 1.

TABLE 1. Description of localities mentioned in publications of the U.S. Geological Survey, the Alaska Division of Geological and Geophysical Surveys, and the U.S. Bureau of Mines, that are found in the Petersburg and eastern Port Alexander Quadrangles, southeastern Alaska.

PETERSBURG QUADRANGLE
(latitude 56° - 57°, longitude 132° - 134°)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION (lat/long)	CATEGORY	FORM OF DEPOSIT	RESOURCE(S)	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
1	Port Camden	56°48'N 133°57'W location approx.	O	--	mag,U	11 and 12 ppm U in 4 in. thick bed of fine-grained Tertiary sandstone. U mineral not identified. 30% mag in sandstone	Eakins, 1975, p. 39-44; Cobb, 1978f, p. 33
2-4	Northern Copper Co.	56°47'-54'N 133°15'-22'W	P(?)	--	Ag,Au,Cu,Zn	Some exploration on several low-grade Cu-bearing ore bodies in greenstone; production (if any) very small; data is applicable to one or more properties near the head of Duncan Canal	Wright and Wright, 1908, p. 142; Buddington, 1923, p. 69; Twenhofel, Reed, and Gates, 1949, p. 37-38; Kerns, 1950; Cobb, 1972g; 1978f, p. 14
2	Northern Copper Co.	56°54'N 133°22'W	P(?)	--	Ag,Au,Cu,Zn	Deposit in pyroxene granulite, which probably replaces limestone in a series of slate, chert and greenstone (some of which is altered diorite.) Granulite is replaced by po, mag, cp and small amounts of sl and py in qz-calc-epidote gangue. Small values in Au and Ag. Explored by several hundred ft. of underground workings, 120 ft. trench, several open cuts, and 375 ft. adit in barren slate. No known production: no work since about 1921	Wright and Wright, 1908, p. 141-142; Buddington, 1923, p. 70-72; Twenhofel and others, 1949, p. 37-38; Berg and Cobb, 1967, p. 188; Cobb, 1972g; 1978f, p. 31
3	Portage Mountain	56°51'N 133°15'W	P	Disseminated, irregular veinlets	Ag,Au,Cu,Pt	Thin qz-calc veins in slate and greenstone intruded by diorite masses and diabase dikes, contain cp, py, and mag and small values of Ag and Au. Mineralized schist between walls of gneissic diorite contain about 0.4 oz. Au, 2 oz. Ag and 0.0006 oz. Pt per ton; also a little Cu and possibly a trace of Ir. Small amount of development, by open cuts, all before 1921. Includes references to Silver Star	Wright and Wright, 1905, p. 60; Buddington, 1923, p. 69; Berg and Cobb, 1967, p. 188; Cobb, 1972g; 1978f, p. 34
4	Taylor Creek	56°48'N 133°22'W	P	Irregular masses	Ag,Cu,Pb,Zn	Irregular, small masses of gn, sl, py and cp occur as replacement deposits in dolomitic limestone. USBM (1948) drilled 4 diamond-drill holes and dug 14 trenches. Assays from trench samples contained no more than 0.95% Pb, 4.3% Zn, and 1.2 oz. per ton Ag; drill-hole samples showed no more than 0.8% Pb, 2.5% Zn, and 0.5% oz. per ton Ag. Au less than 0.005 oz. per ton. Staked in 1903 or 1904; excavated by an open cut; no other development and no production	Wright and Wright, 1908, p. 142; Kerns, 1950; Cobb, 1972g; 1978f, p. 41
5	Kane Peak	56°59'-57°00'N 133°05'- 07'W location approx.	O	Disseminated	Cu,Ni	Body of dunite, locally bordered by pyroxenite, in places contains a few percent disseminated py, pent, and cp. Level of ultramafic body now exposed is probably near original base of intrusive	Kennedy and Walton, 1946, p. 78-80; Walton, 1951, p. 208-226; Cobb, 1972g; 1978f, p. 23
6	--	56°59'N 133°04'W location approx.	C	Lode	Fe	--	U.S. Bureau of Mines, 1978g
7	--	56°50'N 133°02'W location approx.	C	Lode	RA	--	U.S. Bureau of Mines, 1978g
8	--	56°50'N 133°01'W location approx.	C	Lode	Ag,Au,Fe	--	U.S. Bureau of Mines, 1978g

TABLE 1 (continued).

PETERSBURG QUADRANGLE (continued)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION (lat/long)	CATEGORY	FORM OF DEPOSIT	RESOURCE(S)	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
9	Thomas Bay	56°59'N 132°47'W	P	Irregular mineralized fragments	Ag,Au,Cu,Pb	Qz veinlets, and silicified and pyritized schist fragments make up approximately 50% of a 12 ft. zone of sheet veins. One vein carrying py, aspy, and minor cp, po, and argentiferous gn, explored by a short tunnel sometime before 1921. Little development and no known production	Buddington, 1923, p. 68-69; Berg and Cobb, 1967, p. 191; Cobb, 1972a; 1978f, p. 42
10	--	56°43'N 132°46'W location approx.	C	Lode	Au	--	U.S. Bureau of Mines, 1978g
11	Castle Island	56°39'N 133°10'W	M	Lens, vein, disseminated	Ag,Au,ba, Pb,Zn	Barite deposit on small peninsula on east side of Castle Island. Minor impurities in barite are qz and sulfide minerals, probably gn and sl, mag and gp. Analyses indicate 0.01-0.03 oz. per ton Au, 0.79-1.05 oz. per ton Ag, 1.14%-1.27% Zn, 0.05%-0.07% Cu, as much as 0.29% Pb and 0.37% SrO. Claims patented in about 1923. Barite mined as recently as 1974 for use in oil drilling mud (Alaska Division of Geological and Geophysical Surveys Biennial Report, 1974-75, p. 34)	Burchard, 1914, p. 109-113; Buddington, 1925, p. 138; Buddington and Chapin, 1929, p. 318; Berg and Cobb, 1967, p. 185, 188; Cobb, 1972g; 1978f, p. 10-11
12	Stikine River	56°43'N 132°07'W	O	Placer	Au	Fine Au discovered on river bars in 1860's. Most of activity probably was on Canadian side of boundary	Blake, 1868, p. 10; Spurr, 1898, p. 107, 113; Cobb, 1972g; 1978f, p. 40
13	--	56°28'N 133°26'W location approx.	C	Lode	RA	--	U.S. Bureau of Mines, 1978g
14	--	56°28'N 133°26'W location approx.	C	Placer	Au	--	U.S. Bureau of Mines, 1978g
15	Maid of Texas	56°34'N 133°02'W location approx.	O	Vein	Ag(?),Au(?)	Group of claims adjoing Maid of Mexico. Vein on property may be similar to or a continuation of one on Maid of Mexico	Chapin, 1918, p. 74; Cobb, 1978f, p. 30
16	Helen S.	56 34'N 133°04'W	M	Vein, disseminated	Au,Pb,Zn	Mineralization in qz veins in interbedded black slate and greenstone, and in a disseminated lode about 40 ft. wide and 1000 ft. long; both contain gn, sl, py and Au, most of which is in the sulfides. Worked in 1903-1904, and 1907; an unknown, but certainly small amount of ore reported to have averaged 0.177 oz Au per ton was milled. Mine consists of 2 shafts and about 650 ft. of drifts and crosscuts. A little nonproductive work in 1915, abandoned soon afterward. Includes references to Smith and Olympic Mining Co.	Wright and Wright, 1908, p. 184; Buddington, 1923, p. 56-57; Berg and Cobb, 1967, p. 185; Cobb, 1972g; 1978f, p. 22
17	Maid of Mexico (Mining Co.)	56°34'N 133°02'W	M	Disseminated	Ag,Au,Cu Pb,Zn	Qz vein 2-6 ft. thick, averaging 4.5 ft. thick , and traced for 2000 ft., carries disseminated sl, py, Ag-bearing gn, and a small amount of cp and free Au. Vein occurs between slate and siliceous dolomite or wholly in dolomite (Buddington) or between slate and a porphyry dike or wholly in dike (Chapin). More than 1000 ft. of underground workings. Average value of veins about 1 oz. Au per ton. Small test shipments in 1917 and 1929 ore reported to have been milled on property in 1931 and 1933. No activity since 1939. Total production probably did not exceed 100 oz. each of Au and Ag	Chapin, 1918, p. 73-74; Buddington, 1923, p. 67-68; Smith, 1941, p. 20; Berg and Cobb, 1967, p. 185; Cobb, 1972g; 1978f, p. 28-29

TABLE 1 (continued).

PETERSBURG QUADRANGLE (continued)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION (lat/long)	CATEGORY	FORM OF DEPOSIT	RESOURCE(S)	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
18	--	56°32'N 133°04'W location approx.	C	Lode	Ag,Au	--	U.S. Bureau of Mines, 1978g
19	Hattie	56°32'N 133°03'W	P	Vein	Ag,Au,Cu,Pb, Zn	Qz fissure and breccia veins in sheared greenstone contain 3% or less py, cp, gn, sl and Au; some Ag values. Explored by 500 ft. of underground workings in early 1900's; no production	Wright and Wright, 1905, p. 59-60; 1908, p. 182-184; Berg and Cobb, 1967, p. 185; Cobb, 1972g; 1978f, p. 21
20	Alaska Garnet (Mining and Manufacturing Co.)	56°35'N 132°22'W location approx.	M	--	gr	Symmetrical gr crystals generally from 0.25-0.75 in. in diameter. Almandine gr formed by contact metamorphism in qz-bt schist intruded by a qz diorite stock with aplitic injection gneiss border. Gr adequate for use as abrasive, but not of gem quality because of internal fractures and qz inclusions. Unknown, but small, amount of production between 1910 and 1920. Resource above lowest exposure is about 11,900 tons of gr in about 1,125,000 cubic yds. of rock. Includes references to gr near Wrangell	Wright and Wright, 1908, p. 92; Brooks, 1911, p. 42; 1913, p. 51; Buddington, 1923, p. 73-74; Bressler, 1950; Kaufman, 1958, p. 11; Cobb, 1978f, p. 5
21	--	56°33'N 132°02'W location approx.	C	Lode	Ag,Au,Pb	--	U.S. Bureau of Mines, 1978g
22	--	56°32'N 132°03'W location approx.	C	Lode	Mo	--	U.S. Bureau of Mines, 1978g
23	--	56°31'N 132°03'W location approx.	C	Lode	Ag,Au,Pb	--	U.S. Bureau of Mines, 1978g
24	Groundhog Basin	56°31'N 132°04'W	P	Isolated bodies, disseminated	Ag,Au,Cu, fl,Mo,Pb, Zn	Deposits formed by selective replacement of metasedimentary rocks between Coast Range batholith and a smaller qz diorite pluton. Deposits and country rock cut by qz porphyry and basaltic dikes and sills. Deposits include: (1) massive sulfide bodies comprised principally of po, sl, and gn (contains about 8% Zn, 1.5% Pb, and 1.5 oz. per ton Ag; probably several hundred thousand tons); (2) disseminated sl and other sulfides (about 2.5% Zn and 1% Pb; probably several hundred thousand tons) replacing pyroxene granulite. Deposits also contain subordinate cp, py, mag, tn(?), td(?) and cb(?) and very small amounts of Au. Mo (with no other sulfides) in a thick granitic sill; probably less than 0.05% Mo. Breccia vein contains some sulfides and fl. Small cross faults cutting metamorphic and igneous rocks contain qz and fl crystals. Discovered in 1904; explored mainly in 1916-17 and early 1940's by surface cuts, about 450 ft. of underground workings, and at least 600 ft. of diamond drill holes. No production	Wright and Wright, 1908, p. 188-189; Buddington, 1923, p. 57-63; Gault and others, 1953, p. 15-28; Twenhofel, 1953, p. 6; Berg and Cobb, 1967, p. 191-192; Cobb, 1972g; 1978f, p. 18-20; Shawe, 1976
25	--	56°29'-31'N 132°06'W location approx.	C	Placer	Sn	Placer claims along Porterfield Creek	U.S. Bureau of Mines, 1978g
26	Lake	56°29'N 132°05'W	M	Vein, breccia fillings, stringers	Ag,Cu,Pb,Zn	Qz-calc veins, breccia fillings, and stringer lodes occur in a prominent fault zone 10-20 ft. wide in metasedimentary rocks west of a qz diorite pluton; contains gn, sl, py, cp, and Ag in mainly a qz-carbonate gangue. Average grade (based on 7 samples) is 0.99% Pb, 1.01% Zn and 0.12 oz. per ton Ag. Older reports mention high Au content; more recent reports do not. Probably staked in about 1900; development (before 1923) consisted of surface excavations and about 200-250 ft. of underground workings; one ton of ore was shipped to a smelter in 1920. Includes references to: Lake Virginia Mining Co., Margery	Wright and Wright, 1905, p. 61; 1908, p. 189-190; Buddington, 1923, p. 63-65; Gault and others, 1953, p. 41-46; Berg and Cobb, 1967, p. 193; Cobb, 1972g; 1978f, p. 24-25

TABLE 1 (continued).

PETERSBURG QUADRANGLE (continued)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION (lat/long)	CATEGORY	FORM OF DEPOSIT	RESOURCE(S)	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
27	Glacier Basin	56°29'N 132°01'W	P	Disseminated	Ag(?),Au(?) Cu,fl,mag, Pb,Zn	Sulfide-bearing pyroxene granulite similar to and probably continuous with disseminated deposits in Groundhog Basin. Granulite "ore beds" contain sl, gn, po, and mag partially replacing pyroxene; probably consists of many hundreds of thousands of tons of material containing about 1.65% Zn and 1.1% Pb. Veins in shear and breccia zones contain gn, sl, po, py and cp in gangue of qz and fl, probably contain several million tons of rock with about 0.14% Zn and 0.09% Pb. Early reports mention possible low values in Au and Ag. None found during more recent investigations. Discovered in about 1899; developed by 3 short adits; no production	Wright and Wright, 1908, p. 188-189; Gault and others, 1953, p. 29-40; Berg and Cobb, 1967, p. 191-192; Cobb, 1972g; 1978f, p. 16-17; Shawe, 1976, p. 34
28	Berg(s) Basin	56"27'N 132°01'W	P	Vein, pods	Ag,Au,Cu,Pb, Zn	Deposit in belt of metasedimentary rocks between Coast Range batholith on east and 2 granitic plutons on west. Igneous and metamorphic rocks cut by rhyolite, basalt and pegmatite dikes and, rarely, qz veins. Iron sulfides common in metamorphic rocks. First prospect staked in about 1900 on a 1 ft. thick qz vein reported to carry about 0.68 oz. per ton Au; vein not found at depth in 800 ft. crosscut or diamond drill holes. Basalt dike contains pods of gn and minor po and sl. Analyses of gn showed 27.9 and 28.7 oz. per ton Ag. Other basalt dikes contain gn and sl	Chapin, 1918, p. 75; Buddington, 1923, p. 67; Gault and others, 1953, p. 47-55; Berg and Cobb, 1967, p. 191-192; Cobb, 1972g; 1978f, p. 6-7
29	Exchange	56°25'N 132°32'W	P	Vein	Au	Qz vein 12-15 ft. thick in granite contains py and is reported to carry moderate values in Au. Staked in 1900 and developed by surface cuts and crosscut 45 ft. long. No record of production	Wright and Wright, 1908, p. 185; Berg and Cobb, 1967; Cobb, 1972g; 1978f, p. 15
30	--	56°02'N 132°28'W location approx.	C	Lode	RA	--	U.S. Bureau of Mines, 1978g
31	--	56°21'N 132°20'W location approx.	C	Lode	W	--	U.S. Bureau of Mines, 1978g
32	--	56°22'N 132°17'W location approx.	C	Lode	Fe	--	U.S. Bureau of Mines, 1978g
33-35	Salmon Bay	56°16'-19'N 133°07'-10'W	O	Veins	Cu,Fe,Pb(?), REE,U	Fissure veins in a Silurian graywacke unit consisting of sandstone, shale and limestone cut by lamprophyre and alkalic dikes, contain dolomite-ankerite carbonates, hem, mag, py, ms, cp, th, mz, zr, parisite, bastnaesite, alkali feldspar, chert, qz, chalcedony, ep, sericite, kaolinite, fl, musc, ap, topaz and gr. Veins are from 1 in. to 4 ft. thick; some can be traced for a few hundred ft., but most are covered at one or both ends by soil and vegetation or extend beyond low-tide line. Samples of radioactive veins contain as much as 0.095% eU (mainly due to Th). Rare-earth carbonate veins contain an average of 0.79% (maximum in one grab sample was 5.0%) combined rare-earth oxides. Deposits do not appear to be of current (1975) economic interest. Includes references to: Marker, Paystreak, (Pitcher Is.), Smith, Pitcher & Co., Wandve	White and others, 1952, p. 16; Wedow and others, 1953, p. 6, 9-10, 13; Houston and others, 1958, p. 6-23; Overstreet, 1967, p. 108; Cobb, 1972g; 1978f, p. 35-36; Eakins, 1975, p. 50-54

TABLE 1 (continued).

PETERSBURG QUADRANGLE (continued)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION (lat/long)	CATEGORY	FORM OF DEPOSIT	RESOURCE(S)	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
36	--	56°18'N 133°09'W location approx.	C	Lode	RA	--	U.S. Bureau of Mines, 1978a
37	--	56°15'N 133°07'W location approx.	C	--	RA	--	U.S. Bureau of Mines, 1978a
38	Zarembo Is.	56°17'N 132°57'W location approx.	O	Coating, fracture fillings	fl	Fluorite occurs as fillings in narrow fractures and coats chalcedony encrusted fragments in a breccia zone 1 in. to several ft. wide. Country rock is Tertiary volcanics	Buddington, 1923, p. 75; Eakins, 1975, p. 46, 48-49; Shawe, 1976, p. 34; Cobb, 1978f, p. 43
39	Point St. Albans	56°06'N 133°58'W	O	Vein	Zn	Sl-bearing vein material contains 0.001% eU. No other data.	Houston and others, 1958, p. 24, 27; Berg and Cobb, 1967, p. 188; Cobb, 1972g; 1978f, p. 32
40	--	56°11'N 133°26'W location approx.	C	--	Au	--	U.S. Bureau of Mines, 1978g
41-a	Castle & Co.	56°08'N 133°27'W	P	Vein	Au	Qz vein reported to carry auriferous py, discovered in 1898. The company had a stamp mill, but it is not known if any ore was processed	Brooks, 1902, p. 111; Berg and Cobb, 1967, p. 177; Cobb, 1972g; 1978f, p. 9
41-b	Shakan	56°08'N 133°27'W	M	Vein	Cu,Mo,Zn	Fault breccia zone 1-10 ft. wide in hornblende diorite contains mo, py, sl, po, cp and mag. In places sulfides make up 30%-40% of zone, but average only about 5%; gangue composed of country rock fragments, qz, calc, and silicate minerals. Prospect discovered in 1917. Deposit developed by 570-ft. tunnel and 14 surface cuts excavated during and immediately after World War I. Estimated resources are 10,000-20,000 tons of rock containing about 1.5% MoS_2. 500 tons of ore removed during exploration, were not shipped	Chapin, 1919, p. 89; Smith, 1942, p. 169-171; Twenhofel and others, 1946, p. 19-30; Berg and Cobb, 1967, p. 177; Cobb, 1972g; 1978f, p. 37-39
42-46	Dry Pass	56°09'N 133°25'-27'W	P	Disseminated, lenses, vein	Cu,mag,Mo, Pb,W	Lodes in or near diorite pluton carry mo or various combinations of py, po, cp, mo, and gn. Qz veins in marble lenses in a shear zone and in a silicified(?) rock near a marble-diorite contact carry disseminated sc. A band of mag ~2.5 ft. thick follows a contact between marble and a diorite dike. Little exploration of these occurrences	Herreid and Kaufman, 1964, p. 5; Berg and Cobb, 1967, p. 177-178; Cobb, 1972g; 1978f, p. 13
43	Lillie	56°09'N 133°26'W	P	Coatings, disseminated	Cu,Mo	Band of tactite about 100 ft. wide, bound on both sides by diorite, was probably formed by replacement of marble; contains joint coatings and disseminated mo and pow. Exploration restricted to several trenches, one of which disclosed a small mass of mag, cp, and py; sample taken in trench contained 0.16% Mo and as much as 0.09% Cu (no visible Cu minerals)	Herreid and Kaufman, 1964, p. 7-8, 10-11; Berg and Cobb, 1967, p. 177; Cobb, 1972g; 1978f, p. 27
47	Devilfish Bay	56°08'N 133°23'W	P	Mineralized inclusions	Cu,mag,Mo, U	Mag, cp, and minor mo occur in tactite inclusions in granodiorite and tactite in marble and graywacke-siltstone. One sample contained 8 ppm U. Only work done in area was small scale trenching	Herreid and Kaufman, 1964, p. 4; Berg and Cobb, 1967, p. 178; Cobb, 1972g; 1978f, p. 12; Eakins, 1975, p. 54-57
48	--	56°08'N 133°17'W location approx.	C	Lode	Ag,Au,Pb	--	U.S. Bureau of Mines, 1978g

TABLE 1 (continued).

PETERSBURG QUADRANGLE (continued)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION (lat/long)	CATEGORY	FORM OF DEPOSIT	RESOURCE(S)	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
49	Blashke Islands	56°08'N 132°54'W	D	Disseminated in marginal phases of zoned ultramafic complex.	Au,Cr,Cu, Ni,Pt	Zoned ultramafic body about 1.5 mi. in diameter intruded Silurian graywacke and pyroclastic rock. Sulfide minerals, principally po and cp, locally present near margin of body between zones of pyroxenite and gabbro. Chromite is a sparse but ubiquitous accessory in dunite core. There is a large aggregate tonnage of rock containing 1%-2% sulfides. Analyses of sulfide bearing gabbro indicate as much as 0.016% Cu and 0.05% Ni and less than 0.1 oz. per ton Pt-group metals. Other analyses show 0.004 oz. per ton Au, 0.04 oz. per ton Pd, and a trace of Pt. Some analyzed samples contained an average of 0.01 ppm of both Pt and Pd with maxima of 0.02 ppm each	Kennedy and Walton, 1946, p. 76-78; Walton, 1951, p. 16-205; Clark and Greenwood, 1972, p. C159; Cobb, 1972g; 1978f, p. 8
50	--	56°06'N 132°04'W location approx.	C	Lode	Au	Lode claim on Found Island	U.S. Bureau of Mines, 1978g
51	--	56°03'N 132°11'W location approx.	C	Lode	RA	--	U.S. Bureau of Mines, 1978g
52	--	56°03'N 132°06'W location approx.	C	Lode	Cu	--	U.S. Bureau of Mines, 1978g
53	--	56°02'N 132°06'W location approx.	C	Lode	Cu	Lode claims on Niblack Island	U.S. Bureau of Mines, 1978g
54	--	56°03'N 132°06'W location approx.	C	Lode	Cu	--	U.S. Bureau of Mines, 1978g
55	--	56°03'N 132°06'W location approx.	C	Lode	Cu	--	U.S. Bureau of Mines, 1978g
56	--	56°02'N 132°06'W location approx.	C	Lode	Cu	--	U.S. Bureau of Mines, 1978g
57	Le Conte Bay	56°47'-48'N 132°27'-30'W	D	Vein	Au	Au veins found in schist belt; no other information	Buddington, 1923, p. 56; Cobb, 1978f, p. 26

TABLE 1 (continued).

PORT ALEXANDER QUADRANGLE
(latitude 56° - 57°, longitude 134° - approx. 134°30')

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION (lat/long)	CATEGORY	FORM OF DEPOSIT	RESOURCE(S)	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
58a-c	Saginaw Bay	56°52'-54'N 134°09'-17'W location approximate	0	Veins	ba	Barite veins as wide as 5 ft (most are much narrower) in fissures in limestone, conglomerate, and volcanic rocks	Buddington, 1925, p. 72, 136-138; Twenhofel and others, 1949, p. 43; Kaufman, 1958, p. 9; Eakins, 1975, p. 39, 41; Cobb, 1978g, p. 23
59a-c	Cornwallis Peninsula	56°55'-56'N 134°10'-15'W location approximate	0	Stringers, veinlets, veins	ba	Barite in gash veins;aggregates of ba as much as 5 ft. in diameter; ba vein 1 to 1.5 ft. wide and 200 ft. long; many short ba veinlets occupy fractures in volcanic rocks. Small wi stringers also occupy similar fractures; wi in beach pebbles	Buddington, 1925, p. 72, 136, 138; Buddington and Chapin, 1929, p. 317; Smith, 1933, p. 81-82; Twenhofel and others, 1949, p. 40-42; Kaufman, 1958, p. 9; Cobb, 1978g, p. 8
60a-e	Keku Islets	56°54'-57'N 134°04'-09'W location approximate	C	--	ba,Ca	--	U.S. Bureau of Mines, 1978h
61	--	56°54'N 134°08'W location approximate	C	--	Au	--	U.S. Bureau of Mines, 1978h
62	Keku Islet, non metals	56°55'N 134°08'W	0	Vein, veinlets	ba,Pb,wi	Small veins and veinlets in limestone and marble, and rarely in basalt dikes, contain ba and wi; one veinlet contains py and a few streaks of gn.	Buddington, 1925, p. 136-137; Twenhofel and others, 1949, p. 40-41, 43-44; Eakins, 1975, p. 39, 41; Cobb, 1978g, p. 14
63	Keku Islet, metals	56°56'N 134°08'W	0	Mineralized fractures, breccia zones	Ag,Zn	Sl fills transverse fractures in a basaltic dike of probable Tertiary age in gently warped sandstone and conglomerate. Dike next to fractures is altered, with feldspars partially replaced by calc. Country rocks adjacent to dike are shattered and contain minutely brecciated py and ms, with sl filling the fractures. Sample of sl-rich rock contained 37.4% Zn, 0.24 oz. Ag per ton, and a doubtful trace of Au	Buddington, 1925, p. 137-139; Berg and Cobb, 1967, p. 188; Cobb, 1972h; 1978g, p. 13; Eakins, 1975
64	--	56°53'N 134°06'W location approximate	C	--	Ag,Mn,Pb	--	U.S. Bureau of Mines, 1978h
65	--	56°53'N 134°04'W location approximate	C	--	Pb,Zn	--	U.S. Bureau of Mines, 1978h
66	Port Malmesbury	56°20'N 134°09'W	0	--	Ag,Au,Pb, Zn	Zn-Pb deposit said to contain Au and Ag. Very little information made public	Berg and Cobb, 1967, p. 188; Cobb, 1972h; 1978g, p. 20
67a-d	--	56°15'-19'N 134°09'-12'W	C	--	Ag,Au,Pb	--	U.S. Bureau of Mines, 1978h

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TABLE 2. Descriptions of localities examined in 1978 and 1979 by U.S. Geological Survey geologists (Berg and Grybeck, 1980, and unpublished data, 1979; Dickinson, 1979a, b) and by E. M. MacKevett (personal communication, 1980) in the Petersburg and eastern Port Alexander quadrangles, southeastern Alaska.

ANALYTICAL DATA (PPM). Analyses by B. F. Arbogast, G. W. Day, M. Heard, J. D. Hoffman, J. C. Lucas. Symbols: N, not detected at limit of detection; L, detected, but below limit of determination, or below value shown in parentheses; H, interference. Looked for, but not detected (except for samples indicated): Sb, Sn, W.

Map Locality	Locality Name	LOCATION Latitude	Longitude	Cobb Locality	Field Station Number	ATOMIC ABSORPTION ANALYSES Au	Cu	Pb	Zn	Ag	As	B	Ba	Be	Bi	Cd	Co	Cr	Cu	La	SEMIQUANTITATIVE SPECTROGRAPHIC ANALYSES Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zn	Zr	Sample	Locality
(1)	Point St. Albans	56°06'34"	133°57'25"	39	79DG051A*	N	360	20,000	140,000	300	10,000	L	70	N	N	500	N	N	300	N	N	N	L	20,000	N	100	10	15	10,000	20	Sulfide-mineralized lens	Mineralized quartz-calcite veins cut the periphery of a porphyritic hornblende diorite pluton which intrudes Bay of Pillars turbidites. Veins up to 2 m thick are exposed approximately 20 m along beach between high and low tide zones. Country rock is bleached 0.2 to 0.4 m from sampled vein. Mineralization consists of disseminated sulfides, including tetrahedrite with minor sl and gn, as well as sulfide-rich lenses up to 10 cm long x 5 cm wide. *79DG051A contains 3,000 ppm Sb by SS *79DG051B contains 5,000 ppm Sb by SS *79DG051C contains 3,000 ppm Sb by SS
					051B*	0.5	200	400	3,800	70	10,000	15	150	N	N	20	20	30	300	N	N	N	15	1,000	5	100	70	15	5,000	10	Quartz-calcite vein	
					051C*	0.4	350	8,000	4,400	70	10,000	L	70	N	N	20	10	N	300	N	N	N	5	7,000	N	100	15	N	3,000	N	Quartz-calcite vein	
		56°06'40"	133°57'15"		79BG001A	N	90	5	40	N	N	30	5000	1	N	N	5	10	150	20	N	N	15	10	10	100	70	50	N	200	Hornfelsed siltstone	
					001B	N	30	L	20	N	L	10	700	N	N	N	10	30	50	N	N	N	20	L	L	N	50	N	N	70	Hornfelsed argillite	
					001C	N	45	5	25	N	N	20	5000	2	N	N	10	N	70	N	N	N	15	15	L	200	30	20	N	100	Chert	
(2)	Salmon Bay (North)	56°19'12"	133°10'06"	33	79DG070A	L(0.05)	50	40	1,200	N	N	L	100	N	N	70	15	N	50	1000	200	N	5	10	L	1000	50	30	1,500	N	Fine grained quartz-calcite dike	Quartz-carbonate lenses and crosscutting masses form a zone 5 m wide, traceable for 300 m, with sharp contacts. 50% of the dike material weathers orange. Mineralization consists of disseminated py, local gn, sparse fluorite, and a variety of black to reddish black minerals. Country rocks are hornfelsed, thin-bedded graywacke turbidites. Felsic and rhyolite dikes are broken, sheared, and cut by undeformed basalt dikes.
					070B	N	20	20	190	N	N	L	700	N	N	N	5	N	15	500	1000	700	5	10	L	700	70	10	N	N	Felsic dike	
					070C	L(0.05)	10	40	190	N	N	L	200	N	N	N	L	N	7	1000	1000	150	L	30	N	700	50	30	N	20	Felsic dike	
					070D	N	50	350	4,500	N	N	L	50	N	N	70	15	30	50	>1000	200	N	5	300	5	700	30	70	3,000	N	Coarse grained felsic dike	
					070E	N	15	55	180	N	N	L	50	N	N	N	7	N	7	>1000	200	500	L	20	N	1000	30	70	N	N	Calcareous felsic dike	
		56°19'12"	133°10'05"		79BG002A	N	N	5	20	N	N	20	2000	3	N	N	5	N	L	200	N	100	10	L	N	300	30	N	N	50	Porphyritic meta-rhyolite dike	
					002B	N	65	20	65	N	N	30	2000	3	N	N	50	700	150	200	5	30	200	15	20	1500	300	70	N	300	Basalt dike	
		56°19'12"	133°10'07"		79SK052A	N	25	10	15	N	N	L	300	3	N	N	20	30	20	20	N	N	10	L	15	700	100	20	N	70	Calcareous graywacke	
(3)	Salmon Bay (South)	56°15'47"	133°06'43"	35	79DG071A*	N	140	65	95	N	N	L	50	15	N	N	10	300	150	1000	5	100	30	30	30	3000	150	2000	N	150	High grade "vein" material	"Vein" may be a hydrothermally altered zone that includes U and Th deposition near a fracture. "Vein" material is in mottled light green to reddish gray bleached mudstone with minute clots of hematitic staining. Country rocks are massive graywacke and grit. Altered zone is 0.5 m thick. A 3 m basalt dike is unaltered. *79DG071A contains 2,000 ppm Th by SS *79DG071B contains 1,000 ppm Th by SS
					79DG071B*	L(0.05)	25	65	85	N	N	L	70	N	N	N	10	70	15	700	5	50	50	20	15	2000	50	>2000	N	70	Lower grade "vein" material	
		56°15'48"	133°06'42"		79BG003A	N	30	15	85	N	N	10	700	N	N	N	20	70	70	N	N	N	30	15	15	300	300	30	N	100	Graywacke	
					003B	N	30	15	75	N	N	L	500	N	N	N	N	20	30	N	N	N	5	15	L	300	50	10	N	20	Graywacke	
					003C	N	30	5	60	N	N	30	1000	5	N	N	30	100	70	N	N	N	20	10	20	700	300	70	N	300	Hydrothermally altered graywacke	
					003D	N	15	5	30	N	N	30	1000	1	N	N	50	50	70	20	N	N	15	15	20	700	300	70	N	300	Basalt dike	
(4)	Lost Zarembo	56°22'55"	132°53'55"	--	79DG072A	N	10	35	190	N	N	L	70	3	N	N	L	N	7	70	5	50	L	20	N	N	10	100	N	500	Felsic metavolcanic rock with disseminated pyrite	Mineralization is exposed on the north wall of a rock quarry adjacent to a logging road. The deposit consists of 3 or 4 layers and lenses of massive sulfide which is banded parallel to the flow banding in orange weathering, greenish-gray metarhyolite. The main exposure of sulfide mineralization is a 1.5 m layer that crops out for 15-20 m. The total exposed thickness of massive sulfide layers and interlaminated metarhyolite is approximately 10 m. Sulfide-rich rock contains up to 30% py, sl, gn, and cp. The occurrence forms an approximately 10 m by 30m wedge-shaped, locally fault-bounded outcrop, enclosed by steeply dipping unmineralized Tertiary basalt, diabase, and rhyolite dikes. *78DB185E contains 2 ppm W by AA
					072B	N	30	35	300	N	N	L	100	5	N	N	L	N	15	70	20	70	L	15	N	N	10	100	N	500	Felsic metavolcanic rock with disseminated pyrite	
					072C	L(0.05)	3,000	2,500	44,000	30	N	L	5000	2	N	200	20	N	3,000	N	70	N	15	3,000	N	1000	30	30	>10,000	20	Felsic metavolcanic rock with massive sulfides	
					072D	0.55	3,900	1,700	38,000	30	N	L	5000	1	N	100	15	N	3,000	N	50	N	20	3,000	N	1000	30	30	>10,000	70	Felsic metavolcanic rock with massive sulfides	
					072E	N	1,400	1,400	88,000	5	N	L	5000	1	N	500	30	N	1,500	N	15	N	10	1,500	N	N	30	20	>10,000	N	Float sample of banded felsic metavolcanic rock with massive sphalerite	
					072F	0.05	1,000	910	16,000	5	N	10	5000	1	N	70	15	N	1,500	N	15	N	10	1,500	N	700	20	N	10,000	N	Float sample of banded felsic metavolcanic rock with massive sphalerite	
		56°22'56"	132°53'53"		78DB185A	N	35	15	40	N	N	L	500	2	N	N	5	20	20	20	N	L	N	20	5	150	50	50	N	100	Banded, porphyritic biotite rhyolite	
					185B	N	30	25	120	N	N	L	200	N	N	N	50	100	100	N	N	N	30	20	30	200	200	30	N	100	Diabase	
					185C	N	20	15	90	N	N	L	300	N	N	N	30	100	70	N	N	N	20	N	30	300	200	30	N	100	Porphyritic diorite	
					185D	N	15	15	170	N	N	N	300	2	N	N	N	N	10	100	N	20	5	20	N	N	10	70	N	200	Rhyodacite	
					185E*	N	20	25	130	N	N	10	300	N	N	N	50	100	70	N	N	N	20	20	30	300	200	30	N	100	Basalt	
					185F	N	20	35	770	N	N	L	2000	2	N	N	N	L	20	20	N	N	5	70	N	200	20	100	1,000	200	Banded felsic volanic rock	
					185G	N	850	620	720	15	N	20	1000	1	N	70	50	N	700	N	50	N	20	200	N	N	30	N	>10,000	N	Massive pyrrhotitic felsic volcanic rock	
					185H	N	25	25	380	N	N	L	150	7	N	N	N	N	20	N	7	50	10	20	N	N	10	100	500	300	Banded pyritic felsic volanic rock	
(5)	Hydropit	56°22'29"	132°54'53"	--	79DG073A*	N	600	2,900	840	10	N	L	500	5	20	200	N	N	500	30	15	30	L	700	N	N	10	70	500	700	Chip sample from altered vein	Medium grained, hypidiomorphic granular quartz diorite is exposed in rock quarry adjacent to a logging road. Quartz diorite is cut by spherulitic felsic dikes, which are cut by less deformed andesitic dikes. Mineralization in hydrothermal veins and lenses in a highly altered shear zone 1.5 m wide consists of cp, bn, gn, sl, aspy, and possibly mag. Disseminated gn in wall rock as well. *79DG073A contains 10 ppm Sn by SS *79DG073C contains 10 ppm Sn by SS *79DG073F contains 15 ppm Sn by SS *78DB186C contains 2 ppm W by AA *78DB186D contains 3 ppm W by AA *78DB186F contains 1 ppm W by AA
					073B	N	120	160	480	N	N	10	200	10	N	N	N	N	70	20	N	30	L	70	N	N	10	50	N	500	Iron-stained diorite	
					073C*	N	12,000	6,400	790	10	N	10	200	3	N	500	N	N	5,000	50	N	30	L	3,000	N	N	10	70	500	500	Chalcopyrite-, bornite-, and galena bearing vein	
					073D	N	2,500	8,900	3,000	15	N	10	200	5	30	500	N	N	1,500	50	30	50	L	3,000	5	150	50	70	1,500	500	Galena-bearing vein	
					073E	N	100	210	120	N	N	L	150	5	N	N	N	N	30	20	N	20	L	30	N	N	10	50	N	500	Galena-bearing vein	
					073F*	N	3,300	25,000	8,800	50	N	10	200	7	50	>500	N	N	2,000	70	10	70	L	15,000	N	100	30	100	5,000	500	Chalcopyrite-, galena-, and sphalerite-bearing vein in diorite	
		56°22'29"	132°54'53"		79BG005A	N	L	10	140	N	N	20	100	7	N	N	N	N	5	150	N	20	L	15	N	N	20	100	L	1000	Quartz diorite	
					005B	N	20	5	100	N	N	30	1000	2	N	N	50	15	100	70	N	N	5	15	30	700	300	100	N	500	Andesite	
					005C	N	N	15	90	N	200	L	100	7	N	N	N	N	L	150	N	20	5	50	N	N	30	100	N	200	Quartz porphyritic rhyolite	
		56°22'29"	132°54'53"		79DB186A	N	10	30	190	N	N	L	100	5	N	N	N	N	10	N	N	30	L	70	N	N	10	100	200	150	Spherulitic biotite rhyolite	
					186B	N	45	30	180	N	N	L	2000	2	N	N	10	20	70	70	15	30	L	20	50	150	100	70	L	500	Greenstone dike (cuts rhyolite)	
					186C*	N	10	25	140	N	N	L	100	10	N	N	N	N	5	70	N	50	15	50	L	N	10	100	L	500	Medium-grained, equigranular hornblende diorite	
					186D*	N	10	15	180	N	N	L	150	3	N	N	N	N	20	70	5	50	15	15	N	N	10	100	300	500	Medium-grained, equigranular hornblende quartz-diorite	
					186E	N	25	15	120	N	N	L	500	N	N	N	30	10	70	N	7	N	10	10	30	300	100	50	N	150	Basalt dike	
					186F*	N	10	25	120	N	N	L	1000	3	N	N	5	N	7	70	7	30	10	20	10	100	20	70	N	300	Rhyodacite dike	

TABLE 2 (continued).

80-193

Map Locality	Locality Name	Latitude	Longitude	Cobb Locality	Field Station Number	Au	Cu	Pb	Zn	Ag	As	B	Ba	Be	Bi	Cd	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zn	Zr	Sample	LOCALITY
						ATOMIC ABSORPTION ANALYSES								SEMIQUANTITATIVE SPECTROGRAPHIC ANALYSES																				
(6)	BP Adit	56°25'07"	132°57'13"	--	79DG102A	0.20	10,000	180	4,300	20	N	L	>5000	1	N	N	15	N	10,000	20	50	N	10	500	N	1000	20	30	5,000	N	Pyrite-rich massive sulfide near adit	Mineralization in banded reddish to greenish gray silicic metavolcanic rock consists of disseminated py, cp, gn, sl. There is evidence of remobilization of cp, sl, and gn into bands, lenses, and irregular knots. The high grade zone is approximately 1.5 m thick, and runs 50%-75% banded pyrite. Similar mineralization continues 250 m down the creek. Mineralized beds may be as thick as 1 m; aggregate thickness of mineralized beds is approximately 10 m. Banding is 2 cm thick in silicic metavolcanic rock which is locally interlayered with carbonaceous limestone and siltstone. The footwall is a muscovite phyllite with some black limestone; the hanging wall is light greenish gray phyllitic to schistose rhyolite tuff (?). The metavolcanic and intercalated metasedimentary rocks are intruded by Tertiary(?) andesitic dikes. An adit driven at approximately 230 ft elevation for an unknown, probably short, distance, is now filled with water.
					102B	0.45	890	7,600	64,000	7	N	L	>5000	N	N	200	N	N	700	N	15	N	5	3,000	N	2000	10	N	>10,000	N	Representative mineralized banded silicic metavolcanic rock	
					102C	0.40	1,700	4,100	55,000	10	L	L	>5000	N	N	200	N	N	2,000	20	30	N	5	3,000	N	5000	20	20	>10,000	N	Pyrite-rich banded silicic metavolcanic rock	
					102D	5.50	20,000	190	15,000	10	1,000	L	>5000	N	20	50	5	N	15,000	N	30	N	5	200	N	300	10	30	10,000	N	Banded silicic metavolcanic rock with layers of pyrite, sphalerite, and galena	
					102E	0.55	1,900	10,000	46,000	7	N	L	>5000	N	N	150	N	N	1,500	N	15	N	5	3,000	N	2000	10	L	>10,000	N	High grade massive banded pyrite and chalcopyrite	
		56°25'08"	132°57'07"		79BG028A	N	15	H30	95	0.5	N	L	300	N	N	N	N	70	15	N	N	N	20	10	L	1000	100	10	N	20	Limestone with garnet and pyrite	
					028C	N	15	5	25	0.5	200	L	5000	1	N	N	5	N	30	N	N	N	10	20	N	N	20	50	N	200	Phyllitic felsic metatuff(?) with disseminated pyrite	
					028D	N	5	15	820	N	200	L	2000	N	N	N	5	N	5	N	N	N	5	30	N	N	20	50	300	100	Banded rhyolite with disseminated sulfides	
					028E	N	25	10	80	N	L	20	5000	1	N	N	50	100	70	N	N	N	20	20	20	1000	300	30	L	300	Andesite dike	
(7)	Hattie	56°31'58"	133°02'57"	19	79DB127A	N	60	H20	50	N	N	10	500	N	N	N	15	200	30	N	N	N	30	N	10	N	100	L	N	20	Green altered phyllitic rock from dump	Pyritic, rusty-weathering, phyllitic platy or massive light greenish gray calcareous felsic metatuff is cut by white quartz veins. The altered and mineralized zone extends at least 300 m. Altered rocks and quartz veins are intruded by epidote-hornblende-greenstone dikes, and by fresh, unaltered medium grained diorite.
					127B	N	N	L	5	N	N	N	30	N	N	N	N	N	N	N	N	N	L	N	N	N	10	N	N	N	Massive white quartz from dump	
					127C	N	70	H20	25	N	N	N	200	N	N	N	15	70	50	N	N	N	20	N	15	100	100	L	N	20	Sheared white quartz with disseminated py, mouth of adit	
					127D	N	40	H15	40	N	N	N	150	N	N	N	15	20	50	N	N	N	20	N	15	100	100	L	N	30	Silicified, green, altered country rock from footwall of gouge zone	
		56°31'56"	133°03'04"		79DG128A	0.05	80	H30	90	N	N	N	150	N	N	N	15	15	50	N	N	N	30	L	15	N	100	L	N	30	Rhyolite	
					128B	N	130	10	50	N	N	10	150	N	N	N	30	N	150	N	N	N	70	N	20	200	700	20	N	50	Greenstone	
					128C	N	N	N	L	N	N	N	50	N	N	N	N	N	L	N	N	N	5	N	N	N	10	N	N	N	Quartz	
		56°33'47"	133°03'23"		79BG064A	N	180	H20	85	N	N	10	150	N	N	N	20	70	150	N	N	N	30	N	15	100	200	20	N	100	Felsic metatuff	
					064B	N	230	15	75	N	N	L	500	N	N	N	20	70	100	N	N	N	30	N	15	100	200	20	N	100	Greenstone	
(8)	Helen S.	56°34'15"	133°04'07"	16	79DG129A	0.05	230	10	60	N	N	N	500	N	N	N	15	70	100	N	N	N	20	N	N	N	150	10	N	50	Gray phyllitic felsic metavolcanic rock	Massive sulfides, consisting of crudely banded (10 cm thick) pyrite, pyrrhotite(?), arsenopyrite(?), sphalerite and galena, were dug from a small water-filled pit about 30 m inland from the shoreline and at 15 m elevation. Country rocks near the pit include hematite-bearing phyllitic felsic matavolcanic rocks, carbonaceous phyllite and limestone, and mafic intrusive(?) rocks. The felsic metavolcanic rocks are cut by gold-bearing quartz veins, and both of these are cut by mafic dikes. Current owners report boulders of massive sulfides in creeks near the pit.
		56°34'09"	133°04'10"		79DG130A	N	25	H750	2,100	3	N	N	200	N	N	N	N	N	15	N	N	N	5	300	N	100	10	10	500	N	Quartz-calcite vein	
		56°34'12"	133°04'09"		79DG131A	3.0	70	190	130	0.5	700	N	70	N	N	N	N	N	50	N	N	N	5	30	N	N	20	N	N	N	Quartz vein	
		56°34'11"	133°04'03"		79DG132A	N	45	10,000	38,000	30	N	N	70	N	N	N	N	N	50	N	N	N	5	2,000	N	N	L	N	>10,000	N	Hematite-stained metarhyolite	
(9)	Castle Island	56°38'56"	133°09'45"	11	79BG065A	N	30	H25	35	N	N	10	1000	N	N	N	20	100	20	N	N	N	20	L	20	500	50	30	N	70	Phyllite	Rusty weathering, phyllitic, light greenish gray felsic metatuff with pyrite and minor sphalerite and galena, calcareous siltstone or calcareous volcaniclastic(?) rocks, locally containing poorly preserved fossil clams possibly of late Triassic age, chert(?), and conglomerate and grit containing clasts of chert, limestone, and green volcanics, are underlain by a thick unit of greenstone pillow breccia.
		56°38'59"	133°09'48"		79SH134A	N	85	H1300	25,000	N	N	L	>5000	N	N	200	30	30	150	N	N	N	30	1,500	5	700	100	15	10,000	10	Felsic, pyritic metavolcanic rock	
					134B	N	200	20	170	N	N	10	1000	N	N	N	50	200	200	N	N	N	100	20	20	200	500	30	N	70	Foliated pillow breccia	
(10)	Mouth of Castle Creek	56°40'02"	133°15'25"	--	79DG133A	N	40	700	170	10	1,500	20	1000	N	N	N	N	N	50	N	N	N	5	300	N	N	30	N	200	N	Float sample of quartz-pyrite massive sulfide	Massive (up to 50%) pyrite occurs in a 2 m zone in massive to phyllitic light greenish gray felsic metatuff, locally containing 5-15% disseminated pyrite and sphalerite, is exposed as a wave-cut bench below the high tide line. The felsic metatuff is intercalated with light gray, muscovite-rich, siliceous phyllite continuously along the shoreline, and is cut by olivine basalt dikes.
					133B	N	35	240	350	5	N	10	2000	N	N	N	N	N	30	N	5	N	7	70	L	100	30	L	200	30	Representative pyritic felsic metatuff from massive sulfide zone	
		56°39'53"	133°15'20"		79DG134A	N	30	H10	45	N	N	10	700	N	N	N	15	100	70	N	N	N	30	N	N	300	100	L	N	70	Phyllitic felsic metatuff with disseminated pyrite	
(11)	Halobia Locality	56°40'18"	133°15'25"	--	79DG135A	N	100	13,000	120,000	100	1,000	10	150	N	N	500	N	N	100	N	N	N	10	5,000	N	N	30	N	>10,000	N	Massive sulfide lens with pyrite, sphalerite, and galena	Halobia-bearing black carbonaceous phyllitic, locally garnet-bearing, limestone and siltstone are intercalated with silvery dark gray muscovite-bearing phyllite, which locally displays relict fragmental texture. Carbonaceous phyllite and phyllitic siliceous rock contain lenses of massive sulfides in a zone 3-4 m wide and 30-40 m long. Individual lenses up to 0.25 m wide, and 1 m long, contain dominantly pyrite with up to 5% galena and sphalerite.
					135B	N	40	4,200	20,000	15	1,000	10	150	N	N	150	N	10	50	N	N	N	10	1,000	N	N	30	N	>10,000	N	Massive sulfide lens with pyrite, sphalerite, and galena	
		56°40'18"	133°15'27"		79BG069C	N	35	25	L	3	N	30	500	N	N	N	5	N	50	N	N	N	15	15	5	N	70	10	N	70	Phyllitic felsic metatuff	
(12)	Taylor Creek	56°47'38"	133°21'45"	4	79DG136A	0.20	180	3,900	8,200	7	N	L	300	N	N	N	5	N	70	N	N	N	7	700	N	N	20	N	2,000	N	Calcite vein with pyrite, sphalerite, and galena	Mineralization occurs in an irregularly shaped brecciated zone in thinly laminated to phyllitic dolomitized light gray and white fine grained marble, which overlies green crenulated muscovite-chlorite-calcite schist. The contact is characterized by abundant quartz and calcite veins. Richly disseminated to massive sulfides consist dominantly of py with minor gn and sl in a zone approximately 3 m wide by 7 m long in marble. Mineralization persists approximately 100 m along SW bank of creek.
		56°47'39"	133°21'44"		79BG070A	N	N	H50	30	N	N	N	200	N	N	N	N	10	L	N	N	N	L	L	N	500	10	10	N	N	Marble	
					070B	N	100	H10	50	N	N	L	200	N	N	N	30	300	100	N	N	N	70	L	50	150	300	50	N	150	Greenschist with pyrite, calcite, chlorite, muscovite	

TABLE 2 (continued).

80-793

Map Locality	Locality Name	LOCATION Latitude	Longitude	Cobb Locality	Field Station Number	ATOMIC ABSORPTION ANALYSES Au	Cu	Pb	Zn	Ag	As	SEMIQUANTITATIVE SPECTROGRAPHIC ANALYSES B	Ba	Be	Bi	Cd	Co	Cr	Cu	La	Mo	Nb	Ni	Pb	Sc	Sr	V	Y	Zn	Zr	Sample	LOCALITY
(13)	Northern Copper Company	56°53'13"	133°22'15"	2	79DG140A	N	50	H15	29,000	N	N	20	70	3	N	200	15	N	500	N	N	N	5	L	N	N	30	L	>10,000	20	Pyroxene rock with sphalerite and magnetite from trench	Mineralization occurs as pods and irregular masses of sulfides in a locally garnet-bearing equigranular to pyroxene-porphyritic (phenocrysts to 2cm) greenstone with minor white coarse grained marble. Sulfides are either interstitial to pyroxene or show replacement textures where the greenstone is more massive. The mineralization does not appear to be vein-like or tabular, and tends to occur at the base of a massive, flat-lying greenstone layer underlain by green siliceous phyllite, which is underlain by black carbonaceous argillite. Mineralization in the fine grained layers in the greenstone occurs in bands parallel to the compositional layering. Mineralization consists of mag, sl, po, cp. The prospect was trenched and drilled by private interests in 1978 and 1979.
					140B	N	7,100	90	480	5	N	30	200	5	N	N	150	N	5,000	N	N	N	5	30	N	N	10	N	50	20	Massive pyrrhotite and chalcopyrite from trench	
					140C	N	2,000	10	88,000	N	N	20	20	2	N	500	15	N	1,500	N	N	N	L	N	N	N	10	N	>10,000	N	Pyroxene rock with sphalerite and pyrrhotite from shaft dump	
					140D	N	3,000	5	3,100	N	N	30	2,000	N	N	N	10	10	2,000	N	N	N	5	N	L	N	50	20	5,000	50	Rock with garnet, magnetite, and sphalerite from pit dump	
		56°53'15"	133°22'19"		79BG071A	N	80	L	650	N	N	10	70	N	N	N	15	30	70	N	N	N	30	N	15	N	150	10	500	70	Fine grained greenstone	
					071B	N	9,000	L	1,100	5	N	L	50	N	N	N	10	50	2,000	N	N	N	20	L	20	500	150	30	700	70	Greenstone	
					071C	N	120	N	150	N	N	L	100	3	N	N	10	N	100	N	N	N	5	N	N	N	30	10	300	N	Pyroxene granulite with pyrrhotite, magnetite, and sphalerite	
					071D	N	75	N	10	N	N	L	20	N	N	N	N	N	20	N	N	N	5	N	N	N	10	N	N	N	Quartz vein	
					D71E	N	55	L	10	N	N	10	100	N	N	N	30	100	70	N	N	N	70	N	20	300	200	20	N	100	Phyllitic greenstone	
					071F	N	N	L	10	N	N	L	1,000	1	N	N	10	70	L	N	N	N	30	L	10	N	100	20	N	150	Silvery greenish gray phyllite	
(14)	Maid of Mexico	56°33'54"	133°01'57"	17	79DG141A	5.5	680	1,300	1,400	1	N	N	70	N	N	70	5	N	300	N	N	N	10	200	N	N	20	N	1,500	N	Typical sulfide-bearing quartz vein	Gold- and galena-bearing quartz veins, typically banded parallel to vein walls, cut black carbonaceous argillite with minor limestone and mudstone. 1%-5% of the sulfides in the vein sampled include gn, sl, cp, py. The carbonaceous unit is associated with rusty weathering, sulfide-bearing calcareous felsic metatuff and felsic dikes, and is overlain by greenstone, greenschist, and marble. Several stopes were mined in the 1930's. The mine currently consists of several caved adits being reopened and worked privately. *79DG141C contains 10 ppm Au and 200 ppm Sb by SS
					141B	N	65	15	70	N	N	N	150	N	N	N	5	10	100	N	30	N	50	L	5	N	70	N	300	N	Quartz-slate "ribbon rock" with abundant pyrite from mine dump	
					141C*	5.5	1,800	43,000	48,000	200	N	10	50	N	N	>500	30	N	1,500	N	N	N	50	20,000	N	N	10	N	>10,000	N	Quartz with abundant galena and sphalerite from mine dump	
		56°33'54"	133°01'57"		79BG072A	N	10	H30	15	N	N	L	100	N	N	N	N	20	7	N	N	N	15	L	7	500	50	20	N	50	Pyritic black carbonaceous phyllite	
					072B	N	180	H10	45	N	N	10	200	N	N	N	30	100	150	N	N	N	70	L	20	150	300	20	N	100	Calcareous felsic metatuff	
					072C	N	160	H10	85	N	N	10	100	N	N	N	20	N	150	N	N	N	10	N	10	100	200	20	N	50	Felsic dike with pyrite, galena, molybdenite	
(15)	Harvey Creek	56°33'55"	133°03'46"	16	79DG142A	0.10	15	H60	40	N	N	10	150	N	N	N	5	N	20	N	N	N	10	30	5	N	100	N	N	N	Quartz with pyrite and arsenopyrite	Gold- and massive sulfide-bearing quartz veins cut phyllitic, py-bearing light greenish gray felsic metatuff. The prospect was worked during the Depression with a small Pelton wheel and hammer mill, and is currently being worked privately.
					142B	N	180	30	75	0.5	N	10	500	N	N	N	30	200	200	N	N	N	70	15	15	N	500	20	200	100	Pyritic metatuff	
		56°33'55"	133°03'46"		79BG073A	N	190	5	80	N	N	L	100	N	N	N	20	150	100	N	N	N	50	N	20	150	200	30	N	150	Calcareous felsic metatuff	
(16)	Cornwallis Peninsula	56°54'52"	134°10'10"	--	--																											Mineralization consists of sl-bearing calcite-cemented fossiliferous (crinoids, brachiopods) Carboniferous limestone breccia. Drilled by private interests in 1979 (E. M. MacKevett, oral communication, 1980).
(17)	Port Camden	56°48'19"	133°56'32"	1	--																											Tertiary Kootznahoo Formation, consisting of light brown, poorly sorted, very dolomitic sandstone, which contains clay clasts, carbonized wood fragments, and dolomitic concretions, ranges from silty fine grained thin-bedded sandstone to medium and coarse grained partly conglomeratic, medium and thick bedded sandstone. Siderite, mag, py, and apatite are present in some samples. All carbonized wood fragments show radioactivity when tested in place; readings range from 2 to 50 times background. Sample 712791J yields $\beta\mu$ of 1300±400 ppm uranium and $\alpha\mu$ of 2300±700 ppm uranium (Dickinson, 1979a).
(18)	Hamilton Creek	56°05'52"	133°39'27"	--	--																											Fragments of laminated phosphatic rock are suspended in white calcite veins in fine grained, light to dark gray, silty laminated apatite-bearing dolomite. Samples contain 30% to 50% U-bearing apatite. Radioactive anomaly reaches 20 times background for 0.5 m thick bed. One sample indicated $\beta\mu$ of 80 ± 24 ppm uranium (Dickinson, 1979b).