UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

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

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.	D	--	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.	D	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. 79-80; 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, 1978a
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	D	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, 1978a
14	--	56°28'N 133°26'W location approx.	C	Placer	Au	--	U.S. Bureau of Mines, 1978a
15	Maid of Texas	56°34'N 133°02'W location approx.	D	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 500 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, 1978S
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°05'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	D	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	D	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	D	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	D	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	D	--	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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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.