United States Department of the Interior
Geological Survey

Mines, prospects and selected metalliferous mineral occurrences in the Bradfield Canal quadrangle, Alaska

by

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U.S. Geological Survey

Open-file Report 81-728B

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature

Menlo Park, California

1981

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Introduction

A table and accompanying maps briefly describe the known deposits and selected occurrences of metallic mineral commodities in the Bradfield Canal quadrangle of southeastern Alaska. This report is part of a geologic mapping and mineral resource assessment study of the quadrangle carried out under the U.S. Geological Survey's Alaska Mineral Resource Assessment Program (AMRAP). Its purpose is to provide a background of historical and current mineral deposit data to be integrated with other geological, geochemical and geophysical data for the summary resource assessment.

This report is based on an extensive literature search, emphasizing original sources rather than other compilations (Berg and Cobb, 1967; Cobb, 1972, 1978). A U.S. Bureau of Mines map showing locations of mining claims was also used in this compilation. The data derived from these sources were updated and augmented where possible by geological and geochemical data from recent field studies and by consultations with colleagues. In a few cases, information gleaned from other sources has been incorporated. Large disparities exist in the quality and quantity of information about the deposits and occurrences. A few are moderately well documented by modern studies, but many others have no more than brief, sometimes second-hand, descriptions in the old literature.

In the heavily prospected Salmon River and Texas Creek areas of the Hyder Mining District, exploration was most active in the 1920's. Numerous prospects were first located during this time, and most of the literature for deposits in these areas is also from this early period. Contemporary reports on the Hyder area by Buddington (1925, 1929) contain by far the most comprehensive accounts of the numerous mines and prospects of the Salmon River and Texas Creek areas. Subsequent to Buddington's work, activity in the Hyder District became generally sporadic except for a period during and after World War II when the Riverside mine produced gold, silver, copper, lead, zinc, and tungsten.

Within the past decade or two, private interests have examined and explored several areas and deposits in the Banded Mountain and Texas Creek areas, as well as elsewhere in the quadrangle. Two large claim groups (140 and 60 claims) in the Cone Mountain and Craig River areas near the international boundary in the western part of the quadrangle have been actively explored within the past 5 or 6 years. These recent exploration activities have included modern geochemical and geophysical techniques, and also diamond drilling in a few cases. Results of these studies have generally remained proprietary.

Locations shown on the accompanying maps are generally "best fit" locations derived from all available published material including maps, figures, and text descriptions of elevation and location with reference to

geographic features, including glaciers. Notable changes in distances, bearings, and elevations from glaciers have occurred over the last 50 or more years due to glacial retreat and lowering of the ice surfaces, and our map locations include a subjective allowance for these changes where necessary.

Very few of the older prospects were visited during the recent field studies. Locating the old prospects in the field is generally difficult and sometimes effectively impossible. Many are on steep slopes with heavy brush cover, and little evidence of the generally meager development work remains after more than 50 years. Even when the old sites are found, most workings are inaccessible.

No attempt is made in this report to evaluate the extent or economic potential of these deposits. However, some information regarding the significance of deposits may be inferred from the table, particularly under the heading, "Brief Description". Another report (in preparation) provides an assessment of the area's mineral endowment and potential mineral resources.

EXPLANATION

TABLE HEADINGS

MAP NO.

Map numbers refer to the locations of specific deposits or metallic mineral occurrences shown on the maps and serve to link the map positions and table entries.

NAME(S) (if known)

Name(s) of mines or prospects are derived from published sources or from general usage. In most cases we use the early prospect names reported by Buddington (1929) in his thorough account of the mines and prospects of the Hyder area. Although interest in the area generally waned following peak activity of the 1920's, many of the early prospects were restaked or regrouped one or more times. Renaming of claims and prospects was common, but literature reflecting these later activities (and names) is sparse. For this reason the names used in Buddington's report generally prevail. We have used a few of the more recent names to identify newly reported occurrences from the more recent claim groups. Alternate names follow the primary name where appropriate. Names of selected individual claims from the prospect or claim group may be listed under the heading of "Brief Description" if they are commonly referred to in the literature.

LOCATION

Map coordinates of latitude and longitude are given to the nearest 5 seconds for the location as shown on the accompanying maps. Because so many prospects were repeatedly restaked, relocated and combined with other prospects into larger claim groups, we have not attempted to show any claim boundaries. Rather we have tried, where possible, to show the location of the most prominent veins or workings for each deposit described in the table. In other cases a "central" point is shown. Locations of some of the prospects are only vaguely known and these locations are qualified in the table by the notation "location approx."

CATEGORY

Category refers to the historic (in some cases, current) development status of the deposit. 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. Some claims may have been patented, others may or may not be active.

P - Prospect: A deposit that has been staked and explored to some degree but lacks evidence of production. Probably some of the gold and/or silver vein deposits that are listed as prospects have had at least meager production, but lacking evidence of production they are classified as prospects. These claims may or may not be active. Claims have rarely been patented.

C - Claim: A (presumed) deposit for which the only available information consists of a claim reported on the U.S. Bureau of Mines Claim Map (1979). Commodities may or may not have been indicated on that map. A few of these claims may even be spurious (staked for other than minerals-related purposes).

O - Occurrence: A deposit or metalliferous mineral occurrence that is unclaimed, as far as is known, and is mainly known from a brief mention in published reports, or from recent field investigations. Unevaluated or unchecked occurrences of apparently anomalous amounts of metals in rock geochemical samples are generally not included (unless metallic minerals were identified in the sample). Occurrences of pyrite alone are also omitted.

FORM

Form denotes the physical aspect of a deposit or occurrence; specifically the distribution or arrangement of the ore minerals in the hostrock. Terms used under this heading are intended to be as descriptive as possible and are distinct from genetic terms which denote origin or history of the deposit. A mine or prospect may contain more than one form of deposit, and forms may be gradational one to another. In many cases the form is inferred from the literature description, where it is not explicitly stated. The following terms describing forms of deposits are used in this report:

Disseminated--potentially valuable minerals occur as discrete particles or as minute veinlets or clusters which are more or less evenly distributed, at some scale, in the hostrock.

Float--loose or scattered rock or mineral material whose bedrock source may or may not be known.

Lode--U.S. Bureau of Mines claim maps classify claims only as lode or placer, without further information about form of deposit. In this sense, it refers to any bedrock (non-placer) deposit.

Massive--solid masses of potentially valuable minerals in any configuration, including veins, beds, lenses, pods, etc., essentially free of gangue minerals.

Stratiform--a deposit having the form of a stratum or layer, generally conformable.

Vein--tabular or sheetlike deposit contains the potentially valuable minerals, generally in a gangue of quartz or carbonate. Under this heading, the term vein includes deposits described as individual and multiple veins, and as veinlets, stringers, stockworks, fissue veins, fracture fillings, gash veins, and mineralized shear zones.

RESOURCE(S)

Potentially valuable mineral commodities known or reported at each locality are given here. A question mark follows a commodity when the report of that commodity is uncertain due to conflicting or ambiguous accounts or inferred from indirect evidence. Metallic commodities are shown by standard chemical symbols; nonmetallic commodities are abbreviated by appropriate lower case letters (see "abbreviations used"). In the Salmon River and Texas Creek areas galena generally carries significant amounts of silver. If lead is reported, but silver is not, it may be that assays for silver were not done or not reported. If appreciable galena is present, some silver should be assumed.

BRIEF DESCRIPTION

Condensed descriptions of the geology and mineralogy of the deposits are provided under this heading. In some instances development, production, and historical data are included; and in a few cases, names of selected claims which have been individually referred to in the literature are given. Wherever possible, dollar values for assays are converted to tenor or tonnage. When this is not possible, dollar values (and production period) are quoted from the original sources. Measurements are given in the units of the original sources, whether metric or nonmetric. Deposits known only from U.S. Bureau of Mines claim maps commonly lack information which would normally be entered under this heading.

PRINCIPAL REFERENCES

These are the principal published sources of the information used for the map and table. A list of references cited in this report follows the table. For a more complete list of references for each deposit see Cobb (1978).

ABBREVIATIONS USED

Standard chemical symbols: for example, Au, gold; Cu, copper; Fe, iron; U, uranium; etc.

RA:	radioactive elements or minerals; used when radioactive element is not specified
REE:	rare-earth elements; unspecified
cm, m, km:	centimeter, meter, kilometer
in, ft:	inch, foot
oz, lb:	ounce, pound
ppm:	parts per million

MINERALS

aspy--arsenopyrite
ba--barite
calc--calcite
chl--chlorite
cp--chalcopyrite
cv--covellite
dig--digenite
fb--freibergite
gn--galena
mag--magnetite
ml--malachite
mo--molybdenite
po--pyrrhotite
py--pyrite
qz--quartz
sc--scheelite
sl--sphalerite
td--tetrahedrite

Table 1. Table describing mines, prospects and selected metalliferous mineral occurrences in the Bradfield Canal quadrangle, Alaska.

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
1	Spud	56°28'40" 131°59'00" location approx.	P	Lode	Ag,Pb,Zn	Sulfide replacement in marble. Some diamond drilling	U.S. Bureau of Mines, 1979
2	Copper King	56°28'10" 131°58'45" location approx.	P(?)	Vein(?)	Ag,Au,Cu, Pb,Zn	Little reliable information. May be vein(?) or replacement (?). Underground workings. Chapin's (1916, 1918) "Berg claims" may refer to Copper King. May be in Petersburg quad	Chapin, 1916, p. 78; 1918, p. 75; U.S. Bureau of Mines, 1979
3	--	56°24'00" 131°55'50" location approx.	P	Lode	Au(?)	Chapin (1916, 1918) shows "Berg claims" near this location on Aaron Creek, but see also Copper King	Chapin, 1916, p. 78; 1918, p. 75; U.S. Bureau of Mines, 1979
4	Cone Mountain	56°30'50" 131°44'00" location approx.	P	--	Pb(?), U(?),Zn(?)	A claim group totaling 145 claims was staked in 1976, presumably for U and/or other RA. Claims were active for 2 or 3 years; exploration included some diamond drilling. Claims are mostly within western margin of mid-Tertiary alkali-granite stock (Tgr). Geochemical surveys (Koch and Elliott, 1981a-h) have shown notably high values of Ag, Be, Mo, Nb, Pb, Sn, Y (and REE), and Zn in rock, stream sediment and "heavy-mineral concentrate" samples from the immediate area of the stock. Differentiation enrichment of these elements in such a highly-evolved silicic magma may account for most of the values reported, but a very few Pb and Zn values are sufficiently high to strongly suggest local sulfide deposition. Economic concentrations of one or more of the other probably enriched elements is possible, though not likely	Koch and Elliott, 1981a, b, c, d, e, f, g, h
5	--	56°13'20" 131°44'45"	O	Disseminated	Cu	Rusty weathering quartzo-feldspathic schist with 2-3% biotite contains disseminated cp. (U.S.G.S. station 79SK679)	
6	Waco(?)	56°18'25" 131°36'40" location approx.	P(?)	Lode	Ag,Au,Cu	Ten claims, 1969	U.S. Bureau of Mines, 1979
7	--	56°15'45" 131°36'15" location approx.	C	Lode	Cu(?)	Staked 1974	U.S. Bureau of Mines, 1979
8	Zimovia	56°10'20" 131°34'10" location approx.	C	Lode	RA(?)	Staked 1956	U.S. Bureau of Mines, 1979

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
9	North Bradfield River Ptarmigan	56°23'10" 131°23'25"	P	Stratiform, massive	Cu,Fe	Magnetite deposits are localized in skarn at the margins of three marble layers in a 1 to 5 km-wide septum of gneiss and schist. The mag bodies are crudely stratiform and conformable, but apparently discontinuous. They range from 2 to 40 ft thick and between 50 and 350 ft in length. The ore is mainly massive mag with minor po and cp. Deposits probably contain 50 to 65% Fe and .1 to .5% Cu. Two rock geochemical samples contain 100 and 150 ppm Mo. Additional mag ore bodies are probably concealed in areas of cover and dense vegetation. Two structural interpretations, with different implications for potential reserves, have been proposed (MacKevett and Blake, 1963; and Sonnevil, 1981). Drilling by private interests in 1960's	MacKevett and Blake, 1963; Sonnevil, 1981, p. 8117-8118
10	Craig	56°27'55" 131°16'00" location approx.	P(?)	Lode (disseminated?)	Cu	Disseminated(?) cp, py, and po in metasedimentary rocks; cp also in very thin veinlets. Skarn float contains mag and minor cp. Sixty claims recorded in 1977; no longer active	U.S. Bureau of Mines, 1979
11	--	56°07'00" 131°10'15"	O	Dissem-inated(?)	Mo	Small, irregular pods of garnet-diopside skarn contain 1% dissem. mo. (U.S.G.S. station 79SX762)	
12	--	56°23'15" 130°59'00"	O	Float	Mo	Aplite rubble contains visible mo up to about .5%. All rubble is aplite, but only part has visible mo. No outcrop found at site. (U.S.G.S. station 79MH089)	
13	Unuk R.	56°20'00" 130°46'10" location approx.	O(?)	Vein	Cu	Py, po, and cp found in 2 ft vein on Unuk R. about 1 mi below International Boundary	Wedow and others, 1952, p. 57
14	Boundary	56°19'30" 130°46'15" location approx.	P(?)	Placer?	Ag,Au	Ten placer (?) claims in valley of Unuk River	U.S. Bureau of Mines, 1979
15	Joker	56°12'05" 130°27'15" location approx.	P(?)	--	Mo(?)	Claim group staked in 1954 as Mo prospect. Fissure veinlets of qz and calc occur in schist with minor py. Strong iron oxide staining locally. No evidence of Mo mineralization. No claim monuments or evidence of development found in 1973	Berg and others, 1977, p. 42, 73, 123
16	--	56°02'50" 130°23'35"	O	Vein(?)	Ag(?), Au(?),Cu	Qz pod in iron-stained metagraywacke contains po and cp. Sample across thickest part of pod with most abundant sulfides carried 1200 ppm Cu and trace Ag and Au	Berg and others, 1977, p. 133

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
17a	Glacier Banded Mtn.(?)	56°02'30" 130°23'55" location approx.	P	Vein	Ag,Au,Cu, Mo(?),Pb	Qz veins to 1 ft wide occupy two sets of fissures in graywacke and volcaniclastic rocks. Veins contain py, po, cp and minor gn. Assays show 6 oz Ag per ton, 3% Cu, and some Au. Surface stripping and 8 ft adit. North side of Banded Mtn. at "foot of Chickamin Glacier" (ca. 1925), but location not shown on any map from active period. Attempts to identify site of prospect in 1972-73 were not successful; qz float from general area contained py, cp, and mo. Some references to (unnamed) "claims on Banded Mountain" may refer to Glacier. See (Banded Mountain)	Buddington, 1929, p. 120-121; Wedow and others, 1952, p. 57; Berg and others, 1977, p.40-41, 114-116
17b	Banded Mountain Glacier(?)	56°02'30" 130°23'55" location approx.	P	Not known	Ag(?), Au(?), Pb(?)	Vague reports of discovery of rich ore on northwest side of Banded Mtn. near the head of Chickamin River. Referred to as claims of Metcalf and and Fin(d)ley. No data on deposit. Country rock mostly graywacke. See also Glacier; same area, could be Glacier	Smith, 1932, p. 17; 1933a, p. 15; 1933b, p. 17;, 1934a, p. 16; 1934b, p. 16; Berg and others, 1977, p. 133
18a	Goat	56°01'00" 130°25'00"	P	Vein	Ag,Au,Cu	Qz-calc veins to 15 cm contain abundant po, minor cp, and trace Ag and Au. Country rock is hornfelsed graywacke. References to Goat group are commonly linked to Cub group. Description given here is for Goat; Cub is not described	Berg and others, 1977, p. 40-41, 72-73, 114-115
18b	Cub	56°01'00" 130°25'00" location approx.	P	Vein	Cu	All references to Cub group (28 claims) in Berg and others, 1977, are linked to Goat group (2 claims), but only Goat group is described. Location and descriptive distinction of Cub group not clear; may be similar to Goat. See also Goat	Berg and others, 1977, p. 40-41, 70, 72-73
19	Marmot, upper basin	56°01'30" 130°21'45"	P	Vein	Ag,Cu,Mo, Pb	Marmot claim group (51 claims) staked in 1969 covered all or parts of old Jumbo (Banded Mtn.), Galena, and Edelweiss prospects. These prospects treated separately under original names. Marmot, upper basin, is a "new" prospect area exposed by recent retreat of glacial ice. Qz veins from 3 to 90 cm wide occur in dark hornfels of Hazelton Group(?). Veins contain py, cp, mo, and gn(?). Highest reported values from vein samples are: 2000 ppm Mo, 5000 ppm Pb, 3000 ppm Cu, and 150 ppm Ag. For Marmot, lower basin, see Jumbo (Banded Mtn.)	Berg and others, 1977, p. 40-41,60,70,72-73,100-114
20	Edelweiss	56°01'30" 130°21'00"	P	Vein	Ag,Au(?), Pb	Qz vein 30 cm wide in Hazleton Group(?) rocks carries py, po, and gn. Early assay reported about 1.5 oz Au per ton and 10 oz Ag per ton from picked sample. Recent assay confirms silver value but not Au. Small open cut. Restaked as part of Marmot Group in 1969	Buddington, 1929, p. 101; Berg and others, 1977, p. 40-41, 110-113

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
21	Jumbo (Banded Mtn.) Marmot, lower basin	56°01'10" 130°21'00"	P	Vein	Ag,Cu,Mo, Pb,Zn	We include here the area described as Marmot, lower basin, in Berg and others (1977). Qz veins and breccia zones occur in graywacke, argillite, and hornfels of Hazleton Group(?). Veins up to 70 cm wide contain py, gn, mo, and traces of cp and sl. Channel samples contained up to 200 ppm Ag, 6% Pb, 8% Zn, and greater than 2000 ppm Mo; but average values are small fraction of these figures.	Buddington, 1929, p. 101; Berg and others, 1977, p. 40-41, 101-110
22	Galena	56°01'50" 130°19'55"	P	Vein	Ag,Cu,Mo, Pb,Zn	Qz seams and veinlets with small amounts of sulfides occur in several fracture systems in hornfels of Hazleton Group(?). Vein sets contain varying amounts of py, mo, gn, cp, and sl. Highest metal values for small veins are 30 ppm Ag, 500 ppm Mo, 300 ppm Cu, 8,500 ppm Pb, and 2,000 ppm Zn; but total metal content of veins in area is very low. Included in Marmot claim group staked in 1969	Berg and others, 1977, p. 40-41, 112-114
23	Greenpoint	56°01'30" 130°19'20"	P	Vein	Ag,Cu,Mo, Pb	Qz-calc veinlets to 15 cm wide occupy multiple fracture sets in hornfelsed Hazleton Group(?) rocks. Veins contain py, minor gn and mo, trace cp, and up to 30 ppm Ag. Overall metal content low. Explored by small pit and open cut. Greenpoint claims staked in 1970 extend beyond Greenpoint prospect described here and cover the old Heckla prospect. See separate entry for Heckla	Berg and others, 1977, p. 40-41, 72, 93-96
24	Heckla	56°00'45" 130°19'45"	P	Vein	Ag,Au,Cu, Mo,Pb,Zn	Five principal qz veins up to 116 cm wide occur in hornfels of Hazleton Group(?) metasedimentary rocks. Veins contain py, gn, and mo; small amounts of cp and ml locally; traces of cv and dig. Best channel samples contain up to 9% Pb, 8.5% Zn 1% Cu, and 15% Mo. Assays show up to 20 oz per ton Ag, but Au values are low. A 1-ton test shipment of ore was made in 1925. A picked sample was reported to contain .08 oz Au per ton, 54 oz Ag per ton, 22% Pb, 32% Zn, and 4% Cu. Explored by stripping, opencuts, ground geophysics, and shallow drilling. Includes reference (Moffit, 1927) to Hummel, Blasher, and Moss. Covered by one of Greenpoint claims staked in 1970, but distinct from Greenpoint prospect described by Berg and others (1977). See also Greenpoint	Moffitt, 1927, p. 30; Buddington, 1929, p. 101-102; Berg and others, 1977, p. 37, 40-41, 96-100

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
25	Cathedral	56°04'30" 130°17'05"	P	Vein	Ag,Au,Cu, Pb,Zn	Qz veins to 1.5 m wide in Hazleton Group(?) rocks contain zones of nearly massive sl and/or gn with minor cp, py, and po. Channel sample from 1.5 m-wide vein with 18 cm-wide massive sulfide zone contained 70 ppm Ag, .17% Cu, .75% Pb, and 35 % Zn; sample of massive sulfide zone contained 4.4 oz Ag per ton, .27% Cu, .9% Pb, and 35% Zn. Another 6 cm wide zone contained 700 ppm (20 oz per ton) Ag, 19% Pb, and 9% Zn. Development includes shallow pit and some stripping	Berg and others, 1977, p. 38-39, 90-91
26	Marietta	56°04'35" 130°15'30"	M	Vein(?)	Ag,Au,Cu, Pb	More than 1,800 m of ice tunnels driven to find source of gold- and electrum-bearing float resulted in discovery of vein under glacier in 1937. Unconfirmed report of subsequent production of 300-400 oz of Au and electrum. Examination in 1972-73 failed to find bedrock workings due to snow and ice cover. Sparsely mineralized vein near reported site of workings contained small amounts of Cu, Pb, Zn, and Ag. May be same area as old Silver King prospect. See also Silver King. Area has been restaked several times; recent exploration has included mapping, sampling and limited drilling	Berg and others, 1977, p. 37-39, 70, 72, 76-78
27	Chickamin	56°04'15" 130°16'20"	P	Vein	Cu,Pb,Zn	Fissured zone in graywacke contains qz veins with gn, cp, sl, py, and minor po and td. Prospect could not be located in 1972-73	Buddington, 1929, p. 100; Berg and others, 1977, p. 38-39, 84
28	Silver King Marietta(?)	56°04'05" 130°16'00" location approx.	P	Vein	Ag,Au,Cu, Pb,Zn	Qz vein(s) 30 in. thick in graywacke and argillite has solid sulfide zones few inches thick containing sl, gn, cp, py, td and aspy. Sample of gn ore is reported to have 1.28 oz Au per ton, 5.96 oz Ag per ton, 55% Pb, and 2.2 % Cu. Prospect could not be located in 1972-73. Reported to be near Marietta, but lower; may be same(?).	Jewel, 1927, p. 505; Buddington, 1929, p. 99-100; Berg and others, 1977, p. 38-39, 77
29	Hummel	56°03'55" 130°14'30"	P	Vein	Ag,Au,Cu, Pb,Zn	Shear zone in argillite contains veinlets of sulfides and qz. Hanging wall of 2 ft-wide zone has up to 6 in. of solid sulfides; mainly sl with some gn, py, cp, and td. Some stripping	Buddington, 1929, p. 48, 98
30	Double Anchor	56°03'50" 130°15'30"	P	Vein	Ag,Au,Cu, Pb,Zn	Shear or qz breccia zone about 1 m wide in graywacke and argillite contains py with sporadic gn, sl, and cp. Values from zone are as high as 7% Pb, 1.4% Zn, 200 ppm Ag, and 3.2 ppm Au; but average grade about 20% of these values. Explored by trenches and short adits. Alaska State Mines Extension claim group, staked in 1958, covered Double Anchor and Dugas prospects	Buddington, 1925, p. 91; 1929, p. 98-99; Berg and others, 1977, p. 38-39, 76, 79-84

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
31	Dugas Stampede	56°03'45" 130°16'15"	P	Vein	Ag(?), Au(?),Cu Pb,Zn	Dugas prospect described by Buddington (1929) and Stampede prospect described by Berg and others (1977) appear to be about same location but descriptions (particularly attitudes) do not appear to be entirely compatible. Both sources report that shear or "shattered" zones in argillite and graywacke contain sparse sl, gn, py, and cp, but other details vary. Explored by small pits or cuts. May be covered by later Blasher Extension claims	Buddington, 1929, p. 99; Berg and others, 1977, p. 38-39, 77, 79-80
32	Blasher	56°03'20" 130°15'55"	P	Vein	Ag,Au,Cu, Mo,Pb,Zn	Qz vein .2-.6 m thick at contact of quartzite or siliceous hornfels with qz monzonite which is probably part of Texas Creek Granodiorite. Vein and qz seams and veinlets in fractured wall rock contain gn, sl, py, cp, po, and trace mo. Mineralized zone reportedly traced 500 yards. At portal bench, average assay data for vein indicates about 1% each of Cu, Pb, and Zn; and 4.4 oz per ton Ag. Qz monzonite contains mo locally. Workings include opencut, trench, and portal bench and adit. Seven holes have been drilled. Ground restaked several times. Covered by Lone Star group located in 1970 and 1971.	Buddington, 1929, p. 100; Berg and others, 1977, p. 38-39, 85-89
33	Morning Lakeside(?)	56°03'10" 130°16'05"	P	Vein	Ag,Pb	Qz vein 2 to 4 ft wide in Texas Creek Granodiorite contains py and some gn. Explored by pits and trench. Lakeside (Berg and others, 1977) is probably relocation of Morning. Later Lone Star group covers all or part of Lakeside	Buddington, 1929, p. 101 (Morning); Berg and others, 1977, p. 38-39, 72, 84-87
34	Lake	56°03'25" 130°16'25"	P	Vein	Cu,Pb	Qz vein 1 m wide in Texas Creek Granodiorite near contact with Hazleton Group(?) rocks contains py, gn, and trace of cp near footwall. Workings were few pits	Buddington, 1925, p. 74, 91; 1929, p. 101; Berg and others, 1977, p. 38-39, 84
35	Hummel Canyon	56°02'40" 130°17'30"	P	--	--	Pyritic silicified zone 18 to 30 cm wide in slightly pyritic hornfels wallrock. Samples contained negligible amounts of metals. Explored by small adit	Berg and others, 1977, p. 40-41, 86-87, 92
36	Swennings Greenpoint	56°00'55" 130°15'50"	P(?)	Vein	Ag,Mo,Pb	Qz veins in hornfels at contact with Hyder Quartz Monzonite contain knots of gn and minor mo. Samples show up to 4% Pb, .1% Zn, .2% Mo., and 100 ppm Ag	Berg and others, 1977, p. 40-41, 92-93

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
37	Texas (Creek) Comstock Hyder Lead	56°02'30" 130°15'05"	P	Vein	Ag,Au,Cu, Mo,Pb,Zn, ba	Several qz veins in both graywacke and Texas Creek Granodiorite; also fissured zones with many qz stringers. Sulfide bearing veins commonly carry py, gn, cp, and sl; po, td, and mo are rare. Gangue minerals include qz, calc, chl, and ba. Veins in granodiorite generally carry fewer sulfides than those in country rock. Samples from Fortuna and Alaska-Comstock claims reported 2 to 17 oz Ag per ton, and up to .18 oz Au per ton. Exploration by several open cuts and strippings. Claims include: Joe Joe, Fortuna, and Alaska-Comstock	Buddington, 1925, p. 74, 91-93; 1929, p. 43, 102-108; Buddington and Chapin, 1929, p. 317
38	Raygold	56°02'20" 130°14'00" location approx.	C	--	Pb,Zn	Vicinity Texas (Creek) Comstock; staked 1955	U.S. Bureau of Mines, 1979
39	Kano	56°01'50" 130°13'55"	P	Vein	Ag,Au,Cu, Pb,Zn	Qz vein 3 to 4 ft wide in Texas Creek Granodiorite contains shoots of almost solid sulfide as much as 7 inches thick; mainly gn with minor py, cp, sl, and td. Remainder of vein has only minor py and ba. One 50 ft adit reported	Buddington, 1925, p. 94; 1929, p. 108
40	Juneau	56°01'30" 130°12'50"	P(?)	Vein	Cu,Pb	Qz vein 3 to 6 ft thick in Texas Creek Granodiorite has small cp shoots locally. Gn and py reported in another vein	Buddington, 1929, p. 108-109
41	Sunset	56°01'20" 130°12'35"	P	Vein	Ag(?),Pb, ba	Two qz veins in Texas Creek Granodiorite near roof pendant of argillite and graywacke. One vein, 1 to 3 ft thick, contains concentrations of gn and py. Other vein, 3 ft thick, contains lens of py, gn, and some ba. Minor surface stripping	Buddington, 1929, p. 109
42	Engineer	56°02'40" 130°13'05"	P	Vein	Ag,Au,Cu, Pb,W	Qz vein 2 to 4 ft wide in Texas Creek Granodiorite near contact with argillite and graywacke contains shoots with gn, py, cp, and rare sc. Assays from heavily mineralized shoots have reported up to .64 oz Au per ton, 26 oz Ag per ton, and 55% Pb. Explored by adit, open cuts, and stripping	Buddington, 1929, p. 109-110; Byers and Sainsbury, 1956, p. 127, 140
43	North Star	56°02'50" 130°13'20"	P(?)	Vein	Ag(?), Au(?),Pb	Qz fissure vein 1 to 2 1/2 ft wide in graywacke contains local shoots of gn and some py. Includes reference to Bevacque (Bervaque)	Buddington, 1926, p. 53 (Bevacque); 1929, p. 110
44	Jumbo (Texas Cr.)	56°03'10" 130°12'25"	P(?)	Vein, disseminated(?)	Cu,Pb,Zn	Shear zone 1 to 3 1/2 ft wide contains breccia of graywacke with qz stringers 1 in to 2 ft wide; country rock is graywacke pendant in Texas Creek Granodiorite. Qz stringers carry most of sulfides; gn, py, cp, and sl locally	Buddington, 1929, p. 111

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
45	Iron Cap.	56°04'05" 130°12'50"	P	Vein	Ag,Au,Cu, Zn	Eleven-ft-wide zone of graywacke and argillite contains stringers and veins of sulfides and 2-ft qz-calc vein with shoots or pockets of solid po, cp, and sl, and minor aspy. Near contact with Texas Creek Granodiorite. One sample reported to assay 6.3 oz Ag per ton, .04 oz Au per ton, and 2% Cu. Explored by open cut	Buddington, 1925, p. 95; 1929, p. 44, 98
46	Silver Bell	56°04'30" 130°12'10"	P	Vein	Cu,Pb,Zn	Qz vein 2 ft thick in brecciated zone contains inclusions of argillite and graywacke country rock. Vein contains sparse disseminated py, cp, gn, and sl; also one shoot of gn with minor td	Buddington, 1929, p. 44, 97
47	Silver Star	56°04'15" 130°11'30"	P	Vein	Ag,Au,Pb, Zn	Qz veins at and near contact of argillite and Texas Creek Granodiorite. Lower vein in granodiorite contains shoots of gn and py. Upper zone of qz veinlets contains gn, sp, and py; minor amounts of po, aspy, and fb. Explored by 30 ft adit	Buddington, 1925, p. 89-90; 1929, p. 97
48	Texas Discovery	56°03'50" 130°11'50"	P(?)	Vein	Ag,Au,Cu, Pb	Qz vein 1 to 14 in. thick contains gn, py, po, and minor cp. Assay of picked sample reported to have 30% Pb, about 1 oz Au per ton, and some Ag	Buddington, 1925, p. 74, 90-91; 1929, p. 98
49	Ibex	56°04'35" 130°10'50"	P	Vein	Ag,Cu,Pb, Zn	Three qz veins near contact of Texas Creek Granodiorite with argillite and quartzite. Main vein is 1 to 2 ft wide and contains up to 18 in. of nearly solid sl and gn with only minor qz gangue. Adit 131 ft in length driven to undercut deposit did not find vein. Two smaller veins in Texas Creek Granodiorite contain gn and py; minor cp also in one vein. Assays of picked samples reported to have indicated high Ag content	Buddington, 1925, p. 88-89; 1926, p. 53-54; 1929, p. 96-97
50	Silver Coin	56°04'40" 130°10'00"	P(?)	Vein	Cu,Pb	Qz vein and vein zone up to 10 ft thick in Texas Creek Granodiorite contains gn with a little py and cp; variable thickness, form, and ore content	Buddington, 1925, p. 90; 1929, p. 95
51	Homestake	56°04'30" 130°10'10"	M	Vein	Ag,Au,Cu, Pb,Zn	Qz vein 4 to 5 1/2 ft thick in Texas Creek Granodiorite. Mineralized portions of vein contain bands of solid sulfide up to 1 ft thick; mainly gn with py, cp, and trace sl. Stringers of td in hanging wall. Test shipment of sorted ore had 50% Pb, 23 oz Ag per ton, .3 oz Au per ton, and some Zn. Development includes 25 ft adit	Buddington, 1925, p. 88-89; 1929, p. 43, 94-95; Jewell, 1927, p. 504; Moffit, 1927, p. 30; Buddington and Chapin, 1929, p. 317, 320, 358
52	Evening Star	56°04'10" 130°10'15"	P	Vein	Pb	Narrow stringer of gn in Texas Creek Granodiorite; paralleled by qz vein 100 ft above gn stringer. Explored by 10 ft adit	Buddington, 1925, p. 90; 1929, p. 94

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
53	Nothiger Standard(?)	56°03'05" 130°10'40"	P	Vein	Cu(?),Pb	Qz vein and small stringers of qz in 20 to 40 ft thick shear zone in Texas Creek Granodiorite. Main vein is 2 to 6 ft thick and contains only trace of gn and py. Explored by 12 ft adit. Standard claims (staked 1931?) probably include this prospect	Buddington, 1929, p. 94; U.S. Bureau of Mines, 1979
54	Liberty	56°03'15" 130°10'15"	P(?)	Vein	Pb	Qz vein few in. to 2 ft in width in Texas Creek Granodiorite contains local shoots of gn. Standard claims (staked 1931?) may cover all or part. Byers and Sainsbury's observation of scheelite on "Liberty prospect" probably refers to another Liberty (group) which was staked over part of old Fish Creek group (see Byers and Sainsbury, 1956, plate 1)	Buddington, 1929, p. 93-94; Byers and Sainsbury, 1956, p. 140 and plate 1
55	Silver Bar	56°03'40" 130°08'40"	P(?)	Vein	Cu,Pb	Qz vein up to 3 ft thick in Texas Creek Granodiorite locally contains cp with lesser gn and py; some ba present. Much of vein is barren. Includes reference to McVey	Buddington, 1925, p. 88; 1929, p. 93
56	Bartnoir	56°05'15" 130°04'10"	P(?)	Vein	Cu,Pb,Ba	Qz vein with cp and local shoots of gn and py; ba common. Vein averages 6 in. wide. Property mostly in Canada	Buddington, 1929, p. 92-93
57	Cantu	56°04'35" 130°03'50"	M(?)	Vein	Ag,Au,Cu, Pb,Zn,Ba	Qz-fissure veins in Texas Creek Granodiorite near contact with Hazleton Group(?); dikes of Boundary Granodiorite and lamprophyre. Veins few in. to 3 ft thick contain gn, sl, and td; sparse py and cp. Gangue includes calc and ba; locally ba makes up 50% of gangue. Test shipment of 20 tons of selected ore contained .18-.3 oz Au per ton, 14-31 oz Ag per ton, 37-44% Pb, and 6-12% Zn. "Cantu" group restaked in 1949 and 1966. Area(s) covered somewhat different from original Cantu group	Buddington, 1929, p. 41, 43, 91-92; U.S. Bureau of Mines, 1979
58	Charles, Nelson, & Pitcher	56°03'15" 130°04'05" location approx.	P(?)	Disseminated(?)	Ag,Au,Cu, Pb,Zn	Disseminated sulfide in sheared silicified porphyry and granodiorite cut by small barren qz veins. Sulfides include sl, gn, py, and cp; assays report small amounts of Ag and Au. Includes reference to Charles	Westgate, 1922, p. 129, 139-140
59	Ninety-six	56°02'35" 130°04'00"	P	Vein	Cu,Pb,Zn	Qz stringers in brecciated or shattered zone about 5 ft thick in dike of Texas Creek Granodiorite; country rock is slate and quartzite. Qz stringers contain variable amounts of gn, sl, td, py, and cp. Explored by 63-ft adit and open cuts. Gold Eagle claims, staked 1955, probably covered Ninety-six	Buddington, 1925, p. 87; 1929, p. 93; U.S. Bureau of Mines, 1979

Table 1. (cont.)

MAP NO.	NAME(S) (If known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
60	Gold Cliff Premier	56°03'10" 130°02'40"	P	Vein	Ag,Au,Cu, Pb,Zn	Shear zone and fractures in quartzite and tuffaceous rock cut by dikes of Texas Creek Granodiorite and Hyder Quartz Monzonite. Py, calc and qz line fractures; and py is disseminated in zone. Pyritic band in shear zone contains as much as 1 oz Au and 3-4 oz Ag per ton. In other part of property, narrow stringers contain gn, sl, cp, td, and po. Explored by open cut	Buddington, 1929, p. 90
61	Border	56°02'45" 130°02'10"	P	Vein	Cu,Pb,Zn	Wide zone with mineralized gash veinlets in slate and graywacke. Veinlets are qz with gn, sl, py, and minor cp; carbonate occurs with the sulfides. Explored by 70 ft adit	Buddington, 1929, p. 90
62	Virginia	56°02'25" 130°02'30"	P	Disseminated, vein, massive (?)	Au,Cu, Pb,Zn	Mineralized shoot in shear zone in highly altered greenstone is nearly solid sulfide. Sulfides are po, sl, and py, with minor gn and td; qz gangue. Qz veins, calc seams and other mineralized bands also present here. Selected samples have contained as much as 4 1/2 oz Au per ton. Qz veinlets and disseminated sulfides at other sites on property; po, py, sl, gn, and cp are reported. Underground workings include a few hundred feet of crosscuts and drifts; opencuts	Buddington, 1925, p. 74, 84; 1929, p. 88-89
63	Stoner (Gold and Silver Mining Co.)	56°02'05" 130°01'45"	P	Vein, disseminated	Ag,Au,Pb, Zn	Mineralized zone of seams and disseminated crystals of pyrite in greenstone; contains shoots with py, sl, gn, td, po and qz-calc gangue. Also sparsely mineralized qz fissure veins in or along contact of qz diorite porphyry with slate; and seams, fracture facings, and disseminated deposits of py in porphyry. Sample from gn-py streak in greenstone reported 20 oz Ag per ton and some Au. Development includes open cuts and shaft. See also Stoner-Clegg-O'Rourke	Westgate, 1922, p. 131-132; Buddington, 1925, p. 74, 83; 1929, p. 43, 89-90
64	Stoner-Clegg-O'Rourke	56°01'55" 130°02'00"	P	Vein, disseminated	Cu,Pb,Zn	Calc veinlets in greenstone contain sl, py, and gn; minor po, cp, and td. Some disseminated py and po in greenstone. Explored by 75 ft of underground workings. See also Stoner	Buddington, 1929, p. 88
65	Daly-Alaska, lower New Alaska Elevenmile	56°01'55" 130°02'35"	M(?)	Vein, disseminated(?)	Ag,Au,Cu, Pb,Zn	Shear or breccia zone in altered and silicified greenstone contains qz-calcite veinlets and sulfide stringers. Sulfides include: po, sl, gn, py, td, and cp. High Ag values reported. Some ore reportedly taken from Iron claim. Explored by open cuts and a few hundred ft of underground workings from 2 or more portals. Claims include: Elevenmile and Iron	Chapin, 1916, p. 97; Westgate, 1922, p. 128, 131-133; Buddington, 1925, p. 74, 83-84; 1929, p. 43-44, 86-88; Buddington and Chapin, 1929, p. 318, 327, 357-358

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
66	Daly-Alaska, upper New Alaska	56°01'45" 130°02'15"	M(?)	Vein, disseminated	Ag,Au,Cu, Pb,Zn	Fracture zones in silicified and locally calcareous greenstone, tuff and qz porphyry contain disseminated pyrite, calc veinlets, qz gash veinlets, and bands and patches of sulfides. Sl, gn, py are reported with lesser td, cp, po, and aspy. Explored by open cuts and more than 100 ft of underground workings. Claims include: Hoosier, Bertha, and Western	Chapin, 1916, p. 97; Westgate, 1922, p. 128, 131-133; Buddington, 1925, p. 74, 83-84; 1929, p. 43-44, 86-88; Buddington and Chapin, 1929, p. 318, 327, 357-358
67	Alaska-Premier	56°01'35" 130°02'30"	P	Vein, disseminated(?)	Ag,Au,Cu, Pb,Zn	Qz veinlets containing sulfides are found in sheared and altered felsite of uncertain origin; general country rock is greenstone associated with slate and graywacke. Qz veinlets and blebs of sulfides contain py, sl, and gn with minor cp and po; high Au values from selected samples. Mineralized shear zone contains py, gn, sl, cp, td, po, and aspy. Explored by opencuts and more than 200 ft of underground workings. Claims include: Ready Money and Alaska. Report of W applies only to "south workings"; see Alaska-Premier, "south workings"	Buddington, 1925, p. 74, 78-79; 1929, p. 85-86; Byers and Sainsbury, 1956, p. 140 (refers to "south workings")
68	Martha Lee	56°01'35" 130°04'10" location approx.	C	--	Ag(?),Au, Cu,Pb,Zn	Four claims located 1965	U.S. Bureau of Mines, 1979
69	Cripple Creek	56°01'30" 130°04'00"	P	Vein, disseminated(?)	Ag(?),Cu, Pb,Zn	Qz vein and fissured zones with narrow qz stringers in sheared and altered Texas Creek Granodiorite contain stringers and seams of sulfides including gn, py, sl, cp, and minor td. Disseminated py, gn, and sl in locally altered granodiorite of shear zones. Explored by opencuts, stripping, and 45-ft adit	Buddington, 1925, p. 74; 1929, p. 83-84
70	Portland	56°01'20" 130°03'10"	P	Vein	Cu,Pb,Zn	Qz vein in slate; one follows contact between dike of Texas Creek Granodiorite and slate. Sulfides include sparse py, gn, and cp. Explored by open cut and short adit	Buddington, 1929, p. 84
71	Hobo Swede(?)	56°01'15" 130°02'40"	P	Disseminated, vein	Ag,Au,Cu, Pb,Zn	Greenstone contains mineralized zones with seams, fracture facings, and veins of sulfides; qz veins and disseminated sulfides also reported. Sulfides include sl, po, py, cp, and gn; qz and calc are principal gangue minerals. Sl is reported to carry variable amounts of Au; 9 oz per ton reported in some samples. Probably same prospect as Swede (Buddington, 1925)	Buddington, 1925, p. 78; 1929, p. 43, 84-85

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
72	Crest	56°01'00" 130°03'45"	P	Vein, disseminated	Au,Cu,Pb	Narrow qz vein and stringers in fissured zone in Texas Creek Granodiorite carry gn, py, and a little cp. Adjacent country rock contains disseminated py and fracture surfaces are coated by py and gn. Free gold reported at one location. Assays of qz as high as 5 oz Au per ton. Some new Crest(?) claims staked 1978(?), not vicinity old claims	Buddington, 1929, p. 81-82; U.S. Bureau of Mines, 1979
73	Butte Brigadier	56°01'00" 130°04'00"	P	Vein	Ag,Au,Pb, W	Qz vein 1-2 ft thick in Texas Creek Granodiorie contains py and gn. Assays of two samples reported 11-14% Pb, .2-.6 oz Au per ton, and 10-20 oz Ag per ton. Rare grains of sc reported. Explored by open cuts and 25 ft shaft. Includes references to Brigadier and Hyder Butte	Buddington, 1929, p. 81; Byers and Sainsbury, 1956, p. 140
74	Bluebird	56°00'55" 130°03'15"	P(?)	Vein	Cu,Mo,Pb, W	Qz vein 4 in wide in Texas Creek Granodiorite contains sparse py, cp, gn, sc, and mo. Samples contained estimated 0.5% WO_3	Byers and Sainsbury, 1956, p. 139-140
75	Alaska-Premier, "south workings"	56°00'40" 130°02'30"	P(?)	Vein(?)	Ag(?), Au(?), Cu(?), Pb(?),W, Zn(?)	Sc is reported on "Alaska-Premier (south workings only)" prospect by Byers and Sainsbury (1956). Apparently in vicinity of Monarch and (upper) Fish Creek prospects, and not contiguous with Alaska-Premier described by Buddington (1929). See Alaska-Premier	Buddington, 1929, p. 85-86; Byers and Sainsbury, 1956, p. 140 and plate 1
76	Hyder Skookum	56°00'40" 130°02'10"	P	Vein, massive (?)	Cu	Qz veins and sulfide replacement deposit in schistose zone in greenstone near contact with dike of Texas Creek Granodiorite. Sulfides include py and po with a little cp and aspy; qz veins contain minor calc locally	Buddington, 1929, p. 72
77	Titan (& Salmon River Syndicate)	56°00'40" 130°01'20"	P	Vein	Ag,Au,Cu, Pb,Zn	Country rock is greenstone and slate of the Hazleton Group(?) cut by porphyry dikes of the Texas Creek Granodiorite and of the Hyder Quartz Monzonite. Principal deposit is qz vein and stringers in shear zone in altered dike of Texas Creek Granodiorite. Qz veins carry sl, gn, py and cp; and the porphyry contains disseminated pyrite near the qz veins. Assays of picked samples from outcrop reported to be high in Ag and Au. Another qz vein carries gn, sp, py, and cp; and a shear zone in greenstone carries aspy and gn. Calc gangue occurs locally with qz. Explored by more than 500 ft of underground workings and by open cuts	Buddington, 1925, p. 74, 77; 1929, p. 72-74

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
78	Fish Creek, upper	56°00'10" 130°02'40"	M	Vein, massive, dissem-inated (?)	Ag,Au,Cu, Pb,W,Zn	Extensive claim group; majority of claims in Ketchikan quad. Claims wholly or mostly in B.C. quad are: Olympia Extension (Last Chance), Single Rose, Mountain View, Summit, and Climax. Literature on Last Chance (formerly Olympia Extension) sometimes treated separately. Liberty Group (Byers and Sainsbury, 1956) covers several former Fish Creek claims. Prospect is at contact of Texas Creek Granodiorite and Hazleton Group(?) greenstone, graywacke, and slate; veins are mostly within granodiorite. Qz vein on Olympia Extension claim averages 3 ft in width and contains gn, td, cp, py, and sl; gangue includes qz, ba, and ankerite. Td occurs in stringers as much as 2 in. wide. Shipment of 64 tons of sorted ore reported to average $90 per ton (1920's prices), probably mostly from Ag and Au. On the Summit claim, masses as much as several feet across of almost solid po are reported in altered greenstone. Small amounts of py, aspy, cp, and qz gangue accompany the massive po. Py, po, and cp also occur in adjacent country rock. Assay of massive po shows .36 oz Au per ton and 4 oz Ag per ton	Chapin, 1916, p. 98-99; Westgate, 1921, p. 128; Brooks, 1923, p. 21; Buddington, 1925, p. 77-78; 1929, p. 43, 68-71; Buddington and Chapin, 1929, p. 317, 324, 327, 338; Smith, 1937, p. 18-19; Byers and Sainsbury, 1956, p.138
79	Monarch	56°00'25" 130°03'20"	P	Vein	Ag,Au,Cu, Pb,W,Zn, Ba	Qz veins in Texas Creek Granodiorite contain narrow sulfide shoots with gn, py, td, sl, and cp; ba and sparse sc reported locally. Assays of mineralized shoots show as much as 1.4 oz Au per ton; td sample assayed 266 oz Ag per ton. Qz veinlet estimated to range in grade from 0.5 to 3% WO_3. Explored by open cuts, stripping, and 30 ft drift	Buddington, 1929, p. 74-75; Byers and Sainsbury, 1956, p. 139

Table 1. (cont.)

MAP NO.	NAME(S) (if known)	MAP COORDINATES LOCATION	CATEGORY	FORM OF DEPOSIT	RESOURCES	BRIEF DESCRIPTION	PRINCIPAL REFERENCES
80	Riverside	56°00'10" 130°04'10"	M	Vein	Ag,Au,Cu, Pb,W,Zn, Ba	By far the most productive property of the Hyder district with production of Ag, Au, Cu, Pb, W, and Zn from vein deposits. Two qz veins in sheared, gneissoid Texas Creek Granodiorite have produced some ore, but most production is from complex vein/replacement(?) deposit in Lindeborg shear zone has been interpreted as schist inclusion in granodiorite (most writers) or mylonite gneiss and ultramylonite derived from granodiorite (Smith, 1977). Sulfide minerals include py, gn, sl, cp, po, and td; gangue is mainly qz with minor calc, ba, and ankerite. Sc-bearing deposits are mineralized shoots in qz-sulfide veins; perhaps localized by and replacing calcareous schist(?) in the wall rock. Ag, Au, and Pb were produced for a few years in the late 1920's. Production resumed in 1941 and continued to 1951. Total production believed to be about 3,000 oz Au, 100,000 oz Ag, 100,000 lbs Cu, 250,000 lbs Pb, 20,000 lbs Zn, and 70,000 lbs WO_3. Development included several thousand ft of underground workings and several thousand ft of diamond drilling. Includes references to Riverview and Lindeborg. Extensive literature (see Cobb, 1978, for summaries)	Chapin, 1916, p. 97; Westgate, 1922, p. 139; Buddington, 1925, p. 74-75, 79-82; 1929, p. 317, 324, 330, 347; Thorne and others, 1948, p. 4-5; Byers and Sainsbury, 1956, p. 125-136; Noel, 1966, p. 53-55; Berg and Cobb, 1967, p. 147; Smith, 1977, p. 17-18

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