

**MINERAL INVESTIGATIONS IN THE
KETCHIKAN MINING DISTRICT, ALASKA, 1992:
KETCHIKAN TO HYDER AREAS**

By Peter E. Bittenbender, Kenneth M. Maas, Jan C. Still, and Earl C. Redman



**UNITED STATES
DEPARTMENT of the INTERIOR
Bruce Babbitt, Secretary**

**U. S. BUREAU of MINES
Hermann Enzer, Acting Director**



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UNIT OF MEASURE ABBREVIATIONS USED IN THIS REPORT¹

°	degree
g	gram
mg	milligram
kg	kilogram
km	kilometer
m	meter
mm	millimeter
m ³	cubic meter
mt	metric ton
g/mt	gram per metric ton
ppm	part per million
ppb	part per billion

METRIC TO ENGLISH CONVERSIONS

<u>From</u>	<u>Multiply by</u>	<u>To</u>
g/mt (= ppm)	0.02917	ounces/short ton
kg	2.2046	pounds
mt	1.1023	short tons
m	3.2808	feet
km	0.6214	miles
m ³	1.3080	cubic yards

¹All measurements in this publication have been converted to metric units. This policy differs from previous publications and will be reflected in all future Bureau reports.

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ABSTRACT

The Ketchikan to Hyder areas comprise the eastern part of the Ketchikan Mining District, which is located in southern Southeast Alaska. Work accomplished in 1992 constitutes the third year of the U.S. Bureau of Mines' five-year Ketchikan Mining District study.

This report summarizes the U.S. Bureau of Mines' work completed between May and September, 1992. Three two-person crews investigated 195 mineral localities and collected 1,689 samples from Federal, State, and private lands. Efforts were concentrated on the Helm Bay and Hyder areas because of their historic mineral potential. Past production of gold from the Goldstream, Gold Banner and Goo Goo Mines and production of zinc and lead from the Mahoney Mine prompts individual discussion of these locations.

Results of sample analyses indicate the potential for a large tonnage, low grade gold deposit in the Helm Bay area. Numerous polymetallic-gold quartz veins in the Hyder area indicate widespread mineralization, possibly akin to the nearby gold-silver producing ore bodies in Canada. However, no specific ore bodies have been delineated to date.

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INTRODUCTION

The U.S. Bureau of Mines (Bureau) initiated a five-year study of the Ketchikan Mining District (KMD) in 1990 (fig. 1). The project's objectives are to determine the mineral development potential of mines, prospects, and mineral occurrences in the area, determine amount and grade of mineral resources, study beneficiation technologies on mineralized rock from known deposits in the area, evaluate the economic feasibility of developing certain deposit types, and to examine the socio-economic impacts of mineral development within the district.

From May until September, 1992, the Bureau conducted site-specific field investigations of mines, prospects, and mineral occurrences in the eastern part of the KMD, from Ketchikan to Hyder. "Mining District", as used in KMD, is derived from the description of Ransome and Kerns (70)⁵, but in this publication, includes the Hyder Mining District as well. The eastern part of the KMD includes Revillagigedo, Gravina, and Duke Islands; Cleveland Peninsula; and the area between east Behm Canal and Portland Canal. (The Bureau did no work on Annette Island in 1992.) Approximately 195 mineral localities were examined, 1,689 samples collected, and 8,528 m of underground workings surveyed, mapped or sampled. Three samples for metallurgical analyses were collected, one from Helm Bay and two from Hyder (fig. 2).

This report summarizes the work completed in 1992 and presents geochemical and assay analyses of the samples collected. A regional geologic description with reference map of selected published geologic maps is included. Descriptions of access to the study area, land status, previous geological and mineral investigations, and mining history of the area are also presented. Special emphasis is accorded to the Helm Bay and Hyder areas as well as to three locations on southwest Revillagigedo and Gravina Islands that have records of past metal production.

An evaluation of the mineral potential of Prince of Wales Island and vicinity, the western part of the KMD, was undertaken in 1990 and 1991. Reports on the work accomplished during these first two years of the KMD study are available as Bureau open-file reports OFR 33-91 (63) and OFR 81-92 (64). The 1993 field season will be the final year of field investigations of the KMD study. Following the 1993 field season, a comprehensive report detailing Bureau work accomplishments and interpretive resource information for the entire KMD study area will be published.

LOCATION AND ACCESS

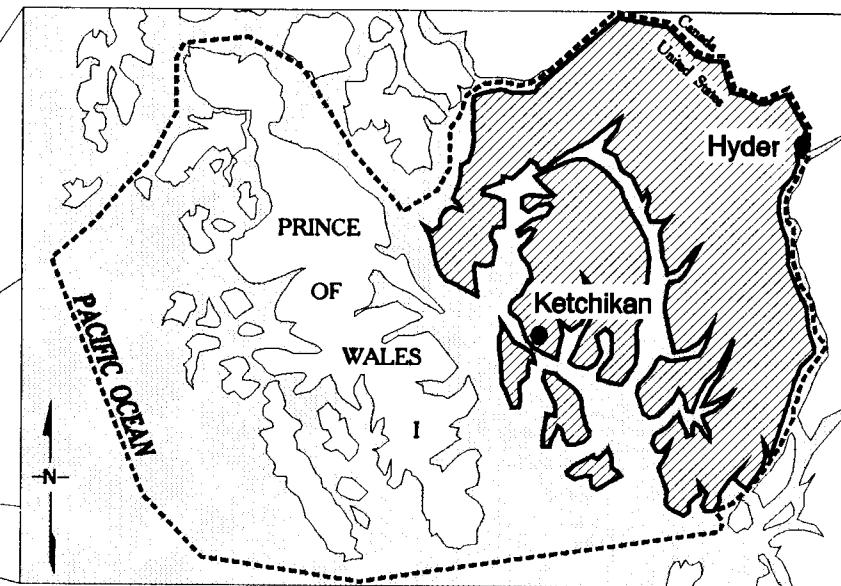
The eastern part of the KMD is bounded generally by Clarence Straight on the west and south; the United States-Canada border on the south and east; and Bradfield Canal and Ernest Sound on the north (fig. 2). The area includes Cleveland Peninsula; Revillagigedo, Gravina, Duke, and the interlying islands; the area between east Behm Canal and Portland Canal; and the area southeast of a line from the head of Bradfield Canal to Mount Lewis Cass on the United States-Canada border.

The city of Ketchikan, with a population of 8,478 (14,110 within the Ketchikan Gateway Borough) (107), is the major population center in the study area. It is also the major transportation and supply center for the region. Commercial airline service to other communities in Alaska as well as to the

⁵Italicized numbers in parentheses refer to references, listed alphabetically, beginning on page 23.

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LOCATION MAP Alaska and the Ketchikan Mining District

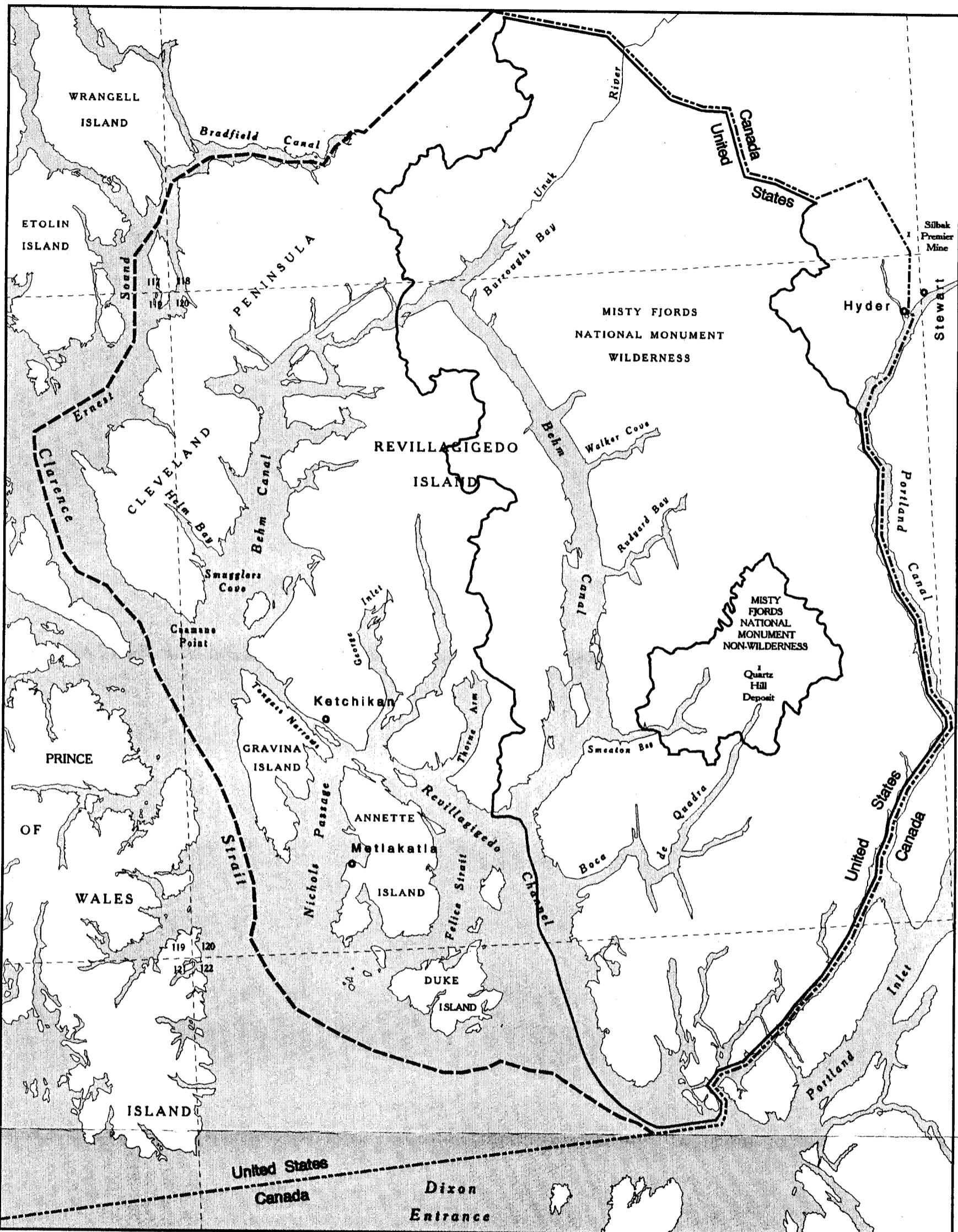


----- Ketchikan Mining District boundary

1992 study area

Figure 1. - General location map of the Ketchikan Mining District (includes the Hyder Mining District) showing the 1992 study area.

Ketchikan Mining District: 1992 Study Area



- International boundary
- 1992 study area boundary
- Wilderness boundary
- - - Quadrangle boundary
- 117. Petersburg
- 118. Bradfield Canal

- 119. Craig
- 120. Ketchikan
- 121. Dixon Entrance
- 122. Prince Rupert

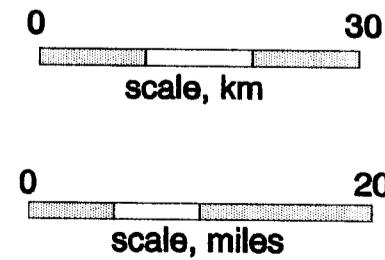


Figure 2. - Detailed location map of the 1992 study area.

contiguous United States is available from Ketchikan. Scheduled floatplane service to smaller outlying communities is also available. The Alaska Marine Highway System's ferries service Ketchikan and provide surface transportation to Metlakatla and Hyder as well as to other locations both north and south of the study area.

Hyder, Alaska, is a community of 99 people (107) that is adjacent to the town of Stewart, British Columbia, Canada. Stewart, with a population of approximately 700 (62), is the second major source of supplies and services in the study area.

There is a limited road system in the Ketchikan area that restricts access to the west-southwest part of Revillagigedo Island. Hyder is connected by road through Stewart to the North America road network. There is also a road that connects Hyder to the important mining areas up the Salmon River drainage. Discontinuous logging road systems are present in various parts of the study area, however most of the area is without roads.

Helicopter transport is commonly the only practical means of accessing higher elevation prospects. Shoreline and low elevation properties are accessible by floatplane and small boat. All-terrain vehicles (ATV's) are well-suited for negotiating logging roads.

LAND STATUS

Land management within the eastern part of the KMD is divided between the U.S. Forest Service (USFS), Bureau of Indian Affairs, Native Regional and Village Corporations, State of Alaska (including the Ketchikan Gateway Borough), U.S. Coast Guard and U.S. Navy, and private individuals (figs. 3, 3A).

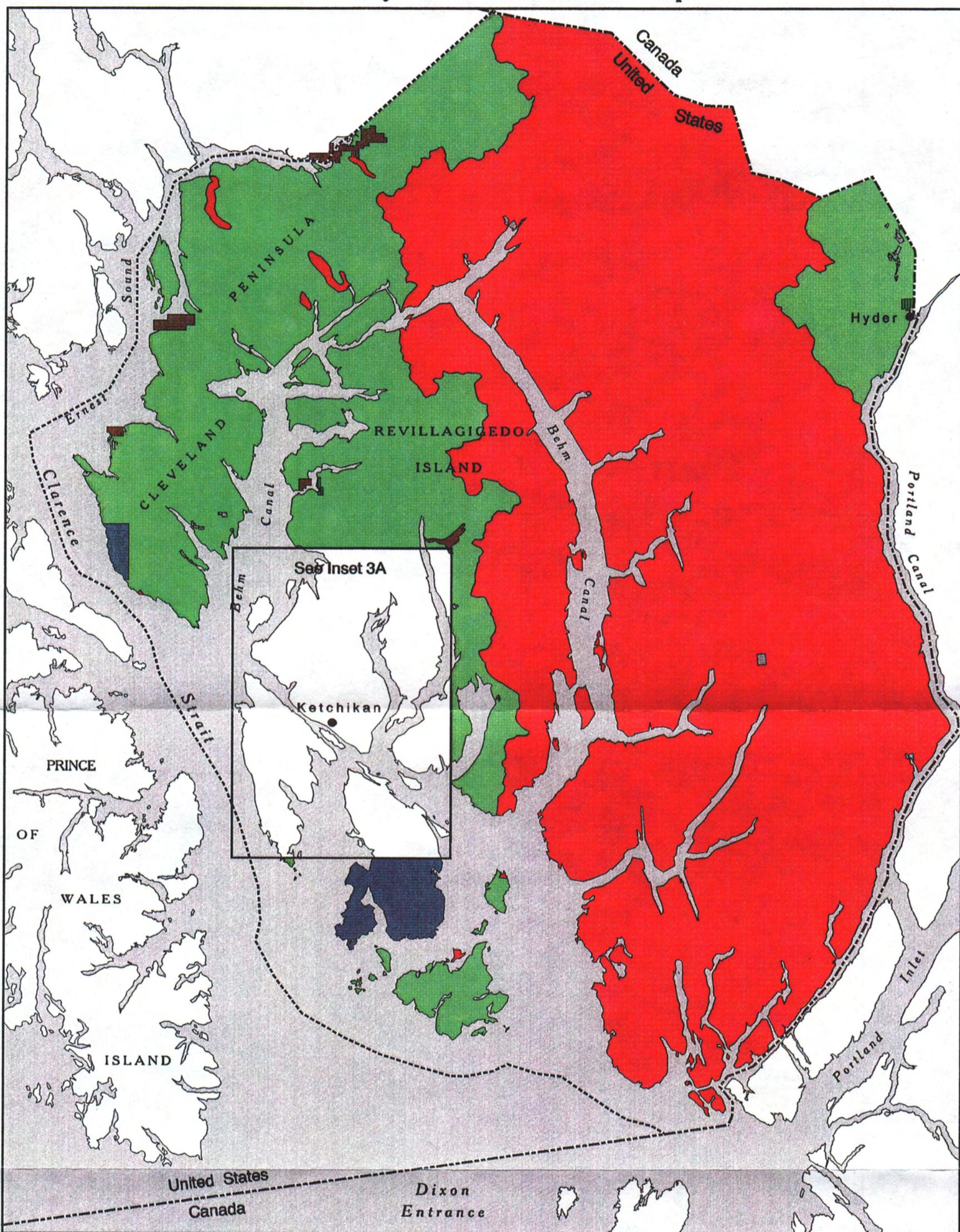
The USFS manages Federal land within the Tongass National Forest. The Tongass National Forest includes the Misty Fjords National Monument and Wilderness that comprises the eastern part of the 1992 study area and is closed to mineral entry and development. A part of the monument was designated as non-wilderness to allow development of the Quartz Hill molybdenite deposit (the project is currently on hold). Most of the remaining USFS land on Cleveland Peninsula; Revillagigedo, Gravina, and Duke Islands; and the Hyder area is open to mineral exploration.

The Metlakatla Indian Community, in cooperation with the Bureau of Indian Affairs, manages Annette Island, the only remaining Indian reservation in Alaska. Public prospecting and private mining ventures on Annette Island are not permitted without permission from the Metlakatla community.

Sealaska Regional Corporation and Cape Fox Village Corporation have land entitlements in the study area. The Regional corporation retains subsurface rights to all village corporation lands obtained under the provisions of the Alaska Native Claims Settlement Act, 1971. Two large blocks of Native land are located on Revillagigedo Island along George Inlet, and along the west shore of Cleveland Peninsula. Other small parcels, including native allotments, cemetery sites, and historical places, are scattered throughout the study area. Permission to prospect on native land must be obtained from Sealaska Corporation.

The State of Alaska and City of Ketchikan own acreage on the east side of Gravina Island and the west side of Revillagigedo Island. Parcels of State land are situated near Traitors Cove and at Meyers Chuck. Most State land outside residential subdivisions, the airport right-of-way, mental health lands

1992 Study Area: Land Status Map



- International boundary
- 1992 study area boundary
- [Green Box] Open Federal
- [Red Box] Closed Federal
- [Dark Green Box] Open State

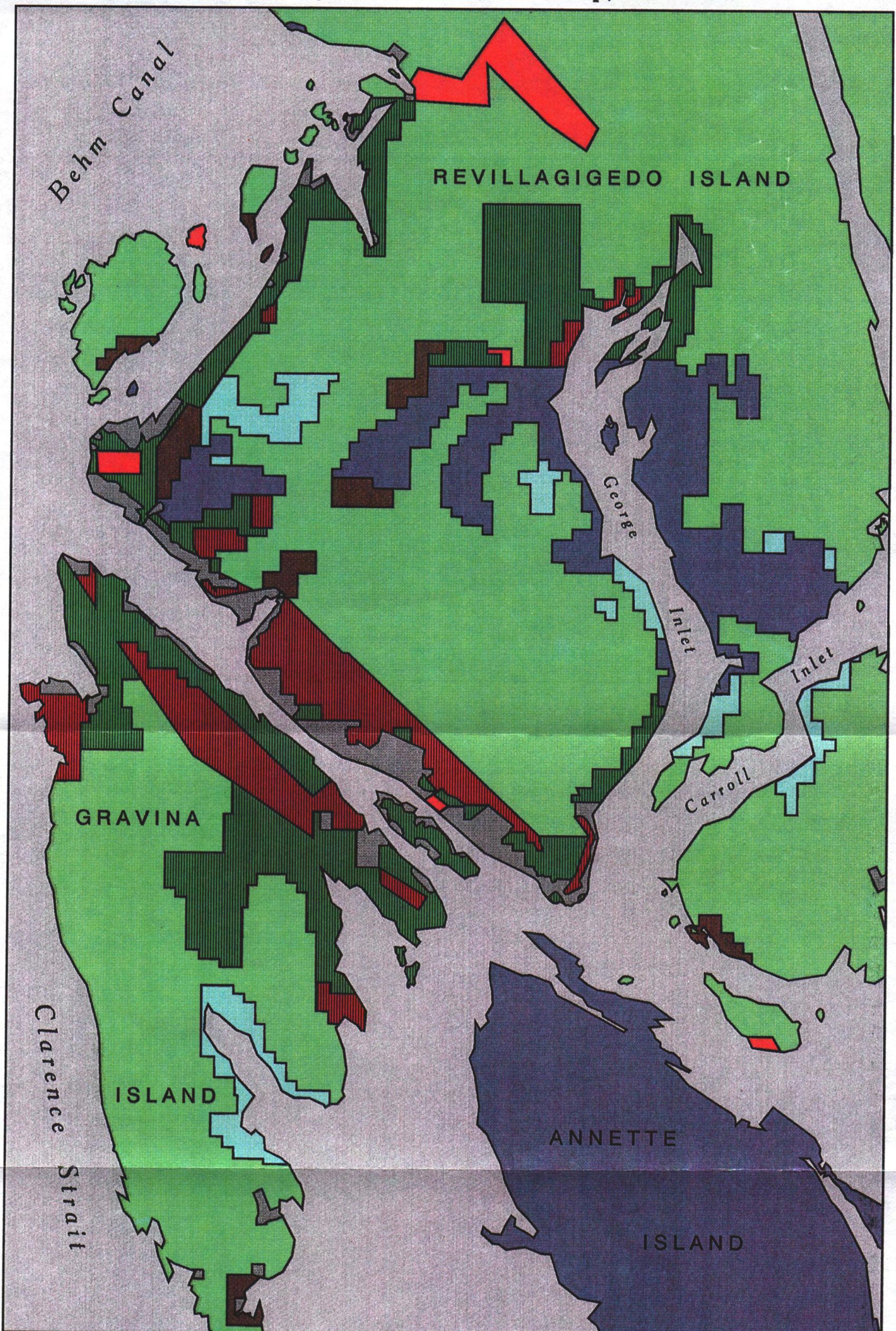
- [Red Box] Closed State
- [Darker Red Box] Selected State
- [Gray Box] Private
- [Dark Blue Box] Patented Native
- [Teal Box] Selected Native

0 30 scale, km

0 20 scale, miles

Figure 3. - Generalized land status map of the 1992 study area.

1992 Study Area: Land Status Map, Inset 3A



[Legend entries]
Open Federal
Closed Federal
Open State
Closed State

[Legend entries]
Selected State
Private
Patented Native
Selected Native

0 10
scale, km

0 5
scale, miles

Inset 3A. - Detailed land status map of southwest Revillagigedo Island and Gravina Island.

and the commercial center of Ketchikan is open to mineral entry and development.

Private parcels of land, including patented mining claims and homestead sites, are scattered throughout the study area. A large concentration of patented claims are situated in the Hyder area. Prospecting these parcels requires permission from the individual land owner(s).

ACKNOWLEDGMENTS

The authors wish to acknowledge the assistance of Mitchell E. McDonald, James D. Bertolucci, and Christopher J. Rusanowski, summer temporary employees, and R. David Oliver, section cartographer, who contributed to the success and safety of the 1992 field season. Their work is greatly appreciated.

Thanks are extended to the many other people who contributed to the success of the 1992 field season: Delmar and Rosemary Shull for housing and office space in Ketchikan; Gary McWilliams for charter boat service aboard the M/V Hyak; Temsco Helicopters for contract helicopter support; Taquan Air for fixed-wing service; and the USFS for providing an emergency communication radio network.

Thanks are also extended to the many property owners who allowed the Bureau access to their properties and provided mining and geologic information. Significant contributors include: June Allen, John Hite, David Jaworski, Paul Larkin, Terence Schorn, Jim Simpson, and Larry Stensland. The completeness of this study is dependent upon their cooperation.

Finally, recognition is made of the diligent efforts of R. David Oliver and Shirley W. Mercer, branch secretary, in the preparation of this report. Their conscientious work is very much appreciated.

PREVIOUS STUDIES

The earliest reports on the KMD were prepared by various USGS investigators. The first of these was by Brooks in 1902 (14) who examined many of the historic properties in the KMD and produced a reconnaissance geologic map of the area. USGS investigators published summaries of yearly mining activity in the KMD for the years 1904-1917, and 1919 (15-17, 27-29, 59-60, 65, 99, 115-119). Somewhat abbreviated yearly summaries were included in reports for 1920 through 1924 (18-22). Many of these reports include information on mining activity in the Hyder area. Reviews dealing specifically with mining in the Hyder area were published in 1921 (66) and 1922 (110).

A comprehensive report on the mineral deposits in the KMD, which describes many prospects in detail, was published by Wright and Wright in 1908 (120). A regional review of the geology and mineral deposits of Southeast Alaska, including the KMD, was published by Buddington and Chapin in 1929 (24). Buddington also published a report on the mineral deposits of the Hyder area in 1929 (23).

Mining engineers from the Territorial Department of Mines conducted numerous site-specific investigations of properties in the study area. Many of the investigations were conducted by Roehm in the mid-1930's to early 1940's, by Wilcox in the late 1930's and by Fowler in the late 1940's to early 1950's (47-52, 72-73, 76-77, 79-85, 87-89, 111). The Territorial Department of Mines also conducted regional studies of mineral deposits of the Hyder area (95, 112) and of Southeast Alaska's strategic and critical minerals (86).

The Bureau conducted site-specific studies of various localities as part of their World War II war minerals investigations. In the 1992 study area these include: the Riverside Mine (68); the Mountain View prospect (45); the Fish Creek claims (114); and the Mahoney Mine (44).

Several site- and commodity-specific investigations were conducted by the USGS, the Bureau, and others in the study area. These are presented in Table 1.

TABLE 1. - U.S. Bureau of Mines and U.S. Geological Survey
site- and commodity-specific studies

Commodity	Area	Investigators	Reference
Tungsten	Hyder	Byers and Sainsbury	(26)
Antimony	Caamano Point	Sainsbury	(93)
Pegmatite	Sitklan Passage	Sainsbury	(94)
Zinc-Lead	Moth Bay Mahoney Creek	Robinson and Twenhofel	(71)
Zinc-Lead	Moth Bay	Warfield and Wells	(108)
Tungsten	Mountain View	Erickson	(45)
Iron-Chromite	Union Bay	Kennedy and Walton Ruckmick and Noble	(58) (92)

An historical review of mining and prospecting activity in the Ketchikan region prior to 1952 is provided by Bufvers (25). Roppel (91) has also written an historical account of several mines in the area, but limits her study to base metal and industrial mineral operations.

An extensive study of the geology and mineral resources of the Ketchikan and Prince Rupert Quadrangles was accomplished by the USGS as part of their Alaska Mineral Resource Assessment Program (AMRAP). A guide to this study was written by Berg in 1982 (4) that describes the scope of the investigation and the products produced (7, 42, 61, 98, 103).

Cobb, and Cobb and Elliott, have summarized references of mineral deposits for all the quadrangles included in the 1992 study area: Ketchikan, Prince Rupert, Bradfield Canal, Petersburg and Craig quadrangles (fig. 2). In 1972, Cobb published metallic mineral resource maps of the quadrangles (31-35). In 1978 and 1980, Cobb, and Cobb and Elliott, published brief data summaries and reference lists for mineral deposits in the quadrangles (36-39).

Regional and statewide mineral inventories that include information on the deposits in the 1992 study area were compiled by Cobb and Kachadoorian in 1961 (40), by Berg and Cobb in 1967 (6), by Wolf and Heiner in 1971 (113), and by Berg in 1984 (5). Cobb and Kachadoorian's work is a compilation of references for metallic and nonmetallic mineral deposits. Berg and Cobb summarize data on metalliferous lode deposits and provide selected references. Wolf and Heiner include locations, references, commodities, and brief remarks in describing metalliferous and nonmetalliferous deposits in Southeast Alaska. Berg's

work includes brief summaries of metallic mineral deposits along with a comprehensive deposit map. In addition, a statewide tungsten resource study was prepared by Thorne and others in 1948 (104).

The USGS, in cooperation with the Bureau of Indian Affairs, has conducted a mineral resource potential assessment of the Annette Islands Reserve at the request of the Metlakatla Indian Community. The assessment, which is now in its final stages, has included geologic mapping; soil, stream sediment, and rock sampling; compiling mineral occurrence and geochemical anomaly data; and airborne and ground-based geophysical mapping. Brief summaries of this work are included in two Bureau of Indian Affairs publications (54-55).

Brew and others have attempted to identify probability levels of undiscovered locatable mineral resources remaining in the Tongass National Forest and adjacent lands (11). Much of the 1992 study area is located within the Tongass National Forest.

Several published reports on the history and mineral deposits of the Stewart region of British Columbia, Canada, have relevance to the 1992 study area as the Stewart region is adjacent to the Hyder area. These include an historical report by Hutchings (56), and geologic and mineral deposit reports by Grove (53) and Alldrick (1).

GENERAL MINING HISTORY

The mining history of the Ketchikan area begins in the late 1800's. Before the United States acquired Alaska from the Russians in 1867, the Russians are believed to have had knowledge of metalliferous deposits in the Ketchikan area. No development of these deposits is known to have occurred however (120). Gold was discovered on the Unuk River in the 1870's and early 1880's, but most activity was on the Canadian side of the border (66, 120). Fishermen in the Ketchikan area are reported to have located many quartz veins and copper deposits prior to the 1890's. James Bawden reported discovery of a gold deposit on the eastern side of Annette Island in 1892. In 1897, discoveries were made on Gravina Island, near Boca de Quadra (120), at Thorne Arm (14), and at Helm Bay (78). In 1898, mineral deposits near Dall Bay on Gravina Island were discovered (120). These were among the first of many claims to be located in the Ketchikan area in succeeding years.

A shaft and other minor workings on a mineral prospect in the Hyder area indicate mineral exploration activity prior to 1898, but no known details are available. In 1898, a shipload of prospectors were brought to the area in search of placer deposits in the Salmon River valley and Bear River valley in British Columbia, Canada. Only minor amounts of gold were discovered (56). The discovery of the Silbak Premier ore body adjacent to the international border in Canada in 1910 sparked a renewed interest in the mineral potential of the Hyder area. The major discovery on the United States side of the border was at the Riverside Mine in 1915 (27). Prospectors discovered, staked, and explored numerous claims in the area between 1910 and 1930. Mineral exploration and development on both sides of the international border have continued sporadically through the years to the present.

Several mines in the eastern part of the KMD produced gold, silver, copper, lead, zinc and tungsten. The amount of metals produced and the years of mine activity are presented in Table 2.

TABLE 2. - Summary of mine production⁶, 1992 study area

Mine	Activity years	Gold (kg)	Silver (kg)	Copper (kg)	Lead (kg)	Zinc (kg)	Tungsten (WO ₃) (kg)
Annie	1900-01	7.9					
Gold Banner	1939-40	0.3	0.2				
Gold Standard	1899-1907, 1915, 1922-42	310+	33+				
Goldstream	1906, 08	8.1	15				
Goo Goo	1915, 35	1.4					
Mahoney	1947-49	0.3	12	1,270	18,000	33,000	
Old Glory	1908	0.3	0.8				
Portland	1923, 25, 1939-41	2.5	1.2	11			
Riverside	1925-50	76	2,700	34,300	1,024,000	8,100	32,000
Ronan	1920-present	<15					
Solo	1930-50	12					

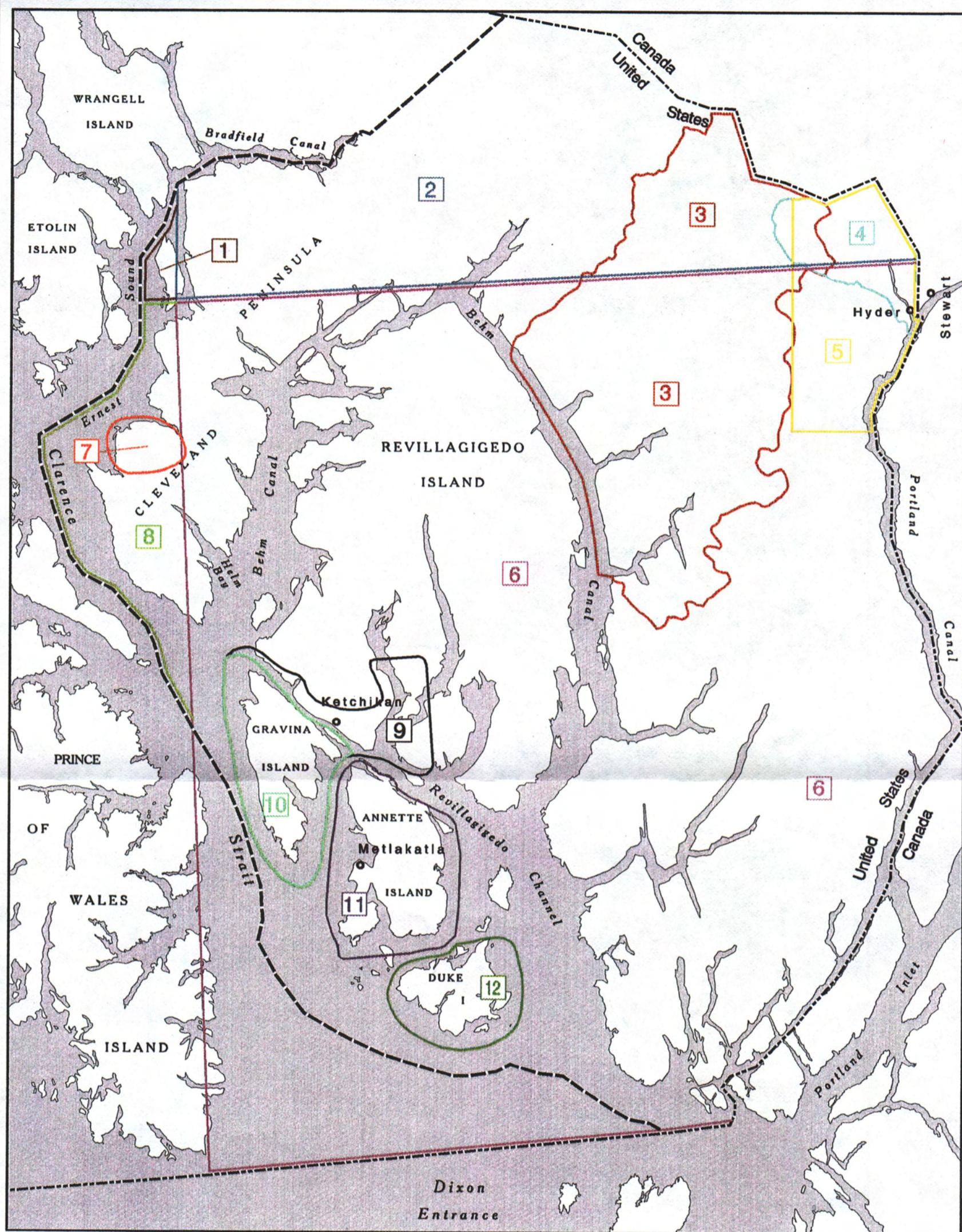
GENERAL GEOLOGIC SETTING

Most of the 1992 study area is included in the geologic map of Berg and others who mapped the Ketchikan and Prince Rupert Quadrangles at 1:250,000 scale (8). The eastern part of Cleveland Peninsula is included in the Craig Quadrangle 1:250,000-scale geologic map of Eberlein and others (41) and the Petersburg Quadrangle 1:250,000-scale map of Brew and others (13). The geology of the study area within the Bradfield Canal Quadrangle is shown in a report by Elliott and Koch at 1:250,000 scale (43). Numerous larger-scale geologic maps have been produced for various parts of the Ketchikan and Hyder areas. Some of these include: Smith's map of the Ketchikan D-1 and Bradfield Canal A-1 quadrangles in the Hyder area (97); Buddington's map of the Hyder vicinity (23); a map of the Granite Fiords Wilderness Area by Berg and others (10); a map by Brooks of the Ketchikan area (14); Smith's (102) and Berg's (3) maps of Gravina Island; Chapin's map of SW Revillagigedo Island and Gravina Island (30); Berg's map of Annette Island (2); and Irvine's map of the ultramafic rocks of Duke Island (57). Figure 4 shows the areas covered by selected geologic maps in the 1992 study area.

⁶Production figures derived mainly from Bureau and USGS production records.

1992 Study Area: Geologic Map Reference

12



- International boundary
- - - - - 1992 study area boundary
- 1** Brew and others (1984) (13)
- 2** Elliott and Koch (1981) (43)
- 3** Berg and others (1977) (10)
- 4** Buddington (1929) (23)
- 5** Smith (1977) (97)
- 6** Berg and others (1988) (8)

- 7** Ruckmick and Noble (1959) (92)
- 8** Eberlein and others (1983) (41)
- 9** Chapin (1918) (30)
- 10** Berg (1973) (3)
- 11** Berg (1972) (2)
- 12** Irvine (1974) (57)

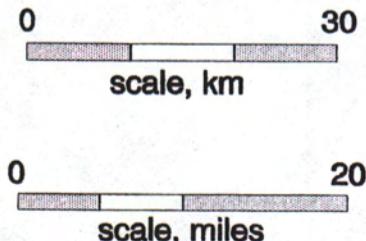


Figure 4. - Location and extent of selected geologic maps in the 1992 study area.

On a regional scale, the study area can be described as including the Coast Range plutonic complex and the metamorphic units that flank it on the east and west. The Coast Range plutonic complex contains massive to foliated or gneissic intrusive bodies ranging in age from Triassic or possibly Paleozoic (51) to Oligocene or Miocene. The composition of the intrusive rocks varies from quartz diorite and quartz monzonite to granite and granodiorite (8). Regionally metamorphosed stratified rocks of unknown pre-metamorphic age occur as xenoliths, roof pendants, and country rock within and between the intrusive bodies.

The rock package flanking the plutonic complex on the northeast within the study area is made up mainly of Jurassic or older metamorphosed volcanic and sedimentary units that locally host Jurassic and Eocene intrusive bodies (53, 1).

Southwest of the plutonic complex, early Paleozoic to Tertiary metamorphosed stratified and intrusive rocks can be divided into two lithologic packages that are separated by a regionally-extensive fault (8, 67). Geographically, this fault is approximately located along Tongass Narrows and Revillagigedo Channel. Northeast of the fault are predominantly Mesozoic to Paleozoic metasedimentary and metaigneous rocks that host Cretaceous to Miocene intrusive bodies. Minor Quaternary volcanic units are also present. Southwest of the fault Ordovician to Devonian metamorphosed igneous and sedimentary rocks predominate. These lower Paleozoic rocks are overlain by predominantly lower Mesozoic volcanic and sedimentary strata and intruded by middle to upper Mesozoic ultramafic to granitic intrusive rocks (8).

Most structural and metamorphic features in the study area trend north to northwest. Regional-scale structures include southwest-vergent thrust faults that have been cut by high-angle strike-slip faults (8). Metamorphic rocks that flank the plutonic complex on the southwest increase in grade from greenschist to amphibolite facies from southwest to northeast (8, 12).

Mineralized lithologies within the 1992 study area include volcanic and volcaniclastic units, metasediments, felsic to ultramafic intrusives including rocks adjacent to the intrusive bodies, and tectonized rocks of varying lithology. Deposit types include polymetallic and precious metal veins, massive sulfides, copper and molybdenum porphyries, gold-copper exhalites, and iron-chromite-titanium-bearing magmatic segregations.

BUREAU INVESTIGATIONS

From May until September, 1992, the Bureau conducted site-specific field investigations of mines, prospects, and mineral occurrences in the eastern part of the KMD. Approximately 195 mineral localities were examined, 1,689 samples collected, and 8,528 m of underground workings surveyed, mapped or sampled. Figure 5 and insets 5A-5F show the location of samples collected during the 1992 field season. Several areas of known mineralization that were not investigated in 1992 will be examined during 1993.

The following section summarizes the work completed in 1992 in the Helm Bay and Hyder areas as well as in three locations on southwest Revillagigedo and Gravina Islands. These areas have been recognized for their elevated mineral development potential and history of past metal production.

HELM BAY/SMUGGLERS COVE

The Helm Bay/Smugglers Cove area is located on the west side of the first major indentation on the south side of Cleveland Peninsula (fig. 5, inset 5C). There are several gold prospects and historic mines located in two clusters in this area. One cluster is located in the northwest part of Helm Bay surrounding the Gold Standard Mine and the other cluster is located between Gold Mountain and the head of Smugglers Cove. Historically, these mines produced more than 320 kg gold.

Mining History

The earliest documented mineral discovery in Helm Bay/Smugglers Cove was made in 1897 at the Gold Standard Mine by Johnson and Dyer (78). Upper veins of the deposit were extensively developed over the next ten years and a lower glory hole was mined sporadically between 1915 and 1942. USGS reports and historic newspaper articles indicate that more than 310 kg gold were produced at the Gold Standard Mine (Table 2). A lessee/lessor basis of mine operation, which did not encourage exploration of the deposit, forced closure of the mine (78).

Numerous other prospects in the area were discovered by 1901 (14). The discoveries at the Portland (formerly called the Blue Jay), Annie, Old Glory, and Free Gold properties resulted in extensive developments, but only minor gold production (Table 2).

The Portland Mine was a small prospect until 1920 when a change of ownership allowed minimal production to ensue. The mine was abandoned until 1935. In 1936 it was rehabilitated and nearly 1,000 mt of gold ore containing over 1.8 kg gold was produced between 1939 and 1941 (Table 2) (82).

The Annie Mine was initially developed by a 6.1-m shaft where \$5,000 in gold was recovered by 1901 (14). After 1902, reports on the Annie Mine are rare. By 1914, a 91-m-long adit had been completed and several test shipments of ore sent out. Assessment reports indicate sporadic activity at the mine from 1938 until 1961 (106). A total of 7.9 kg gold were reportedly produced at the Annie Mine (Table 2) (14, 81).

The veins at the Old Glory, American Eagle, and Last Chance claims were developed by a number of adits during the early 1900's. A small test mill was constructed at the Old Glory camp in 1901, but by 1908 only 0.3 kg gold had been recovered (Table 2). Construction of a long adit below the Last Chance workings was initiated by 1914. By 1939, development of the claims consisted of an adit with over 790 m of workings, 10 claims surveyed for patent, and a large camp. A Security and Exchange Commission investigation in 1940 of the company working the property halted the company's inertia and work never resumed (86).

The Free Gold prospect, located north of the Gold Standard Mine, was discovered in 1903. A 529-m adit was completed by 1940 that undercut numerous quartz veins and pods (81). No gold production was reported at the Free Gold, even though substantial development work was accomplished.

Presently the Helm Bay/Smugglers Cove area is covered by two large claim blocks. One of these blocks surrounds the Gold Standard Mine and is held by the Stensland family. The other is held by Pacific Northwest Resources Company, which staked a large block of claims in the Smugglers Cove area in 1992.

Geologic Setting

The Helm Bay/Smugglers Cove area is underlain by a northwest-trending series of Upper Paleozoic to Triassic metamorphic rocks intruded by dioritic plutonic rocks of Cretaceous to Tertiary age (8). The metamorphic rock packages in the Helm Bay area, from east to west, consist of: 1) intercalated, dark-colored metasiltstone, metagraywacke, green phyllite, felsic schist, chlorite schist, and massive greenstone; 2) a 1.6 kilometer-thick sill of hypabyssal greenstone/diorite; and 3) a package of light-colored metasedimentary rocks.

Rocks in the Helm Bay area have been subjected to a greenschist facies metamorphic event. Amphibolite-grade rocks (hornblende and garnet index minerals) are found 2 to 3 km east of Helm Bay (8). Foliation of the rocks generally strikes 140° to 160° , and dips steeply to the northeast, but local variations are common. All rock units in the area are folded. The scale of folding varies from a large anticline-syncline sequence to local small-scale crenulations. Folds plunge moderately northwest, but southeast plunges are also common.

Most gold deposits in the Helm Bay area are emplaced in faults, fractures and shear zones that crosscut foliation surfaces. The faults and anastomosing shear zones are up to 0.9 m wide and contain quartz veins and stringer zones with gold and pyrite. Wallrock and schistose partings adjacent to these zones are usually pyritic, with the intensity of alteration varying between deposits. Zones of bleached, pyritic, schistose rocks are up to 1.5 m wide at the Gold Standard Mine, however other deposits have thinner zones.

The Helm Bay/Smugglers Cove area contains essentially gold deposits. There are no other metallic minerals present in adequate quantities to be exploration targets, although an antimony prospect is located near Caamano Point, about 10 km away on the southernmost point of Cleveland Peninsula. The presence of polymetallic veins associated with silicic intrusives at the Rainy Day and Wixon prospects are more a curiosity than a significant show. Bureau sampling from most of the Helm Bay deposits reveals gold to silver ratios of about 10:1 with only minor copper and virtually no lead and zinc. All mineralized systems (except at the Puzzler) strike parallel to the surrounding foliation with crosscutting dip directions. Though most deposits are very similar, distinct styles are present, including: 1) faults with large quartz veins and pyritic alteration; 2) quartz vein swarms; 3) quartz veins with little or no wallrock alteration; 4) faults with both quartz veins and stringers; 5) exhalative gold-copper; and 6) polymetallic veins.

Faults with large quartz veins are found at the Upper Gold Standard Mine, Portland Mine, Free Gold prospect, and Sleeping Beauty prospect. These deposits are hosted in massive greenstone that is foliated and pyritic near the faults. Quartz vein swarms are found at the lower Gold Standard, Beulah, and Snowstorm prospects. Quartz veins with no wallrock alteration are found at the Lakeview prospect. Fault zones with quartz veins and stringers are found in the Gold Mountain area at the Keystone, Old Glory, American Eagle, Annie, Lone Jack, Jewel, and Novatney properties. An exhalative deposit is located along the shore of Smugglers Cove at the Blue Bucket prospect. Polymetallic veins are found at the Rainy Day and Wixon prospects (inset 5C).

The genesis of the Helm Bay mineral deposits is uncertain. Mineralizing fluids may have been

derived from metamorphism or local magmatism. Two polymetallic deposits in the area, the Rainy Day and Wixon prospects, are separated by nearly 6.4 km, but both contain galena, sphalerite, chalcopyrite and pyrite in fissure veins associated with felsic to intermediate intrusives. These intrusive rocks may be the source for mineralization in the area. If so, the question remains why the gold deposits essentially contain only pyrite and not other sulfides. A bleached, silicic, pyritic unit crops out along the northeast shore of Smugglers Cove. The mineralogy of the area's gold deposits more closely resembles this exhalative deposit. However, there is a poor spatial relationship between the Smugglers Cove unit and the deposits in northern Helm Bay.

1992 Work

Bureau investigations at Helm Bay/Smugglers Cove were accomplished over a 5-week period and included visiting 27 mines, prospects, and occurrences, taking 323 samples (including one metallurgical sample from the Gold Standard Mine), and mapping nearly 2,600 m of underground workings in addition to all trenches, pits, and shafts that were accessible. Extensive workings were found at the Old Glory, Free Gold, Keystone, and American Eagle prospects, and at the Gold Standard, Annie, and Portland Mines (inset 5C). A reconnaissance geologic map (1:63,360 scale) was produced by the State of Alaska Division of Geological and Geophysical Surveys, which will be published at a later date as a separate document.

Sampling in the Helm Bay area revealed significant gold mineralization related to pyritic alteration zones surrounding quartz veins. Pairs of adjacent samples taken from quartz and pyritic schist localities generally show a higher concentration of gold in the pyritic rock. Free gold was observed along vein margins, but rarely in the middle of quartz veins. Samples from the Gold Standard Mine, both in the lower glory hole and underground workings, identified several well-mineralized areas. A series of chip samples across a 5.6-m zone yielded a weighted average of 9.1 ppm gold (map no. 141, samples 7065-66, 7084-85, 7092-93). Samples from a similar zone in the adjacent east glory hole gave a weighted average of 33.6 ppm gold across 7.5 m (map no. 141, samples 7056-58, 7063, 7401-02). Many of the prospects in the Helm Bay area contain anomalous gold values, but the Gold Standard Mine has the greatest potential for a large tonnage deposit.

Reconnaissance examinations were made near Union Bay and Vixen Inlet, on the south side of Bradfield Canal, and along northern Behm Canal to Burroughs Bay. Placer samples from the larger streams draining Mount Burnett and adjacent ultramafic peaks revealed elevated platinum values. Sample 7134 (map No. 121) contained 3.166 ppm platinum. An outcrop of alaskite located on the south side of the mouth of Vixen Inlet exposes mineralized shear zones containing galena and sphalerite. A 6-m shaft was found on this property. A select sample from the Alaskite Nose prospect (map no. 117, sample 7141) contained 2.35% lead, and 88.50 ppm silver. A molybdenum porphyry deposit was examined on the north shore of Behm Canal just west of Burroughs Bay. An aplitic quartz monzonite cropping out on the beach for nearly 0.75 km contains molybdenite mineralization along fracture surfaces. Representative chip samples averaged 157 ppm molybdenum, with a high value of 372 ppm (map no. 5, sample 7164).

HYDER

The Hyder area is located at the head of Portland Canal and is bounded on the east and north by the Alaska-British Columbia, Canada border. It consists of the Salmon River and Texas Creek drainages

and the drainages to the south of the Chickamin Glacier. (The major prospects in the Hyder area are shown in insets 5A and 5B.) Adjacent to the Hyder area in British Columbia, is the Stewart mining camp. The Stewart mining camp is of interest because its important gold-silver mines are hosted in rock units that trend into the Hyder area.

Mining History

In the spring of 1898, the ship "Discovery" from Seattle landed 64 prospectors at the head of Portland Canal. This started prospecting in the Hyder-Stewart area and the town of Stewart, located 5 km inside British Columbia, Canada, was soon established (56). The 1910 discovery at the Silbak Premier Mine, located in the Stewart mining camp less than 1.6 km from the border with Alaska, would prove to be the area's most important. Between 1919 and 1992, this Canadian mine produced 52,875 kg gold, 1,360,000 kg silver and appreciable base metals (1). Discovery of the Silbak Premier ore body spurred exploration on the United States side of the border. In 1915, the Riverside Mine was discovered, that between 1925 and 1950 produced 76 kg gold, 2,700 kg silver, 34,300 kg copper, 1,024,000 kg lead and 32,000 kg tungsten trioxide (Table 2) (53). By the early 1920's the town of Hyder was established, and during the 1920's and 1930's discoveries were made along the Salmon River, in the Fish Creek area, along the West Fork of Texas Creek and to the south of Chickamin Glacier. High-grade gold-silver base metal ore shoots attracted prospectors' attention. However, most proved to be discontinuous and too small, as exposed, to support anything but hand-sorted, high-grade test shipments. Among the most prominent of the discoveries were the Solo, Homestake, Double Anchor, Blasher, Engineer, Philips, Joe-Joe, Keno, Heckla, Cantu, Stoner, Daly Alaska, Eureka, Ronan Mine, Silver Point, and Mountain View (Grey Copper) (insets 5A, 5B).

Many of the Hyder area's prospects received brief examinations from the Territorial Department of Mines during the 1930's and 1940's as part of a war minerals assessment program. Between 1942 and 1944, Bureau engineers and miners carried out an exploration-development program at the Riverside and Mountain View properties. The program consisted of mapping, trenching, sampling, drifting, crosscutting, and diamond drilling (45, 68).

Much of the early exploration in the Hyder area was accomplished by individual prospectors or groups of prospectors. This work continues today. During the 1970's, El Paso Natural Gas Company explored and carried out a limited exploration drilling program at the Greenpoint, Heckla, and Solo prospects (10, 106). During the 1980's, Pulsar Resources Limited explored the area southeast of Fish Creek and in the vicinity of Mineral Hill with limited diamond drilling. From 1989 to 1991, Hyder Gold Incorporated optioned or staked over 500 mining claims north of Hyder, in the Mineral Hill-Fish Creek area, and explored the area with geologic mapping, rock and soil sampling, and shallow diamond drilling.

Geologic Setting

The geology of the Hyder area was mapped by Buddington in 1929 (23) and Smith in 1976 (97). The western part of the area was studied by Berg and others in 1977 (10). (Figure 4 shows the parts of the Hyder area mapped by each of the above investigators.) Geologic studies by Alldrick (1) and Grove (53) in the Stewart mining camp address units in the eastern part of the Hyder area.

The Hyder area lies along the eastern boundary of the Coast Range plutonic complex. The oldest

rock units in the area belong to the Jurassic Hazelton Group. This group is made up of a thick sequence of volcanic, volcaniclastic and associated sedimentary rocks whose most important outcrops are located east of the Salmon River, north and south of the West Fork of Texas Creek and in the vicinity of Chickamin Glacier. Jurassic Texas Creek Granodiorite intrudes and forms porphyritic dikes within the Hazelton rocks (23, 97). Alldrick interprets the area's Jurassic rocks as being part of an island arc complex (1).

The Eocene Hyder Quartz Monzonite, a part of the Coast Range plutonic complex, intrudes and forms dikes within the Hazelton and Texas Creek rocks. Local deformation and narrow zones of hornfelsed rock near contacts result from this intrusion (1, 97).

Mid-Cretaceous tectonism resulted in extensive regional shearing and formation of the northeast-trending Fish Creek Fault zone. This is the only major fault within the Hyder study area and forms a 1.5-km zone of cataclasite, schist and gneiss (97).

According to detailed studies by Alldrick (1), area mineral occurrences were formed by two mineralizing events, one early Jurassic and the other Eocene that in places may be superimposed on one another. The early Jurassic episode is characterized by a hydrothermal system with silver, gold, zinc, lead and copper, and dominated by magmatic fluids. It forms gold-pyrrhotite veins and masses; polymetallic gold-silver base metal veins; stratabound disseminated sulfide deposits; and epithermal vein-breccia deposits (1). These early Jurassic occurrences are found in the Hazelton and/or Texas Creek rocks and account for the most important past producing mines in the Stewart area. The most important producer is the Silbak Premier Mine, which is located less than 1.5 km from the Alaska-British Columbia border. The Stoner, Daly Alaska, Eureka, Upper Iron, Iron, and Shaft Creek Copper prospects may be of the early Jurassic type.

The Eocene mineralizing episode is characterized by silver-rich galena-sphalerite veins related to the intrusion of the Hyder Quartz Monzonite (1). These mesothermal veins are localized along shears and faults. Lead isotope studies by Alldrick (1) indicate that the Riverside Mine belongs to this late mineralizing episode. It is likely the Mt. Dolly Summit, Silver Falls, Silver Point, Lakeside, and Silver Coin prospects are also of the Eocene episode. Skarns and porphyry deposits may also be related to Eocene plutonism.

1992 Work

During 1992, two Bureau crews worked in the Hyder area. One spent 4 weeks and the other 10 weeks using ATV, truck, and helicopter to examine 73 occurrences, 52 adits, and 4,000 m of underground workings, and to collect 516 samples. These examinations revealed silver-gold base metal vein, exhalative-type disseminated sulfide, iron-copper-gold massive sulfide, stockwork-type molybdenum-silver-lead, and placer gold deposits. In addition, the Riverside Mine contains tungsten and rare-earth elements (REE), the Mountain View (Grey Copper) prospect contains tungsten, and the Ruby Silver prospect contains REE. The most extensive underground workings are found at the Riverside Mine (1,067 m examined) and Mountain View prospect (1,280 m examined). Forty-seven adits account for the remainder of the 4000 m of underground workings.

The most consistent gold-silver values were found in veins located east of the Salmon River at the Riverside and Ronan Mines, and at the Mountain View prospect (Grey Copper vein). Veins at these

properties vary from less than 0.3 m to over 1.5 m thick and can be traced for over 150 m. All are hosted in the Texas Creek Granodiorite. Gold-silver values follow base metal sulfides as shoots in the quartz veins. The best values were at the Ronan Mine, where measured vein samples ranged from 0.061 ppm (map no. 86, sample 6034) to 27.36 ppm gold (map no. 86, sample 6039) and from 0.4 ppm (map no. 86, sample 6034) to 2,750 ppm silver (map no. 86, sample 6639) for samples representing a 180-m strike length. Of note is the Silver Point prospect where trenches and an adit expose a narrow quartz-sulfide vein that contains up to 4,750 ppm silver (map no. 96, sample 5981).

The Stoner, Daly Alaska and Eureka prospects, located just across the border from the Silbak Premier Mine, contain disseminated sulfide mineralization in silicified volcanics that is exposed discontinuously by trenches and adits for up to 75 m. Samples from these prospects contained up to 68.33 ppm gold (map no. 74, sample 6704) and 903.4 ppm silver (map no. 72, sample 6653).

The most prominent prospects located north of the West Fork of Texas Creek are the Blasher, Solo, Homestake and Double Anchor. The first three are narrow quartz-sulfide veins hosted in Hazelton volcanics or Texas Creek Granodiorite that can be traced for up to 100 m. These veins contain up to 32.36 ppm gold (map no. 12, sample 6685) and 1,167 ppm silver (map no. 12, sample 6076). The Double Anchor prospect consists of a flat-lying quartz-breccia zone up to 1 m thick containing disseminations and blebs of base metal sulfides. The zone extends for at least 270 m and is hosted in graywacke and argillite. Most of the quartz breccia contains little mineralization, however samples of higher grade portions contain up to 36.82 ppm gold and 207.0 ppm silver (map no. 32, sample 6664).

South of the West Fork of Texas Creek the most prominent prospects are the Engineer, Keno, Joe-Joe, Philips, and Heckla. These prospects are developed on polymetallic, gold- and silver-bearing quartz veins. The vein at the Keno prospect is hosted by Texas Creek Granodiorite, the Joe-Joe and Heckla veins by hornfelsed Hazelton metasedimentary or metavolcanic rocks, and the Philips and Engineer veins by both granodiorite and metamorphic rocks. Limited sampling of both host-rock lithologies indicate negligible precious metal content. Analytical results of rock chip sampling from the five prospects indicate precious and base metal values are concentrated sporadically along the veins. Precious metal values are generally associated with sulfide phases in the veins. The veins are generally discontinuous and range in width from less than 0.1 m to approximately 2.5 m. Given the limited extent of the veins, current economic potential must be restricted to precious metal values. The best values, from the Engineer prospect, range up to 12.62 ppm gold and 47.31 ppm silver over 1.3 m (map no. 38, sample 8441), and 26.30 ppm gold and 63.42 ppm silver over 0.4 m (map no. 38, sample 8440).

GRAVINA AND SOUTHWEST REVILLAGIGEDO ISLANDS

Bureau production records indicate production from three deposits in the Ketchikan vicinity (Table 2): the Goldstream Mine (made up of the Gold String and Gold Stone claims) on Gravina Island (inset 5D); the Mahoney Mine on George Inlet (fig. 5, map no. 189), and the Gold Banner and Goo Goo Mines on Thorne Arm (inset 5E), Revillagigedo Island (105).

Mining History

The Goldstream deposit was discovered by 1897 and was one of the earliest properties to be developed in the Ketchikan area. Most of the development was accomplished during 1903, which included sinking shafts, extending drifts and crosscuts, and installing a 5-stamp mill. Between 1906 and

1908, approximately 2,700 mt of ore was reportedly mined from six claims held by the Irving Consolidated Mining Company (120). Bureau and USGS production records indicate 8.1 kg gold and 15 kg silver were produced during this time (Table 2) (105). Minor work was accomplished on the property between 1908 and 1915. In 1925, two of the Goldstream claims, the Gold Stone and Gold String, were patented (106). No other work on the property is reported with the exception of reworking some of the dump material in the 1930's (25).

The Mahoney Mine ore body was discovered prior to 1901 and referred to as the Ashe Group by Brooks, for the name of the locator. By 1901, development consisted of an 11-m adit, a short shaft and several open cuts (14). The Mahoney was restaked in 1942 by Cy Perkins (86) and examined by the Bureau in 1945 (44). The next year, Perkins sold the rights to the prospect to Aner W. Erickson and the Big Four Mining Company for \$600 (46). In 1947, the company opened a stope in a zone of high-grade ore a short way inside the adit. By 1949, another company had begun mining the ore body. Total production between 1947 and 1949 was 33,000 kg zinc, 18,000 kg lead, 1270 kg copper, 12 kg silver, and 0.3 kg gold (Table 2) (105). There was only minor assessment work conducted thereafter.

Several mining operations have been situated at the northeast end of Thorne Arm, on the south side of Revillagigedo Island. The area is commonly known as the Sealevel area, however the Sealevel Mine, from which specific production figures are unreported, was only one of three past producers in the immediate vicinity. The others were the Goo Goo and Gold Banner Mines.

The Sealevel Mine was another one of the early properties to be developed in the Ketchikan vicinity (14). Claims were first staked on this discovery in 1897. By 1902, shafts were sunk, drifts extended, power plant and support buildings erected, and a 30-stamp mill put into operation (14, 90, 120.). By mid-1903, the mill ceased to operate (120) due to lack of ore (25). The Sealevel property was examined with the intent of rehabilitating the mine at various times since 1903. In the late 1920's and 1930's, two companies tried to reopen the mine and small test shipments of ore were made (100-101). Although four other claims were patented in the Sealevel area, the Sealevel claim itself was never patented.

The Goo Goo claim was staked in 1905, however its location coincides with the Golden Dream claim referred to by Brooks in 1902 (14). Some development was accomplished on the claim by 1908 (120), but there is no record of production by this time. Only minor development and assessment work was accomplished on the property until about 1930. During this time, a 1.8-mt test shipment of ore was made by a property holder (74). In 1934, the Evis Mining Company was formed and explored the prospect and installed a small pilot mill to test the ore (74). Because the grade of ore was too low, the company ceased operations by 1937 (25). In 1938, 635 mt of ore was reportedly milled on the property with a recovery of "\$3.50 per ton," but operations were halted later in the year (80). The Goo Goo property (including the Goo Goo Extension claim to the southwest) was issued a patent in 1940 (106).

The Gold Banner claim was originally located as the Golden Tree claim (120) and was staked prior to 1901 (14). Minor development was accomplished by 1908 (120). In the late 1920's and early 1930's, significant improvements were made on the property which, included a hydro-electric plant, assay office, wharf, rail system, and mill (69). Approximately 15,400 mt of ore were reportedly milled between 1931 and 1933 (75) (grade of mill run not reported). The Gold Banner property was patented in 1933 (106).

Recent attention by mineral industry groups has been paid to the mineralization in the Sealevel area. From at least 1984 until 1988, Villebon Resources Limited held a block of 170 claims that covered

the northeast Thorne Arm area. Claims in the area are currently held by Pacific Northwest Resources Company.

Geologic Setting

Goldstream Mine production came from gold- and silver-bearing sulfide-rich quartz veins hosted by schistose metamorphic rocks. Berg has included the rocks in the vicinity of the mine in the metavolcanic member of his Middle or Upper Jurassic Gravina Island Formation (3). The rocks hosting the veins are generally light green, well-foliated talc and chlorite schist, commonly with fine-grained, disseminated pyrite, and thin layers of pyrite and arsenopyrite. Foliation in the schist strikes northwestward and dips moderately to steeply to the northeast. The quartz veins, with subordinate calcite, generally strike parallel to the schist foliation. Sphalerite, galena, pyrite and arsenopyrite are found concentrated in quartz-rich lenses parallel to foliation. Higher gold and silver values are associated with the sulfides.

The Mahoney Mine area is underlain by black phyllite and argillite and intruded by felsic dikes and garnet-biotite-bearing diorite. All metasedimentary rocks have been hornfelsed by plutons in the area (in addition to the intrusive rocks in the mine, there is a large gabbroic stock less than 4 km southwest of the mine). Mineralization at the Mahoney Mine consists of a massive "vein" of sphalerite and galena. The vein strikes east-west, parallel to the black phyllite in the east half of the mine, but dips crosscut foliation. The massive sulfide vein averages almost 0.6 m thick in the east drift, but thins abruptly, both to the west and up-dip (as seen in the stopes).

The historic mining activity in the Sealevel area was concentrated on northeast-trending, auriferous quartz veins hosted by metavolcanic, volcaniclastic and metasedimentary rocks. More recent mineral exploration activity has also focused on sulfide-bearing felsic volcanic layers within a dominantly mafic volcanic unit (96). These host rocks have been broadly assigned to a Paleozoic-Mesozoic metavolcanic unit by Berg and others, whose 1:250,000-scale geologic map is the most recent published map of the area (8).

Quartz vein gold mineralization in the Sealevel area is commonly associated with sulfide minerals, both within the quartz veins and also adjacent to the veins. Sulfide minerals include pyrite, pyrrhotite, sphalerite and galena. Early reports on mining operations in the area indicate most of the gold to be free-milling (14, 120).

1992 Work

Two Bureau personnel spent approximately two days examining the Gold String and Gold Stone patented claims, which include the developments of the Goldstream property. Three flooded shafts, numerous surface cuts and minor outcrops were examined, surveyed, and sampled. Very little rock outcrop is exposed. Nine samples were taken near two shafts on the Gold String and one shaft on the Gold Stone claims. The highest grade sample collected on the Gold String claim returned 4.728 ppm gold, 47.4 ppm silver, 6.28% zinc, 7,887 ppm lead and 975 ppm copper over 1.2 m (map no. 239, sample 8152). This sample was taken across several sulfide-rich quartz lenses that are oriented parallel to the host schist foliation. About 700 m southeast of the Gold String workings, sulfide-rich layers associated with quartz lenses, oriented parallel to schist foliation, were found near a 12-m-deep flooded shaft. Sulfide minerals include sphalerite, galena, pyrite and arsenopyrite. A 0.6-m sample yielded 1.758 ppm gold, 8.1 ppm silver, 2.16% zinc, 7000 ppm lead and 432 ppm copper (map no. 240, sample 8154). A 0.3-

m sample yielded 4.820 ppm gold, 44.8 ppm silver, 2.59% zinc, 4.95% lead and 290 ppm copper (map no. 240, sample 8153).

The Bureau investigated copper mineralization at the south end of Gravina Island, near Seal Cove and Dall Bay (inset 5F). The mineralization occurs as disseminated sulfides in altered felsic intrusive rocks, as sulfide-rich, stratiform layers in metasedimentary and metavolcanic rocks, and associated with breccia and fault gouge in fault zones. Grades of 1% copper are common in many samples collected in the area (e.g. map no. 264, sample 8370; map no. 265, sample 8130; map no. 273, sample 8379; map no. 274, sample 8146). The best intercept sampled was along the north shore of Dall Bay (map no. 277) where sample 8139 returned 1.37% copper over 23.2 m. Pacific Northwest Resources Company currently holds claims on south Gravina Island. Two blocks of patented claims are also located in the area, at Seal Cove and at Dall Bay.

Rock chip sampling at the Mahoney Mine indicates that mineralization changes along strike of the vein. The vein in the eastern portal is dominated by galena, but this changes abruptly to domination by sphalerite across a space of 3 m. The weighted average for lead and zinc in a representative section of the mine (map no. 189, samples 7184-85, 7189-92) is 3.2% lead and 7.6% zinc over 0.3 m. Samples were also analyzed for cadmium and tin. Cadmium varied between 259 ppm (map no. 189, sample 7192) and 1,200 ppm (map no. 189, sample 7189), and tin ranged from 9 ppm (map no. 189, sample 7192) to 48 ppm (map no. 189, sample 7197).

Bureau work in the Sealevel area was accomplished over nine days, during which time workings on four patented claims as well as the historic Sealevel claim and surrounding area were examined. Analytical results from testing of 62 samples indicate that gold values are sporadically concentrated along the quartz veins and are commonly associated with sulfide occurrences, particularly pyrite. The highest gold value detected was found in a 0.3-m-wide quartz vein that contains approximately 3% pyrite (76.59 ppm gold; map no. 245, sample 8187). Pyrite is commonly found disseminated and in well-formed cubic crystals in the altered metavolcanic host rocks adjacent to the quartz veins. Gold values are associated with the pyrite in these altered zones. A select sample of pyrite from a shear zone in the altered country rock adjacent to a quartz vein yielded 8.991 ppm gold (map no. 258, 8164).

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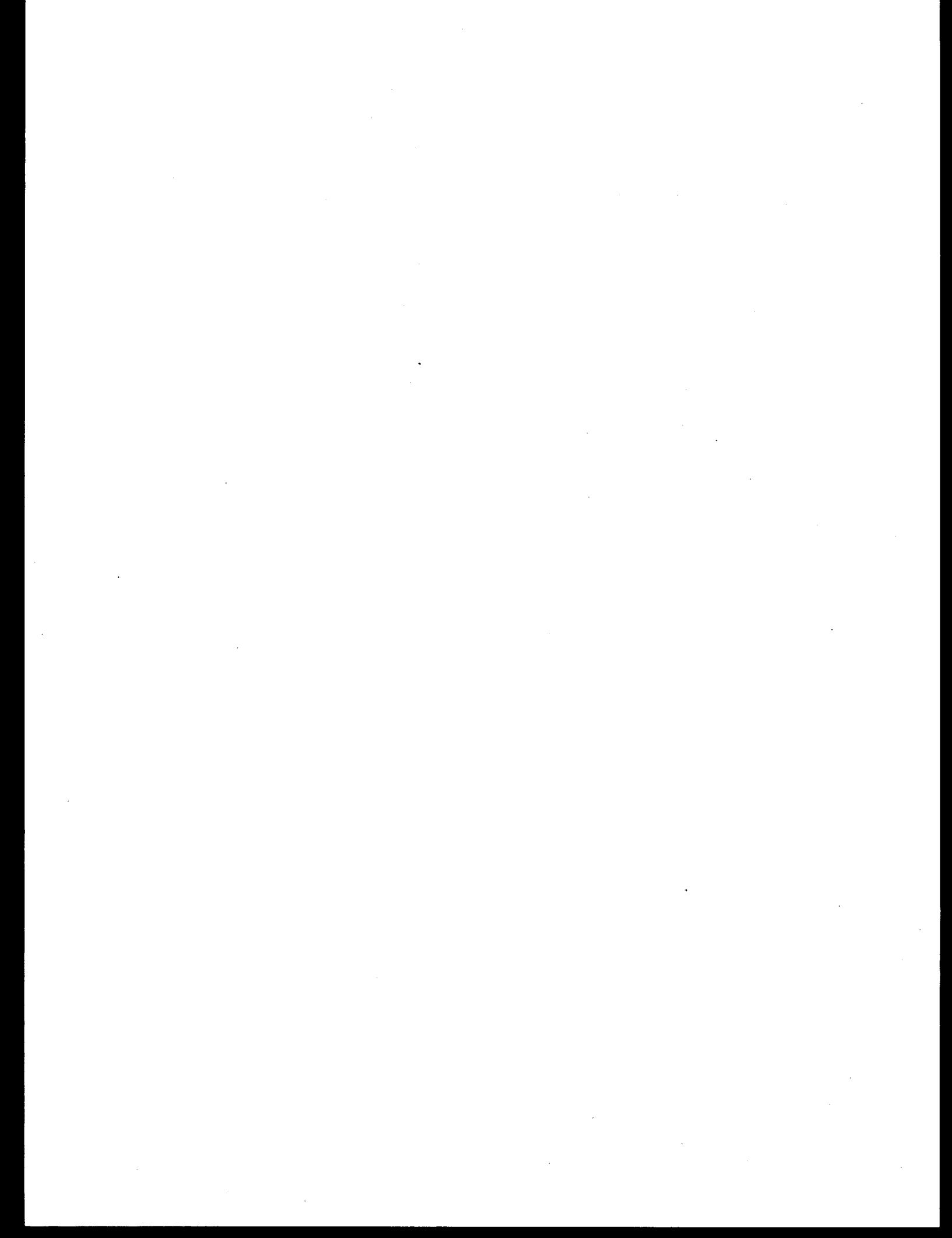
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APPENDIX A - ANALYTICAL RESULTS

Sample data and analytical results are tabulated in Appendix A-1. In addition to the sample results, the following information is listed in the table: mineral locality name, map number, field sample number, sample type, sample size, and material sampled. The results are organized by map numbers, which are used on the map of localities sampled (fig. 5).

KEY TO TABLE A-1

All analyses were conducted by a commercial laboratory. Results are given by chemical element symbol in the following units except when noted by an asterisk(*):

Au, Pt, Pd - ppb;
Ag, Cu, Pb, Zn, Mo, W, Ni, Co, Ba, Sn, Cr, Bi, V, As, Sb, Hg - ppm;
oxide and "Loss on Ignition" (LOI) values - percent.

If followed by an asterisk, Au and Ag values are in ppm (denoting assay analysis with gravimetric finish) and other elements (including Cu, Pb, Zn, Mo, Fe) are in percent.

ABBREVIATIONS

Abbreviations for sample types are as follows: (see Appendix B for definitions)

<u>ROCK CHIP</u>		<u>STREAM SAMPLE</u>	
C	continuous chip	PC	pan concentrate
CC	chip channel	PL	placer
CH	channel	SS	stream sediment
G	grab		
RC	random chip		
Rep	representative chip		
S	select		
SC	spaced chip		

Abbreviations for sample location types:

FL	float	RC	rubblecrop
MD	mine dump	TP	trench, pit, or cut
MT	mill tailings	UW	underground workings
OC	outcrop		

Abbreviations used in the sample descriptions consist of the capitalized first letter of the four cardinal directions, as well as the following:

@	at	hem	hematite
adj	adjacent	hnbd	hornblende
alt	altered	hn	hornfels
an	andesite	hw	hanging wall
ar	argillite	ls	limestone
asp	arsenopyrite	mag	magnetite
az	azurite	mg	medium-grained
bt	biotite	ml	malachite
br	breccia (brecciated)	mo	molybdenite
calc	calcite	monz	monzonite
cg	coarse-grained	min	mineralized
cng	conglomerate	msv	massive
chl	chlorite (chloritic)	musc	muscovite
cont	continuous	pl	phyllite
cp	chalcopyrite	po	pyrrhotite
di	diorite	porph	porphyry (porphyritic)
dissem	disseminated	py	pyrite (pyritic)
ep	epidote	qt	quartzite
fel	felsic	qz	quartz
fest	iron stained	sed	sediment
fg	fine-grained	sc	schist
fw	footwall	sil	silicified
gd	granodiorite	sl	sphalerite
gn	galena	sulf	sulfide
gp	graphite (graphitic)	volc	volcanic
gs	greenstone	w/	with
gw	graywacke	xcut	crosscut/crosscutting

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	kg	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	CaO	MgO	SO ₃	LOI	Na ₂ O	K ₂ O	P ₂ O ₅	MnO	Cr ₂ O ₃	Ti ₂ O ₅	Total	Titrated CaCO ₃	Sample Description
Anan Creek																				
1	LS301	Rep	85m		6.08	12.28	1.56	0.19	45.66	2.09	0.04	36.83	0.29	0.53	0.1	0.02	0.01	0.02	99.62	81.45
1	LS302	Rep	62m		4.33	1.09	0.16	0.01	51.47	3.39	<0.02	43.07	0.02	<0.05	0.11	<0.01	<0.01	<0.01	99.39	91.8
Bradfield Mica																				
2	7147	S	0.06m		<5	<0.1	11	7	14	-	-	-	-	-	-	-	-	-	-	
Lucky Chance																				
3	7136	C	1.52m		<5	0.4	30	8	41	-	-	-	-	-	-	-	-	-	-	
3	7143	C	1.52m		<5	1.3	29	102	41	4	-	-	-	-	-	-	-	-	-	
3	7144	C	1.52m		9	1.3	23	19	73	13	-	-	-	-	-	-	-	-	-	
3	7145	C	1.83m		18	0.9	15	15	29	5	-	-	-	-	-	-	-	-	-	
3	7146	C	0.30m		<5	0.6	47	9	68	6	-	-	-	-	-	-	-	-	-	
Skelokum Hot Springs																				
4	7155	Rep			<5	0.7	<1	13	79	5	-	-	-	-	-	7	<10	107	29	
Burroughs Bay																				
5	7160	Rep			6	0.2	40	12	48	71	-	-	-	-	-	-	-	-	-	
5	7161	Rep			<5	0.2	12	75	70	249	-	-	-	-	-	-	-	-	-	
5	7162	Rep			54	<0.1	2	18	17	336	-	-	-	-	-	-	-	-	-	
5	7164	Rep			<5	<0.1	8	11	16	372	-	-	-	-	-	-	-	-	-	
6	7154	Rep	3.66m x 3.05m		<5	<0.1	2	19	21	114	-	-	-	-	-	-	-	-	-	
6	7163	Rep			<5	<0.1	5	15	17	172	-	-	-	-	-	-	-	-	-	
6	7165	Rep			<5	<0.1	8	13	27	90	-	-	-	-	-	-	-	-	-	
7	7149	Rep	3.05m x 3.05m		<5	<0.1	31	10	22	47	-	-	-	-	-	-	-	-	-	
7	7150	Rep	3.66m x 1.52m		<5	<0.1	12	9	10	99	-	-	-	-	-	-	-	-	-	
7	7151	Rep			9	0.2	96	9	15	23	-	-	-	-	-	-	-	-	-	
7	7152	Rep	4.57m x 3.05m		<5	<0.1	4	10	18	231	-	-	-	-	-	-	-	-	-	
7	7153	Rep	4.57m x 4.57m		<5	<0.1	<1	9	26	75	-	-	-	-	-	-	-	-	-	
West Texas Glacier, North																				
8	6133	C	0.46m		11	1.6	93	122	220	<1	<1	3.3	0.6	<200	30.0	1.0	3.0	2.0	2.90	<0.5
OC, ar w/2% disseminated sulf																				

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
64	8450	SC	1.8m @ .1m	<5	0.5	467	90	550	<1	4	36	5.3	<200	<5	0.5	1.8	1.4	2.5	<0.5	UW, meta-gw w/po
64	8452	S		14	1.4	1761	58	350	<1	<1	119	3.6	<200	<5	<0.5	<0.2	<0.2	1.7	<0.5	UW, meta-gw w/py, po
Ninety-six area																				
65	6086	C	0.46m	<5	0.1	18	65	150	7	2	12.0	1.2	<200	12.0	<0.5	2.3	1.3	1.00	<0.5	OC, qz vein
65	8207	C	0.5m	<5	1.1	41	21	<1	<1	<1	2.9	0.5	<200	8.3	<0.5	0.7	0.4	0.7	<0.5	OC, qz vein in metavolc(?)
65	8208	C	0.6m	<5	0.2	17	32	120	4	<1	10	0.9	<200	13	<0.5	1.8	1.2	0.93	<0.5	OC, qz veins/stringers in metasediment & gd
65	8451	Rep	0.2m	7	0.5	82	58	140	8	1	24	1.5	<200	9.1	<0.5	1.2	0.8	1.1	<0.5	OC, qz w/ py
Border, below road																				
66	5491	G		<5	0.3	104	20	68	3	<2	-	-	-	-	-	-	-	-	- MD, sil gs w/dissem po	
66	5915	G	0.21m	62	0.6	25	101	1490	7	<2	-	-	-	-	-	-	-	-	- MD, qz rubble	
Border, above road																				
67	6001	SC	10.37m @ .30m	36	5.1	51	84	1500	2	5	86.1	4.4	<200	27.0	0.8	2.9	1.6	3.20	0.5	UW, gs w/qz veins and sulf
67	6002	SC	10.37m @ .30m	8	1.2	40	31	200	3	4	112.0	4.0	<200	38.0	0.5	4.2	2.4	3.50	<0.5	UW, gs w/qz veins and sulf
67	6607	C	1.07m	11	0.5	61	20	<100	3	2	23.0	3.0	<200	35.0	<0.5	3.8	1.9	3.40	0.6	UW, sil gs w/5% sulf
Stoner, upper adit																				
68	5494	CC	0.11m	<5	<0.1	10	12	96	<1	<1	5.9	0.5	<200	7.6	<0.5	<0.2	<0.2	1.20	<0.5	UW, qz vein
68	5495	CC	0.09m	<5	1.0	9	197	112	2	<1	27.0	1.9	<200	17.0	<0.5	0.9	0.6	1.70	<0.5	UW, qz vein
68	5496	G	0.09m	1355	23.1	148	1.18*	5152	5	<3	8830.0	32.8	<200	30.0	<0.5	1.7	<0.6	2.90	<0.5	UW, sil gs w/sl, gn, aspy
68	5497	S		929	14.7	525	7306	2.08*	<4	<4	>10000	44.3	<430	<21.0	<0.5	2.9	<0.8	2.60	<0.5	MD, sil gs w/aspy, py, sl, gn
68	6679	C	0.15m	126	1.3	80	434	2000	<3	<3	3850.0	13.2	<510	<22.0	<0.5	<0.9	<0.6	3.10	<0.8	UW, shear zone w/gossan & fault gouge
68	6680	C	0.64m	79	0.1	15	58	290	3	<1	250.0	3.5	<200	45.0	<0.5	4.0	2.3	3.80	<0.5	UW, shear in sil gs w/7% sulf
68	6681	C	1.16m	10	<0.1	30	48	240	<1	<1	40.0	3.9	<200	37.0	<0.5	4.5	2.4	4.30	<0.5	UW, shear zone w/sil gs
Stoner, lower trench																				
68	5498	C	0.12m	744	42.3	4684	4074	6.59*	11	<1	565.0	17.3	<200	28.0	<0.5	<0.2	<0.2	1.70	<0.5	TP, sil shear w/aspy, py, sl, gn
68	6674	SC	1.83m @ .30m	39	1.4	52	141	460	3	<1	249.0	5.0	<200	28.0	<0.5	3.7	2.4	3.10	<0.5	TP, sil gs w/2% dissem py
68	6675	Rep	1.52m	60	2.3	109	518	1400	5	2	108.0	4.0	<200	24.0	<0.5	2.5	1.4	2.70	<0.5	TP, sil gs w/6% sulf
68	6676	C	0.24m	59	6.6	281	1560	870	3	4	82.3	6.4	<200	26.0	<0.5	2.2	1.2	3.40	0.8	TP, shear zone w/gossan fault gouge
68	6677	C	0.08m	547	28.3	1640	3590	36800	6	3	373.0	14.7	<200	17.0	<0.5	1.2	0.5	1.80	<0.5	TP, sil zone w/py, sl, gn
68	6678	SC	3.05m @ .30m	16	3.9	111	1400	600	<1	3	63.2	6.4	<200	<5.0	<0.5	2.0	1.1	2.50	<0.5	TP, gray metavolc w/3% dissem sulf
Stoner, lower adit																				
68	5919	C	0.76m	100	3.5	83	242	-	12	2	366.0	6.4	300	29.0	<0.5	3.1	2.5	4.10	0.5	UW, alt gs w/dissem py, po, aspy
Stoner, shaft																				
68	5920	G	0.15m	9212	16.2	130	7640	-	6	<3	5820.0	27.8	<200	26.0	<0.5	2.8	2.0	2.30	<0.5	TP, ore in gs w/sl, gn, aspy, py, po
68	6669	C	0.58m	870	6.0	50	3260	5000	3	<1	1090.0	15.4	<200	42.0	<0.5	4.0	2.6	2.90	<0.5	TP, sil gs w/sulf
68	6670	C	0.61m	571	1.1	36	551	2000	7	3	1820.0	18.0	<430	42.0	<0.5	2.7	2.3	2.70	<0.5	TP, sil gs w/py, cp, aspy
68	6671	C	0.06m	581	8.2	162	2400	1600	<6	<2	3330.0	34.2	<580	<31.0	<0.5	<3.2	2.3	2.80	<0.5	TP, gossan zone w/20% sulf
68	6672	C	0.95m	398	3.2	90	1519	4000	<2	<2	2970.0	17.0	<470	<29.0	<0.5	<2.4	<2.1	2.70	<0.5	TP, sil gs w/sulf

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
68	6673	G		2731	10.8	77	5177	9500	<6	<3	5440.0	22.5	<730	<35.0	<1.0	<2.6	<1.0	2.40	<0.5	MD, sil gs w/gn, py, sl, cp
Stoner, upper trench																				
68	6066	C	1.52m	34	0.3	29	232	490	2	2	46.0	4.4	390	53.0	0.7	4.8	2.4	4.60	0.5	TP, gs w/rare disseminated py
68	6067	C	0.91m	40	0.2	19	75	400	2	2	63.1	3.4	<200	43.0	<0.5	4.9	2.8	4.50	0.7	TP, gs w/dissem py
68	6068	C	0.70m	155	1.6	53	742	1500	9	<2	5410.0	38.1	<810	<37.0	<0.5	3.9	1.8	3.70	<0.5	TP, gs and fault gouge
68	6069	C	0.91m	37	<0.1	16	61	170	<1	3	220.0	3.9	<200	36.0	<0.5	4.5	2.5	4.20	0.6	TP, gs w/sparse disseminated py and qz vein
68	6070	G	0.12m	3643	23.6	205	6403	19000	<23	<11	>10000	131.0	<3800	<220.0	<4.7	<9.0	<4.6	<0.92	<2.9	TP, gs w/20% sulf, 10% qz
Iron Ridge																				
69	5492	C	0.61m	86	1.8	1994	24	174	2	49	-	-	-	-	-	-	-	-	-	- OC, msv po w/less than 1% cp
69	5916	Rep	0.70m	12	0.9	279	65	80	6	<2	-	-	-	-	-	-	-	-	-	- OC, sil gs w/dissem po
Daly Alaska, roadcut																				
70	5493	G	0.02m	100	8.7	407	323	10000	6	<2	885.0	17.9	<200	<16.0	<0.5	1.8	1.2	2.50	<0.5	OC, sil gs w/po and sl
70	5917	Rep	0.12m	2106	34.7	463	1524	17903	3	<2	-	-	-	-	-	-	-	-	-	- OC, msv sulf hosted in gs
70	5918	Rep	0.15m	96	12.1	236	259	2410	4	7	-	-	-	-	-	-	-	-	-	- RC, gs w/dissem py, po, cp and sl
Daly Alaska, lower adit																				
71	5998	C	1.37m	90	21.7	211	891	5400	3	6	317.0	14.3	<200	26.0	0.6	1.9	1.0	3.40	0.5	UW, gs w/dissem sulf
71	5999	Rep	0.70m	1535	25.0	507	468	1600	2	7	149.0	10.0	<200	18.0	<0.5	1.4	1.4	2.30	<0.5	UW, msv gs w/sulf
71	6604	SC	14.63m @ .30m	119	4.7	142	126	1900	5	5	77.0	7.4	<200	25.0	0.9	2.2	1.4	3.10	<0.5	UW, sil gs w/7% sulf
71	6605	SC	15.24m @ .30m	287	5.9	208	168	4200	3	6	104.0	7.0	<200	21.0	0.7	1.9	0.8	2.60	<0.5	UW, sil gs w/7% sulf
71	6606	SC	15.24m @ .30m	959	14.0	442	523	5900	26	9	106.0	8.7	<200	14.0	<0.5	1.5	1.3	2.50	<0.5	UW, sil gs w/7% sulf
Daly Alaska, shaft																				
71	6000	S		77	12.9	122	331	4500	<1	11	163.0	10.0	<200	28.0	0.7	2.1	1.1	4.00	<0.5	MD, gs w/py, gn and some sl
Daly Alaska, upper adit																				
72	6047	SC	6.10m @ .30m	52	10.5	287	543	190	8	3	23.0	19.1	<200	34.0	0.6	4.9	2.5	3.20	<0.5	UW, gs w/dissem py & qz stringer
72	6048	SC	6.10m @ .30m	65	9.0	139	408	230	7	2	23.0	22.5	260	35.0	0.7	4.5	2.4	3.20	0.5	UW, gs w/dissem py
72	6049	SC	6.10m @ .30m	152	8.0	272	221	1900	19	4	380.0	11.1	<200	15.0	<0.5	2.1	1.1	2.30	<0.5	UW, gs w/dissem py & rare qz seam
72	6050	SC	18.90m @ .15m	286	23.8	198	310	570	4	2	648.0	39.1	<200	<12.0	<0.5	2.1	0.9	1.90	<0.5	UW, gs w/1% dissem sulf
72	6051	SC	3.66m @ .15m	349	25.9	221	1268	1600	7	2	627.0	35.5	<200	24.0	<0.5	2.8	1.4	2.50	<0.5	UW, gs w/3% sulf (gn, py, aspy)
72	6052	C	0.18m	185	31.4	238	1703	730	5	2	134.0	33.4	<200	<5.0	<0.5	1.0	0.5	0.66	<0.5	UW, qz vein/stringers in gs
72	6646	SC	6.10m @ .30m	20	3.3	83	138	370	3	10	61.7	11.5	<200	26.0	<0.5	2.7	1.4	2.60	<0.5	UW, sil gs w/3% sulf
72	6647	C	0.49m	261	7.4	78	439	1300	5	2	957.0	30.2	<200	22.0	<0.5	1.8	0.9	2.10	<0.5	UW, sil gs w/15% sulf
72	6648	SC	8.54m @ .30m	41	2.9	112	78	430	9	3	56.8	7.8	<200	27.0	0.6	2.7	1.7	2.70	<0.5	UW, sil gs w/5% sulf
72	6649	S		3374	225.3*	438	1.16*	31300	12	<7	>10000	362.0	<1600	<100.0	<1.5	<2.8	<1.9	0.44	<1.1	MD, sil gs w/15% sulf
Daly Alaska, trenches																				
72	6053	C	1.22m	1081	12.8	88	909	7800	5	3	7360.0	123.0	<900	<52.0	<0.5	<1.7	<1.0	1.00	<0.5	TP, gs w/10% sulf and qz vein
72	6054	S		3236	305.1*	577	4.53*	34500	16	<9	>10000	627.0	<2400	<150.0	<2.3	<5.1	<3.0	0.46	<1.8	TP, sil gs w/10-30% sulf
72	6055	C	0.70m	455	50.1*	119	1362	8300	4	<1	1660.0	71.3	<200	<14.0	<0.5	1.0	<0.2	0.27	<0.5	TP, gs w/dissem & msv sulf
72	6650	Rep	0.91m	53	4.7	98	278	1000	10	4	194.0	10.7	<200	24.0	<0.5	3.5	2.0	2.90	<0.5	TP, sil gs w/3% sulf

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
72	6651	S	0.21m	12.03*	193.7*	1319	2.15*	35500	<25	<14	>10000	635.0	<3400	<230.0	<3.5	<7.5	<5.2	<0.36	<2.5	RC, sil gs w/py, sl, gn
72	6652	C	0.91m	2562	292.1*	476	6423	17200	<16	14	>10000	500.0	<1400	<81.0	<1.5	<3.0	<2.1	1.50	<1.1	TP, sil gs w/py, sl, gn
72	6653	Rep	1.22m	2694	903.4*	1047	1.10*	24900	<18	<37	>10000	1250.0	<2400	<150.0	<2.4	<5.6	<3.8	1.40	<1.9	TP, sil gs w/py, sl, gn
72	6654	C	0.61m	229	8.2	79	127	260	7	3	245.0	13.0	<200	25.0	<0.5	2.1	1.1	2.20	<0.5	TP, sil gs w/10% sulf
Alaska Premier																				
73	6056	SC	5.49m @ .30m	35	2.5	127	216	710	12	4	105.0	4.9	<200	17.0	0.7	1.6	1.3	3.20	<0.5	UW, gs w/1-2% disseminated sulf
73	6057	SC	4.27m @ .30m	19	2.3	126	139	950	3	4	52.4	3.9	<200	17.0	0.6	1.4	1.4	3.10	<0.5	UW, gs w/1% disseminated sulf
73	6058	SC	10.67m @ .30m	32	2.8	194	145	3500	3	4	91.1	3.3	<200	27.0	<0.5	2.7	1.4	3.10	<0.5	UW, gs w/2% disseminated sulf
73	6059	S	1.8m @ .30m	18	2.6	159	91	4500	10	4	27.0	3.1	<200	19.0	0.7	1.4	0.9	3.30	<0.5	UW, high grade of sulf in gs
73	6655	SC	6.10m @ .30m	16	2.9	197	56	430	3	4	50.2	5.4	<200	25.0	0.7	2.2	1.3	3.40	<0.5	UW, sil gs w/2% sulf
73	6656	C	0.08m	11	1.6	104	52	110	2	<1	16.0	1.6	<200	12.0	0.5	1.2	0.5	1.50	<0.5	UW, qz vein
73	6657	SC	6.40m @ .30m	28	3.3	228	164	500	3	2	40.0	5.0	<200	29.0	0.7	2.0	1.4	3.40	<0.5	UW, sil gs w/2% sulf
73	6658	SC	5.79m @ .30m	14	1.5	188	71	330	5	2	27.0	2.1	<200	29.0	0.8	1.6	1.1	3.50	<0.5	UW, sil gs w/2% sulf
73	6659	G	0.09m	32	2.4	375	62	280	7	<1	36.0	8.0	<200	23.0	0.7	1.8	1.1	3.20	<0.5	UW, sil gs w/2% sulf
73	6660	SC	3.66m @ .30m	12	1.1	144	40	540	3	<1	54.7	2.3	340	41.0	0.8	3.6	2.0	4.10	0.5	UW, sil gs w/3% sulf
73	6661	G	8	1.3	170	25	380	3	1	45.0	2.6	<200	32.0	0.8	2.3	1.4	3.80	0.6	UW, gs inclusion w/az stain	
73	6662	G	33	2.7	224	36	230	3	2	81.1	3.7	<200	24.0	<0.5	1.9	1.1	3.10	<0.5	UW, sil gs w/10% sulf	
Eureka, lower adit																				
74	6089	C	0.26m	<5	<0.1	21	16	230	2	<1	7.8	3.0	<200	<5.0	<0.5	0.5	0.4	1.10	<0.5	UW, barren qz vein hosted in gs
74	6090	C	0.09m	<5	5.3	407	49	550	<1	<1	21.0	11.0	<200	<5.0	<0.5	<0.2	<0.2	0.28	<0.5	UW, barren qz vein hosted in gs
74	6091	C	0.49m	98	3.8	80	243	670	41	3	47.0	4.8	<200	28.0	<0.5	3.1	1.3	2.20	<0.5	UW, sil zone in gs
74	6092	C	1.22m	187	2.8	144	62	360	26	6	195.0	5.2	<200	12.0	<0.5	0.8	0.9	2.70	<0.5	UW, fest fractured zone in gs
74	6701	C	0.82m	16	0.8	134	54	710	14	114	62.6	1.6	<200	23.0	0.8	5.2	1.9	2.80	<0.5	UW, sil gs w/7% py
74	6702	C	0.55m	1579	30.1	138	200	3800	<28	<36	>10000	<258.0	<2900	<160.0	<4.7	<5.8	<4.3	<3.00	<2.2	UW, fest sil gs w/10% py
Eureka, upper adit																				
74	6093	C	1.59m	56	2.1	246	50	740	4	3	42.0	2.8	<200	28.0	0.8	1.5	0.8	3.30	0.5	UW, sil gs w/5% sulf, 10% qz
Eureka, east trench																				
74	6094	C	0.76m	970	37.6	418	3649	35800	2	5	709.0	44.9	<420	<15.0	<0.5	0.7	<0.2	1.30	<0.5	OC, sil br w/gn, sl, cp, py
Eureka, west trench																				
74	6095	C	0.37m	42	3.2	96	123	2300	<1	4	404.0	5.3	<200	31.0	<0.5	1.7	1.4	2.80	<0.5	TP, fest fractured zone in gs
74	6096	C	1.25m	36	1.1	111	89	890	<1	3	79.6	3.6	<200	15.0	<0.5	1.7	1.2	2.90	0.6	TP, fest gs w/sparse sulf
74	6703	C	1.22m	11.21*	17.0	210	381	17700	<3	20	1870.0	16.9	<500	45.0	<0.5	<0.7	0.9	2.80	<0.5	TP, sil gs w/po, py, sl, cp
74	6704	C	0.08m	68.33*	89.8*	476	1780	>90000	<7	<7	1970.0	34.2	<1400	<56.0	<0.5	<1.5	<1.5	<1.70	<1.1	TP, sulf band w/py, sl, gn, cp
74	6705	C	2.13m	164	3.7	107	121	900	2	8	135.0	4.2	<200	22.0	<0.5	1.7	1.6	3.00	<0.5	TP, sil gs w/7% sulf
74	6706	C	0.12m	114	1.1	59	26	820	2	3	68.2	19.5	<200	12.0	<0.5	0.9	0.6	1.50	<0.5	TP, qz vein w/calc and py
74	6707	C	1.25m	878	3.2	207	129	1100	5	5	317.0	7.6	<200	38.0	<0.5	1.5	1.4	3.50	<0.5	TP, sil gs w/5% sulf
Blacksmith																				
75	6713	Rep	1.22m	<5	0.3	90	29	260	<1	<1	29.0	1.3	<200	13.0	<0.5	1.4	0.8	2.10	<0.5	UW, chl gs w/1% sulf

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
Hyder Skookum																				
76	6112	C	0.09m	6	<0.1	22	8	<100	3	<1	20.0	0.8	<200	15.0	<0.5	0.8	0.4	0.90	<0.5 TP, barren qz vein	
76	6723	C	0.30m	14	1.4	40	28	140	3	<1	61.6	4.5	<200	42.0	0.6	4.6	2.3	4.40	<0.5 TP, sil lens in fest gs	
76	6724	G		74	0.7	77	18	160	2	3	243.0	1.8	<200	30.0	<0.5	3.7	1.7	3.90	<0.5 MD, qz & fest sil gs	
Carto																				
77	6109	C	0.43m	56	0.4	50	28	<100	<1	<1	111.0	3.1	<200	<5.0	<0.5	0.3	0.2	0.22	<0.5 OC, msv, vuggy qz vein	
78	6110	SC	1.98m @ .08m	18	0.1	31	18	<100	2	<1	75.1	2.4	<200	<5.0	<0.5	0.4	0.3	0.22	<0.5 OC, barren qz vein	
79	6721	C	0.23m	17	0.3	39	13	<100	1	2	57.8	2.4	<200	12.0	<0.5	1.3	0.8	1.70	<0.5 OC, qz vein	
Titan, adit																				
80	6024	C	0.21m	19	0.7	62	175	120	2	3	31.0	2.0	<200	8.2	<0.5	0.4	<0.2	0.67	<0.5 UW, qz vein in greenish-gray sc	
80	6025	C	0.24m	17	0.9	47	104	<100	2	1	11.0	1.7	<200	<5.0	<0.5	0.3	<0.2	0.39	<0.5 UW, qz vein in greenish-gray sc	
80	6026	C	1.22m	48	0.9	48	40	330	<1	6	69.4	2.0	<200	23.0	0.6	1.8	1.1	3.00	0.9 UW, greenish-gray sc w/qz stringer	
80	6027	C	0.09m	18	0.3	4	26	<100	2	3	20.0	1.4	<200	12.0	<0.5	2.0	1.2	0.56	<0.5 UW, qz vein hosted in gs	
80	6028	G		84	1.1	9	58	230	2	5	118.0	2.4	<200	30.0	<0.5	1.9	0.7	2.90	<0.5 MD, gs w/dissem py cubes	
80	6119	SC	2.74m @ .08m	<5	<0.1	7	28	190	<1	<1	289.0	1.7	<200	33.0	<0.5	6.5	3.2	3.00	<0.5 UW, Premier porph	
80	6624	C	0.40m	65	1.7	72	729	820	4	7	72.3	22.8	<200	<5.0	<0.5	1.1	0.5	1.70	<0.5 UW, qz vein along shear in gs	
80	6625	C	0.08m	17	1.2	47	277	370	6	2	19.0	2.9	<200	<17.0	<0.5	1.3	<0.2	0.43	<0.5 UW, qz vein	
80	6626	S		18	0.8	18	107	170	5	1	48.0	5.7	<200	6.0	<0.5	1.3	0.7	0.45	<0.5 MD, qz w/gs wall rock	
80	6729	CC	0.26m	69	<0.1	7	10	<100	<1	3	15.0	1.3	<200	24.0	<0.5	4.5	2.0	1.90	<0.5 UW, shear zone w/qz stringer	
Titan, surface																				
81	6114	C	0.24m	46	1.7	9	278	120	3	<1	36.0	2.8	<200	<5.0	<0.5	<0.2	0.3	0.15	<0.5 OC, barren qz vein	
81	6115	C	0.55m	333	1.3	44	118	260	2	1	183.0	6.0	<200	11.0	<0.5	2.0	1.9	1.80	<0.5 OC, ar w/10% qz, 2% py	
81	6116	C	0.15m	30.17*	63.1*	118	5975	1700	12	4	25.0	25.0	<200	<22.0	<0.5	<0.6	0.8	0.57	<0.5 TP, qz vein, min inclusions, sl	
81	6117	C	0.40m	5074	5.6	33	253	260	4	5	36.0	3.8	<200	16.0	<0.5	3.3	2.3	2.70	<0.5 TP, min ar	
81	6118	S		3766	15.1	419	5700	5800	4	3	27.0	14.2	<200	<5.0	<0.5	1.7	0.8	0.77	<0.5 MD, high-grade of sl, gn, cp, in qz vein	
81	6725	CC	0.24m	18	0.7	57	120	140	2	<1	57.7	1.5	<200	<5.0	<0.5	0.6	<0.2	0.27	<0.5 OC, qz vein	
81	6726	C	0.15m	30	0.9	38	46	260	2	5	67.1	4.2	<200	24.0	<0.5	2.0	0.9	2.50	<0.5 OC, sil wall rock w/py and sulf	
81	6727	C	1.22m	1245	15.9	83	802	2600	8	6	59.2	4.2	<200	22.0	<0.5	3.3	1.6	1.30	<0.5 TP, qz stringer w/10% sulf	
81	6728	C	1.83m	750	3.6	45	640	1400	3	2	28.0	4.0	<200	28.0	<0.5	4.2	2.2	1.50	<0.5 TP, qz stringer zone w/5% sulf	
82	6113	C	0.49m	15	0.4	9	25	<100	1	<1	5.4	2.9	<200	<5.0	<0.5	<0.2	<0.10	<0.5 OC, barren qz vein		
Upper Iron																				
83	6108	G		5560	15.0	3900	165	<1500	<30	<8	>10000	<23.9	<1900	<110.0	<2.9	<3.9	<2.6	<0.82	<1.5 MD, fest gs w/po, cp	
83	6720	S		9607	24.5	4900	95	<1800	<17	<15	>10000	<51.8	<2000	<120.0	<3.3	<4.2	<3.5	<0.48	<1.6 MD, po w/gray sulf and 1% cp	
Monarch																				
84	8213	C	0.6m	<5	0.7	39	398	190	3	22	1	1.6	<200	15	<0.5	1.8	1.4	0.72	<0.5 TP, qz vein in gd, w/ very minor gn & py	
84	8214	C	0.2m	453	0.4	29	150	180	16	1110	6	2.1	<200	29	<0.5	3.9	2.6	2.4	<0.5 TP, qz vein in shear in gd	
84	8454	C	0.3m	<5	0.1	17	94	<1	<1	4	1.2	1.1	<200	<5	<0.5	0.4	0.6	0.16	<0.5 TP, qz + ar	
84	8455	S		296	7	2467	39	210	74	3	506	1.2	<200	<5	<0.5	2.2	2.1	1.2	<0.5 MD, gd w/ py, mo	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
Onilone																				
98	5955	C	0.15m	10.6*	826.3*	1019	12.2*	1600	<830	48	68.2	886.0	<690	<46.0	<0.5	<1.9	<1.7	2.00	<0.5 UW, qz vein w/banded gn, disseminated py	
98	5956	CC	0.15m	651	153.6*	569	5941	9200	<100	12	28.0	105.0	<200	13.0	<0.5	2.0	0.7	1.10	<0.5 UW, qz vein w/dissem gn, py	
98	5957	C	0.21m	53	11.7	10	2876	340	<100	7	7.2	6.2	<200	15.0	<0.5	20.1	7.1	0.21	<0.5 UW, qz gouge lens w/dissem gn, cp	
98	5958	Rep	2.16m	54	17.4	136	823	750	<100	21	6.2	12.9	<200	53.0	0.8	6.8	6.2	4.70	0.6 TP, sheared gd w/sulf	
98	6545	C	0.24m	1373	136.1*	790	7210	5900	8	68	9.1	137.0	<200	48.0	0.6	8.8	4.4	4.00	<0.5 TP, shear zone w/qz, py, cp, sl	
98	6546	C	0.20m	4065	445.0*	4752	1.94*	14100	7	158	23.0	457.0	<200	<24.0	<0.5	2.2	4.3	1.70	<0.5 TP, shear zone w/qz, py, cp, sl, gn,	
98	6547	C	0.55m	137	48.0*	539	2970	790	17	30	5.8	44.8	<200	45.0	0.7	6.5	3.8	4.10	<0.5 TP, shear zone w/qz, cp, sl, gn, py	
98	6548	C	0.34m	186	38.3	297	2390	1600	4	25	13.0	36.4	<200	47.0	0.6	7.0	3.9	5.40	0.8 TP, shear zone w/qz and sulf	
98	6549	C	0.30m	177	15.3	175	1560	1400	23	34	7.0	24.0	<200	42.0	0.7	5.5	3.3	4.50	0.6 TP, sheared gd	
98	6550	Rep	0.30m	38	3.4	34	133	350	3	12	6.2	4.6	<200	24.0	0.9	21.7	5.5	1.70	<0.5 UW, shear zone	
98	6551	C	0.43m	196	27.1	145	1459	3600	113	18	4.9	23.5	<200	42.0	1.0	6.1	3.5	4.60	0.7 UW, shear zone w/qz and sulf	
Grey Copper																				
99	5967	C	0.18m	105	1.1	37	15	100	14	8	1.7	4.5	<200	<17.0	<0.5	<0.6	<0.2	0.43	<0.5 OC, qz vein w/blebs of mg py	
99	5968	C	0.76m	114	19.8	1315	90	<100	10	730	0.5	5.7	<200	<5.0	<0.5	<0.2	1.8	1.10	<0.5 OC, qz vein w/dissem & banded py	
99	5969	Rep	1.04m	109	16.9	167	817	190	<1	16	2.4	7.5	<200	47.0	0.6	6.3	3.0	4.00	0.7 UW, sil di w/dissem py	
99	5970	C	0.61m	1856	54.5*	658	2430	110	6	55	24.0	144.0	<200	<11.0	<0.5	<0.5	<0.2	0.22	<0.5 TP, qz vein w/dissem py & ml stain	
99	5971	C	1.04m	348	37.0	730	3910	120	31	2480	<0.5	6.4	820	<15.0	<0.5	<0.7	1.6	1.30	<0.5 TP, qz zone w/dissem py, gn, aspy	
99	6562	C	0.67m	537	21.5	320	690	300	16	51	12.0	26.6	<200	<5.0	<0.5	1.2	1.3	0.90	<0.5 UW, qz sulf vein w/py, cp, gn, sl, ml	
99	6563	Rep	0.55m	130	5.8	38	1045	670	45	35	1.4	7.5	<200	40.0	0.6	5.2	2.9	4.10	0.7 UW, green-gray rock (alt di)	
99	6564	C	0.15m	25.92*	129.9*	4050	1.17*	2300	26	25200	<28.0	35.6	<200	<10.0	<0.5	<0.4	<1.5	4.20	0.6 UW, qz sulf vein w/py, cp, gn, sl, scheelite	
99	6565	C	0.37m	1820	21.1	1025	2230	110	11	343	5.3	2.6	<200	<5.0	<0.5	<0.2	1.5	0.40	<0.5 UW, qz sulf vein w/py, cp, sl, gn, scheelite	
99	6566	C	1.16m	2173	29.3	847	1062	1100	21	719	27.0	42.8	<200	<20.0	<0.5	<0.7	1.3	0.89	<0.5 UW, qz vein w/py, cp, sl, gn, ml, scheelite	
99	6567	Rep	0.91m	23	1.2	29	118	220	4	29	2.7	6.2	<200	36.0	0.5	7.3	3.0	4.00	<0.5 UW, black alt di	
99	6568	C	0.91m	6680	45.0	194	4352	<100	24	618	88.8	19.8	<200	15.0	<0.5	<0.2	0.9	1.00	<0.5 TP, qz sulf vein w/py, cp, sl, gn	
99	6569	C	0.91m	2474	252.3*	812	4940	30400	<10	5630	467.0	718.0	<580	<20.0	<0.5	<0.9	<2.9	1.20	<0.5 TP, qz sulf vein w/py, cp, sl, gn	
99	6570	Rep	0.30m	34	1.1	34	53	220	3	23	3.2	5.8	<200	43.0	0.7	5.0	2.4	4.20	0.6 TP, alt di	
Ruby Silver, trench																				
100	5965	C	0.73m	33	1.2	56	106	280	8	9	2.2	1.0	<200	31.0	<0.5	6.6	3.5	3.00	<0.5 TP, alt volc in shear zone	
100	5966	C	1.13m	195	6.7	108	278	260	13	15	10.0	2.4	<200	34.0	1.3	11.0	7.6	2.00	<0.5 TP, qz vein in alt volc	
100	6560	C	0.61m	167	12.6	156	523	570	30	10	1.6	10.8	<200	69.0	0.9	30.8	10.0	2.40	<0.5 TP, sil volc w/qz stringers	
100	6561	S		1167	185.5*	762	346	200	38	10	21.0	10.0	210	17.0	<0.5	4.0	1.8	1.40	<0.5 MD, qz zone w/py, sl, cp	
Ruby Silver No. 1																				
100	6556	C	0.46m	569	6.2	57	222	190	12	9	1.8	2.3	<200	25.0	0.6	18.0	3.8	0.67	<0.5 UW, shear zone w/qz and sulf	
100	6557	C	0.98m	6	0.8	22	101	180	7	66	0.5	0.9	<200	41.0	0.7	22.6	4.1	1.10	<0.5 UW, shear w/qz stringers and sulf	
100	6558	C	0.85m	23	3.0	44	278	690	5	6	2.7	1.2	<200	30.0	<0.5	3.5	2.6	3.20	<0.5 UW, shear zone w/qz stringers	
100	6559	C	1.01m	64	1.1	45	229	590	32	11	1.1	0.7	230	33.0	0.6	20.4	4.9	1.50	<0.5 UW, shear w/qz stringers	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
101	6508	C	0.34m	83	7.5	174	127	89	11	54	2.6	4.0	<200	29.0	<0.5	27.0	11.0	0.53	<0.5 UW, sil gd w/qz vein	
101	6509	C	0.43m	12.44*	173.1*	6448	5648	2219	12	4070	17.0	40.7	<200	<29.0	<0.5	<1.1	<1.0	2.20	<0.5 UW, sulf vein w/sparse qz	
101	6510	C	0.55m	240	70.3*	1154	1537	247	6	143	4.7	37.5	<200	43.0	0.7	5.0	2.3	4.10	<0.5 UW, qz stringer w/sulf in gd	
101	6511	C	0.61m	4597	53.5*	774	2487	52	16	2690	5.7	20.8	470	<19.0	<0.5	<0.8	2.4	3.70	<0.5 UW, qz sulf vein	
101	6512	Rep	0.55m	50	10.7	202	739	173	22	324	1.7	7.8	<200	37.0	0.7	4.6	2.5	4.50	0.7 UW, sil gd	
101	6513	C	0.27m	2480	24.0	1444	262	38	20	443	2.0	6.6	<200	15.0	<0.5	3.9	1.9	2.30	<0.5 UW, qz sulf vein	
101	6514	C	0.49m	75	9.3	711	442	109	8	242	1.9	4.1	<200	38.0	0.6	5.0	3.4	4.20	<0.5 UW, gd w/qz blebs	
101	6515	C	0.40m	82	3.6	167	62	57	8	48	2.2	1.7	<200	21.0	0.6	18.0	6.1	1.40	<0.5 UW, gd w/qz lenses	
101	6516	CC	0.30m	4768	100.1*	3305	185	327	77	183	2.4	16.1	<200	10.0	<0.5	1.7	1.9	1.00	<0.5 UW, qz sulf vein	
101	6517	C	0.46m	670	16.7	791	176	184	226	219	2.1	5.6	<200	48.0	0.6	7.9	6.8	4.30	0.5 UW, gd sheared near vein	
102	6150	C	0.46m	2140	69.9*	1869	1328	460	7	19	11.0	26.2	<200	<5.0	<0.5	1.0	1.6	0.74	<0.5 OC, qz vein w/5% sulf	
103	6006	C	0.40m	949	1529*	2961	44.60*	>90000	21	<680	379.0	710.0	<950	<26.0	<0.5	<1.2	<3.9	<0.36	<0.5 UW, msv gn band in qz vein	
103	6612	C	0.21m	36	3.6	359	600	780	116	4	2.9	0.3	<200	17.0	<0.5	2.1	1.8	2.30	<0.5 UW, shear zone w/qz	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
Walker Cove																				
110	8077	S		<5	0.2	186	<2	35	20	-	-	-	-	-	-	-	-	-	- FL, gneiss w/py & po	
111	8076	S		<5	<0.1	26	<2	11	3	15	5	-	-	-	-	-	-	-	- FL, qz segregations in gneiss w/py	
112	8352	S		<5	<0.1	21	<2	51	2	-	-	-	-	-	-	-	-	-	- FL, gneiss w/py, gp	
113	8349	G		<5	<0.1	46	4	10	10	-	-	-	<2	-	-	-	-	-	- OC, qz-rich sc or gneiss w/minor gp	
113	8350	Rep 2.0m		<5	<0.1	2	<2	23	4	-	-	-	<2	-	-	-	-	-	- OC, gp sc/gneiss	
114	8078	RC		<5	2.6	112	4	5	-	-	-	-	-	-	-	-	-	-	- RC, qz vein	
114	8353	S		<5	<0.1	15	<2	3	7	-	-	-	-	-	-	-	-	-	- OC, qz w/py, gp	
115	8079	S		<5	0.3	84	6	166	-	-	-	-	-	-	-	-	-	-	- FL, gp gneiss & sc w/py	
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
Sunshine Island																				
116	7139	C 0.15m		175	0.6	188	17	125	-	-	-	-	-	-	-	-	-	-	- OC, fold-controlled qz veins, cp, py	
Alaskite Nose																				
117	7140	S		6	1.4	<1	719	255	3	-	9	-	6	-	-	-	-	-	- OC, muscovite alaskite, gn, sl, py	
117	7141	S 0.40m		237	88.50*	40	2.35*	2921	4	-	8	-	<2	-	-	-	-	-	- OC, qz-calc veins in alaskite, gn to 10%	
117	7142	Rep 1.52m		7	3.3	<1	1034	156	4	-	18	-	<2	-	-	-	-	-	- UW, alaskite w/qz-calc veins	
Mount Burnett drainages																				
118	7131	PL .077m³		534	<0.1	22	6	50	-	-	-	-	18	123	-	-	-	-	- mag, garnet in concentrate	
119	7132	PL .077m³		4	0.1	10	7	37	-	-	-	-	54	11	-	-	-	-	- mag, garnet	
120	7133	PL .077m³		25	<0.1	11	7	42	-	-	-	-	55	15	-	-	-	-	- two very fine colors, mag, garnet	
121	7134	PL .077m³	2016	0.3	20	7	49	-	-	-	-	-	3166	35	-	-	-	-	- one color, mag	
122	7135	PL .077m³	887	0.1	29	20	80	-	-	-	-	-	53	7	-	-	-	-	- two very fine colors, py, minor mag	
124	7148	PL .077m³	82	<0.1	16	7	77	-	-	-	-	-	1214	53	-	-	-	-	- few colors, minor garnet, trace mag	
Vixen Inlet																				
121	7127	Rep 1.83m		<5	0.3	81	17	121	-	-	-	-	-	-	-	-	-	-	- OC, alt qz bt sc w/black pl host	
121	7128	C 0.58m		<5	0.3	90	14	122	-	-	-	-	-	-	-	-	-	-	- TP, alt pl, disseminated py to 2%	
121	7129	S 0.23m		<5	<0.1	11	7	5	-	-	-	-	-	-	-	-	-	-	- TP, qz float (dump), lower pit	
121	7137	S 0.10m		<5	1.2	109	89	11	-	-	-	-	-	-	-	-	-	-	- OC, qz vein, cp, ml, py	
121	7138	Rep 9.15m x 4.57m		<5	<0.1	23	10	21	-	-	-	-	-	-	-	-	-	-	- OC, qz veins/veinlets, py on margins	
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Fe	W	Pt	Pd	Co	Te	Cr	V	Sample Description
Bennyville																				
123	7130	S		<1	<0.1	24	7	51	-	-	-	45.64*	-	22	9	-	-	-	-	- OC, mag pyroxenite

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
Margaret Creek																				
125	7156	S		12	1.6	285	24	108	45	-	-	-	-	-	-	-	-	-	- OC, br black pl, py to 8%, trace cp	
125	7157	C	1.62m	10	0.2	85	14	93	20	-	-	-	-	-	-	-	-	-	- OC, br black pl/gp sc, py blebs to 5%	
126	7166	S		8	<0.1	134	10	37	-	-	-	-	-	-	-	-	-	-	- OC, qz at contact of hnbd di-black sc, cp	
127	7167	S		6	0.7	361	17	29	-	28	-	-	-	-	-	-	-	-	- RC, alt hnbd di, po to 15%, cp	
127	7168	C	1.37m	10	0.4	353	10	170	-	36	-	-	-	-	-	-	-	-	- OC, sil di, shear zone w/qz, po	
128	7158	Rep	6.10m	<5	0.2	61	12	132	-	-	-	-	-	-	-	-	-	-	- TP, bt sc w/qz, py to 3%	
Wixon																				
129	7403	Rep	3.05m	267	0.9	243	32	8	-	-	-	-	-	-	-	-	-	-	- TP, composite from 13 small qz veins	
129	7409	S		4698	2.4	64	719	12	-	-	<20	-	<20	-	-	-	<10	302	7 OC, qz vein w/ gn, sl, cp, py to 5%	
Sleeping Beauty																				
130	7043	C	1.52m	7737	0.3	70	8	64	-	-	12	-	18	-	-	0.5	-	-	- TP, chl sc (70%), qz (30%), py to 3% on fw	
130	7044	C	0.61m	13.61*	0.6	38	7	44	-	-	-	-	-	-	-	-	-	-	- TP, chl sc w/0.5m qz vein, fest	
130	7046	C	0.79m	2255	<0.1	152	6	71	-	-	15	-	6	-	-	<0.2	-	-	- UW, qz-calc veins in chl sc, visible Au	
130	7047	C	0.73m	3267	<0.1	20	6	37	-	-	-	-	-	-	-	-	-	-	- UW, concordant qz veins, chl sc, py 5%	
130	7048	S		61	<0.1	45	3	44	-	-	-	-	-	-	-	-	-	-	- OC, stockwork veins w/minor gs sc	
Portland																				
131	7010	C	0.61m	9596	1.2	77	23	46	-	-	8	-	5	-	-	<0.2	-	-	- UW, sheared chl sc, py 3-15%	
131	7011	C	1.55m	5702	0.7	8	15	28	-	-	-	-	-	-	-	-	-	-	- UW, qz vein, py <2%, adj to fault	
131	7012	C	0.85m	1388	0.2	2	8	8	-	-	-	-	-	-	-	-	-	-	- UW, qz vein w/ minor chl sc, py to 8%	
131	7013	C	0.55m	14.88*	1.3	47	15	66	-	-	-	-	-	-	-	-	-	-	- UW, chl sc 75%, qz vein 25%, py in sc	
131	7014	C	0.49m	2532	0.6	19	20	36	-	-	8	-	3	-	-	<0.2	-	-	- UW, qz, chl sc w/py to 20%	
131	7015	C	1.22m	5383	0.9	510	12	40	-	-	-	-	-	-	-	-	-	-	- UW, pyritic chl sc w/py <2%	
131	7016	SC	3.05m @ 0.15m	5610	0.8	501	12	36	-	-	-	-	-	-	-	-	-	-	- UW, qz vein w/chl sc partings, py to 5%	
131	7017	C	0.76m	774	0.3	133	11	44	-	-	-	-	-	-	-	-	-	-	- UW, chl sc, qz, py to 2%	
131	7018	C	0.91m	1388	0.3	37	12	46	-	-	-	-	-	-	-	-	-	-	- UW, qz vein w/chl sc partings, py to 3%	
131	7019	C	0.73m	6699	0.8	89	7	22	-	-	-	-	-	-	-	-	-	-	- UW, qz vein 30%, chl sc 70%, py in sc	
131	7020	C	0.76m	38	<0.1	40	13	72	-	-	-	-	-	-	-	-	-	-	- UW, chl sc, fw of main fault	
131	7021	C	1.52m	177	<0.1	106	8	79	-	-	-	-	-	-	-	-	-	-	- UW, chl sc, adj to 7021, hw	
131	7022	C	3.05m	738	<0.1	76	8	63	-	-	-	-	-	-	-	-	-	-	- UW, qz w/pyritic chl sc, py to 10%	
131	7023	Rep	0.46m	54.03*	5.8	21	28	19	-	-	12	-	7	-	-	0.9	-	-	- OC, gs sc (65%), qz (35%), minor py	
132	7045	C	1.52m	145	<0.1	32	4	54	-	-	-	-	-	-	-	-	-	-	- OC, chl sc (30%), qz (70%), py <1%	
132	7049	C	0.61m	3941	0.3	45	7	38	-	-	-	-	-	-	-	-	-	-	- OC, chl sc (50%), qz (50%), py <1%	
132	7050	C	0.61m	155	<0.1	45	4	56	-	-	-	-	-	-	-	-	-	-	- TP, qz veins w/py chl sc, py to 20%	
132	7051	C	0.46m	6567	1.0	17	10	43	-	-	11	-	9	-	-	<0.2	-	-	- TP, pyritic chl sc, py to 30%, see 7051	
132	7052	S	0.46m	18.86*	2.0	52	18	88	-	-	-	-	-	-	-	-	-	-	- TP, qz vein in creek south of trench	
132	7053	C	0.37m	8353	0.7	195	6	35	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/chl sc, py to 10% in sc	
132	7054	Rep	3.66m	221	<0.1	21	<2	15	-	-	-	-	-	-	-	-	-	-	- UW, qz vein in creek south of trench	
Freeland																				
133	7024	C	0.73m	6275	2.5	51	10	39	-	-	7	-	<2	-	-	1.9	-	-	- UW, qz vein w/chl sc, py to 10%, fest	
133	7025	S	0.76m	17.31*	7.7	49	24	41	-	-	11	-	10	-	-	6.4	-	-	- UW, pyrite-rich ore, see 7024 for rep	
133	7026	C	0.95m	736	0.3	114	6	33	-	-	-	-	-	-	-	-	-	-	- UW, qz-calc vein in pyritic chl sc	
133	7027	C	0.37m	2708	1.9	14	54	40	-	-	8	-	8	-	-	0.6	-	-	- UW, chl sc, fault gouge	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
133	7028	C	1.07m	496	0.6	90	12	52	-	-	-	-	-	-	-	-	-	-	-	- UW, qz, chl sc in fault zone
133	7029	Rep	1.52m	126	<0.1	136	7	77	-	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/10% qz-calc component
133	7030	C	1.52m	476	0.2	71	7	41	-	-	-	-	-	-	-	-	-	-	-	- UW, qz vein swarm in sheared chl sc
133	7031	Rep	1.68m	902	0.3	92	10	38	-	-	-	-	-	-	-	-	-	-	-	- UW, qz-calc vein swarm/bleached chl sc
133	7032	C	1.37m	33	<0.1	19	3	27	-	-	-	-	-	-	-	-	-	-	-	- UW, qz-calc vein w/<20% chl sc, py <5%
133	7033	C	1.68m	79	<0.1	69	3	32	-	-	-	-	-	-	-	-	-	-	-	- UW, qz-calc vein w/20% chl sc, py <2%
133	7034	C	0.91m	390	0.2	45	13	23	-	-	-	-	-	-	-	-	-	-	-	- UW, qz-calc vein w/chl sc partings
133	7035	C	0.52m	2027	0.6	88	6	39	-	-	-	-	-	-	-	-	-	-	-	- UW, qz-calc vein w/chl sc, py in fw
133	7036	C	0.46m	45	<0.1	26	7	32	-	-	-	-	-	-	-	-	-	-	-	- UW, qz in chl sc, shear zone
133	7037	C	0.55m	130	<0.1	91	9	46	-	-	-	-	-	-	-	-	-	-	-	- UW, sheared chl sc w/qz-calc vein
133	7038	C	1.68m	25	<0.1	104	8	78	-	-	-	-	-	-	-	-	-	-	-	- UW, qz veins in chl sc; 50:50 ratio
133	7039	C	1.83m	566	<0.1	86	5	46	-	-	-	-	-	-	-	-	-	-	-	- UW, qz veins w/in py chl sc, py to 10%
133	7040	C	0.91m	1621	0.3	41	11	53	-	-	9	-	<2	-	-	-	<0.2	-	-	- UW, qz veins/chl sc partings
133	7041	C	0.55m	747	<0.1	39	4	26	-	-	-	-	-	-	-	-	-	-	-	- UW, qz vein w/chl sc, minor py
133	7042	C	0.61m	1014	<0.1	83	6	43	-	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (40%), qz (60%), minor py
133	7347	C	1.22m	621	0.3	26	12	33	-	-	-	-	-	-	-	-	-	-	-	- UW, qz veins w/py gs sc, resample of 7034
134	7355	C	2.29m	1182	0.1	34	3	13	-	-	-	-	-	-	-	-	-	-	-	- TP, qz (90%), gs sc (10%), py <1%
134	7361	C	0.61m	10	<0.1	22	4	38	-	-	-	-	-	-	-	-	-	-	-	- TP, qz (90%), gs sc (10%), trace py
134	7362	C	1.83m	3361	1.4	9	7	22	-	-	-	-	-	-	-	-	-	-	-	- TP, qz (80%),gs sc (20%),py to 10% locally
134	7369	C	1.83m	1209	0.3	73	6	52	-	-	-	-	-	-	-	-	-	-	-	- UW, qz (80%), alt sc (20%), py <1%
134	7370	C	0.91m	4300	1.1	9	7	11	-	-	-	-	-	-	-	-	-	-	-	- TP, qz (75%), alt sc (25%), py to 5%, near adits
134	7371	C	0.88m	157	0.2	102	7	57	-	-	-	-	-	-	-	-	-	-	-	- UW, qz veins in gs sc, py to 15% in sc
135	7348	C	0.27m	9	0.1	4	4	2	-	-	-	-	-	-	-	-	-	-	-	- TP, qz vein, py clots, limonite
135	7349	C	0.64m	30	<0.1	3	3	5	-	-	-	-	-	-	-	-	-	-	-	- OC, qz vein-crushed, same vein as 7348
135	7350	Rep	1.52m	471	1.0	70	21	34	-	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/gs sc partings, py to 15%
135	7351	C	0.30m	1128	0.6	44	10	114	-	-	-	-	-	-	-	-	-	-	-	- TP, py alt sc, py to 20%
135	7352	Rep	0.46m	1584	1.4	6	20	18	-	-	-	-	-	-	-	-	-	-	-	- TP, alt di w/py to 20%
135	7353	C	1.22m	285	0.2	116	6	34	-	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/chl sc partings
135	7354	C	1.52m	352	0.2	11	5	20	-	-	-	-	-	-	-	-	-	-	-	- TP, qz (60%), trachytic di (40%), irregular veins
135	7356	C	1.52m	5529	1.1	92	16	36	-	-	-	-	-	-	-	-	-	-	-	- TP, gs sc (70%), qz (30%), py to 10% sc
135	7357	C	1.52m	611	0.3	59	7	38	-	-	-	-	-	-	-	-	-	-	-	- TP, gs sc (70%), qz (30%), py on margin
135	7358	C	1.52m	660	0.2	150	7	87	-	-	-	-	-	-	-	-	-	-	-	- TP, gs sc (90%), qz (10%), py to 2%
135	7359	C	1.52m	3092	0.5	81	10	70	-	-	-	-	-	-	-	-	-	-	-	- TP, gs sc (80%), qz (20%), fest, 10% py
135	7360	C	2.13m	554	0.6	55	9	29	-	-	-	-	-	-	-	-	-	-	-	- OC, qz (60%), gs sc (40%), py to 25% sc
135	7363	C	0.61m	149	0.2	36	11	21	-	-	-	-	-	-	-	-	-	-	-	- TP, qz (70%), gs sc (30%), py in sc to 10%
135	7364	C	1.52m	91	<0.1	44	5	53	-	-	-	-	-	-	-	-	-	-	-	- TP, gs sc (65%), qz (35%), py in sc
135	7365	C	1.37m	813	0.3	22	7	15	-	-	-	-	-	-	-	-	-	-	-	- OC, qz (75%), alt gs sc (25%), py in sc to 25%
135	7366	C	1.37m	828	0.3	18	5	22	-	-	-	-	-	-	-	-	-	-	-	- TP, qz (95%), gs sc (5%), py to 5%
135	7367	C	0.76m	22	<0.1	4	3	3	-	-	-	-	-	-	-	-	-	-	-	- TP, qz, near Mahoney Cut
135	7368	C	1.22m	2655	4.2	17	44	18	-	-	-	-	-	-	-	-	-	-	-	- TP, qz (50%), alt gs sc (50%), py to 25%
Gold Standard																				
136	7110	C	0.55m	3220	0.8	12	15	21	-	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (30%), qz (70%), py to 10%
136	7112	C	0.40m	23.14*	3.7	44	15	30	-	-	10	-	10	-	-	-	3.6	-	-	- UW, qz (90%), chl sc (10%), py 5-10%
136	7113	C	0.40m	9720	3.2	103	11	29	-	-	8	-	14	-	-	-	6.1	-	-	- TP, qz (75%), chl sc (25%), py to 15%

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
136	7114	C	0.73m	246	<0.1	18	3	13	-	-	-	-	-	-	-	-	-	-	- TP, msv qz in fault, chl sc fragments	
136	7115	Rep	1.37m	5382	1.2	79	12	43	-	-	7	-	<2	-	-	-	1.3	-	- UW, alt gs w/qz-calc veins, py to 5%	
136	7116	C	0.55m	1500	0.3	41	8	14	-	-	12	-	<2	-	-	-	0.5	-	- TP, qz vein w/gs partings, py to 5%	
136	7117	C	0.61m	125	<0.1	41	3	19	-	-	-	-	-	-	-	-	-	-	- TP, qz-calc vein w/gs fw, py to 1%	
136	7118	C	0.61m	37	<0.1	1	<2	2	-	-	-	-	-	-	-	-	-	-	- OC, qz, trace py	
136	7119	C	0.37m	6847	0.8	<1	4	3	-	-	-	-	-	-	-	-	-	-	- TP, qz vein in bleached sc, py to 1%	
136	7120	C	0.64m	74	<0.1	<1	<2	<1	-	-	-	-	-	-	-	-	-	-	- OC, qz vein above shaft - barren	
136	7123	S	78.62*	14.3	93	18	5	-	-	-	12	-	<2	-	-	-	3.8	-	- FL, Folwarzny vein, py to 50% in bands	
136	7124	C	0.43m	5550	2.0	<1	<2	7	-	-	-	-	-	-	-	-	-	-	- OC, Folwarzny vein, py in fw, hw barren	
137	7121	C	0.40m	5380	3.4	1	3	1	-	-	14	-	<2	-	-	-	4.4	-	- OC, qz vein, py to 3% in clots	
137	7399	C	0.27m	549	<0.1	2	4	3	-	-	-	-	-	-	-	-	-	-	- OC, parallel qz vein above 7121, py <1%	
137	7400	C	0.24m	<5	<0.1	4	3	3	-	-	-	-	-	-	-	-	-	-	- OC, qz vein, same vein as 7399	
141	7055	C	0.98m	856	<0.1	21	3	17	-	-	8	-	4	-	-	<0.2	-	-	- TP, qz vein (85%), chl sc (15%), ribbon texture	
141	7056	C	1.52m	10.49*	2.5	266	9	59	-	-	13	-	3	-	-	-	0.8	-	- UW, chl sc (70%), qz (30%), py 3-5%	
141	7057	C	1.52m	12.41*	1.1	370	10	70	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (90%), qz (10%), py to 4%, near 7056	
141	7058	C	1.07m	1099	0.2	77	7	41	-	-	-	-	-	-	-	-	-	-	- TP, chl sc (50%), qz (50%), py to 2%, near 7055	
141	7059	C	1.52m	2396	1.3	89	14	62	-	-	-	-	-	-	-	-	-	-	- TP, chl sc (45%), qz (50%), basalt (5%)	
141	7060	C	1.52m	35	<0.1	34	6	56	-	-	-	-	-	-	-	-	-	-	- TP, qz (70%), alt chl sc (30%), py <1%	
141	7061	C	0.40m	887	<0.1	129	7	60	-	-	-	-	-	-	-	-	-	-	- TP, py chl sc (85%), qz (15%), py 2-3%	
141	7062	C	0.91m	7490	0.4	21	3	16	-	-	-	-	-	-	-	-	-	-	- TP, qz (90%), alt chl sc (10%), py 1-2%	
141	7063	C	1.22m	173.4*	19.6	21	21	43	-	-	10	-	6	-	-	-	5.1	-	- MD, chl sc w/abundant py to 20%	
141	7064	C	0.85m	266	<0.1	13	3	35	-	-	-	-	-	-	-	-	-	-	- TP, qz veins; 1 barren, 1 fest w/py	
141	7065	Rep	0.88m	19.37*	2.7	16	12	8	-	-	8	-	<2	-	-	-	1.9	-	- TP, qz vein, py to 10% along margins	
141	7066	C	0.88m	14.30*	1.8	266	12	26	-	-	-	-	-	-	-	-	-	-	- TP, qz, chl sc, see 7065, py to 5%	
141	7067	C	1.52m	10.63*	1.0	167	10	73	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (60%), qz (40%), py 3-5%	
141	7068	C	1.52m	1954	0.3	203	6	84	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (75%), qz (25%), cont w/7067	
141	7069	C	1.22m	461	<0.1	120	6	77	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (65%), qz (35%), py to 1%	
141	7070	C	1.52m	16.83*	7.1	135	6	64	-	-	-	-	-	-	-	-	-	-	- UW, chl sc, py <1%	
141	7071	C	1.52m	331	<0.1	143	6	67	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (60%), qz vein swarm (40%)	
141	7072	C	1.22m	594	<0.1	142	8	55	-	-	-	-	-	-	-	-	-	-	- UW, qz, chl sc, py to 5% in sc	
141	7073	C	1.16m	3332	0.8	145	8	51	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/qz vein (20%), minor py	
141	7074	C	1.52m	331	<0.1	161	6	87	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/10% qz, py on margins	
141	7075	Rep	3.05m	742	0.1	106	6	35	-	-	11	-	14	-	-	<0.2	-	-	- UW, qz clots/stringers in gs flow	
141	7076	C	1.52m	18	<0.1	26	7	71	-	-	-	-	-	-	-	-	-	-	- UW, chl sc, qz, cont w/7071	
141	7077	C	1.52m	<5	<0.1	22	6	99	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (65%), qz (35%), py <1%	
141	7078	S	8705	0.8	<1	13	7	-	-	-	9	-	6	-	-	-	0.6	-	- UW, qz (95%), chl sc (5%), py 5-10%	
141	7079	C	1.52m	107	<0.1	37	5	86	-	-	-	-	-	-	-	-	-	-	- TP, chl sc (80%), qz (20%), py <1%	
141	7080	C	1.52m	209	<0.1	115	7	87	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/qz stringers/veinlets	
141	7081	C	1.52m	91	<0.1	219	5	94	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/py to 5%, minor qz	
141	7082	C	0.46m	17	<0.1	16	3	12	-	-	-	-	-	-	-	-	-	-	- TP, qz (98%), chl sc (2%), opposite 7079	
141	7083	C	1.52m	14	<0.1	1	<2	3	-	-	-	-	-	-	-	-	-	-	- OC, large qz pod	
141	7084	C	1.52m	20.54*	4.0	108	10	60	-	-	9	-	8	-	-	-	1.2	-	- TP, chl sc (70%), qz (30%), py 3-5%, main ore zone	
141	7085	C	1.52m	3680	0.2	66	9	72	-	-	8	-	10	-	-	-	0.8	-	- TP, chl sc (80%), qz (20%), adj to 7084	
141	7086	C	1.52m	17.86*	5.9	42	10	32	-	-	-	-	-	-	-	-	-	-	- TP, chl sc (70%), fel sc (20%), qz (10%), py to 20%	
141	7087	S	25.17*	12.3	23	10	36	-	-	-	10	-	6	-	-	-	8.2	-	- TP, chl/fel sc, py 10-20%	
141	7088	C	1.07m	191	<0.1	42	7	76	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (65%), qz (35%), py <1%	
141	7089	S	0.08m	2807	0.3	19	13	27	-	-	12	-	7	-	-	<0.2	-	-	- UW, qz vein in fault w/chl sc, py to 15%	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
141	7090	C	0.30m	1389	0.2	16	<2	6	-	-	-	-	-	-	-	-	-	-	- TP, qz vein offset by fault	
141	7091	C	1.22m	30.10*	3.8	106	9	52	-	-	-	-	-	-	-	-	-	-	- TP, qz (20%), chl sc (80%), py to 4% in sc	
141	7092	C	1.22m	2535	<0.1	85	8	63	-	-	9	-	6	-	-	-	<0.2	-	- TP, qz veins, chl sc, py to 3%	
141	7093	C	1.52m	234	<0.1	59	5	25	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/minor sc, in window of glory hole	
141	7094	C	1.37m	8116	1.2	66	7	30	-	-	-	-	-	-	-	-	-	-	- TP, qz veins w/chl sc, py to 5%	
141	7095	S		17.04*	3.5	131	11	72	-	-	10	-	6	-	-	-	3.0	-	- TP, chl sc, select from 7094, py to 10%	
141	7096	C	2.13m	93	<0.1	176	7	85	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (85%), qz veinlets (15%)	
141	7097	C	1.52m	35.90*	9.7	39	16	32	-	-	8	-	<2	-	-	-	5.6	-	- UW, chl sc (95%), qz (5%), py to 15%, hw of fault	
141	7098	C	1.52m	44.40*	9.4	113	9	59	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (75%), qz (25%), py 2-5%	
141	7099	C	1.52m	3227	1.3	97	8	55	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (95%), qz (5%), cont w/7098	
141	7102	C	1.52m	7050	1.4	330	10	55	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/qz pods, sc warped	
141	7103	Rep	0.61m	2955	0.3	90	8	46	-	-	-	-	-	-	-	-	-	-	- UW, qz vein w/chl sc-fault zone, py to 8%	
141	7104	C	1.22m	28.63*	8.0	63	8	17	-	-	<5	-	<2	-	-	-	3.0	-	- UW, bleached chl sc w/2 qz veins, py to 2%	
141	7401	C	2.13m	1458	<0.1	180	7	80	-	-	-	-	-	-	-	-	-	-	- TP, chl sc (85%), qz (15%), py to 1%	
141	7402	C	1.37m	614	<0.1	242	6	95	-	-	-	-	-	-	-	-	-	-	- TP, chl sc, py to 3%, near 7056	
Lakeview																				
138	7100	C	0.82m	1708	1.8	16	<2	3	-	-	13	-	<2	-	-	-	3.0	-	- TP, qz vein, py to 1%, ribboned on fw	
138	7101	C	0.52m	2270	2.2	53	5	7	-	-	-	-	-	-	-	-	-	-	- UW, qz vein, py to 1%, horizontal slick	
138	7105	C	0.46m	328	0.1	1	<2	3	-	-	-	-	-	-	-	-	-	-	- TP, qz veins in gs, no visible py	
138	7106	C	0.82m	298	0.3	35	<2	7	-	-	-	-	-	-	-	-	-	-	- TP, qz vein, fw min, hw not	
138	7107	C	0.21m	5564	5.7	14	4	6	-	-	13	-	<2	-	-	-	6.1	-	- TP, qz, py 1-3%, sil gs in hw, fest	
138	7108	C	0.40m	5382	4.1	14	32	3	-	-	-	-	-	-	-	-	-	-	- TP, ribboned qz w/py to 2%	
138	7111	C	0.40m	8694	7.5	393	54	4	-	-	-	-	-	-	-	-	-	-	- TP, qz vein, ribboned on fw	
138	7122	Rep	0.61m	12.72*	4.4	74	7	20	-	-	-	-	-	-	-	-	-	-	- TP, qz vein, pyritic chl sc, py to 10%	
139	7109	C	0.27m	319	<0.1	<1	<2	<1	-	-	-	-	-	-	-	-	-	-	- TP, qz vein, py to 1%, above trench in gully	
Lone Jack/Helm Bay																				
140	7125	C	0.37m	34	<0.1	94	4	66	-	-	-	-	-	-	-	-	-	-	- UW, sheared chl sc, disseminated py to 3%	
140	7126	C	0.10m	7590	2.9	19	<2	3	-	-	-	-	-	-	-	-	-	-	- UW, qz vein in shear, fest	
Snowstorm																				
142	7385	Rep	0.24m	6	<0.1	5	2	3	-	-	-	-	-	-	-	-	-	-	- OC, qz vein on beach	
142	7389	Rep	0.23m x 1.52m	87	<0.1	14	<2	5	-	-	-	-	-	-	-	-	-	-	- OC, qz vein in fold hinge, py to 2%	
142	7390	Rep	0.37m x 1.83m	<5	<0.1	9	3	3	-	-	-	-	-	-	-	-	-	-	- OC, qz vein intersection, py to 2%	
142	7397	Rep	0.23m x 0.61m	38	0.1	5	8	6	-	-	-	-	-	-	-	-	-	-	- OC, qz vein near adit-trenches	
142	7398	Rep	0.15m x 3.05m	125	<0.1	11	5	9	-	-	-	-	-	-	-	-	-	-	- UW, qz, gs sc, trace py	
142	7404	C	0.15m	1691	<0.1	7	3	4	-	-	-	-	-	-	-	-	-	-	- OC, qz vein, fest, no visible py	
142	7405	C	0.46m	9697	0.5	141	5	35	-	-	-	-	-	-	-	-	-	-	- OC, qz (75%), gs sc (25%), py in clots	
142	7406	Rep	0.15m x 0.61m	6	<0.1	111	5	21	-	-	-	-	-	-	-	-	-	-	- OC, qz-calc vein w/gs sc from creek	
142	7407	Rep	0.15m x 3.05m	383	<0.1	10	<2	3	-	-	-	-	-	-	-	-	-	-	- OC, qz vein, visible Au found nearby	
142	7408	Rep	0.37m x 1.52m	<5	<0.1	12	<2	3	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/trace py	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
Last Chance																				
143	7006	C	3.05m	<5	<0.1	54	4	86	-	-	-	-	-	-	-	-	-	-	- UW, bleached chl sc, fest, disseminated py to 1%	
143	7007	C	3.05m	<5	<0.1	50	3	61	-	-	-	-	-	-	-	-	-	-	- UW, bleached chl sc, fest, py to 1%	
143	7008	C	3.05m	16	0.1	101	5	75	-	-	-	-	-	-	-	-	-	-	- TP, bleached gs sc, fest, disseminated py	
143	7009	C	3.05m	9	<0.1	45	5	80	-	-	-	-	-	-	-	-	-	-	- TP, bleached chl sc, py to 1%	
Beulah																				
144	7374	Rep	0.91m	42	<0.1	77	11	67	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), py to 5%	
144	7375	C	0.91m	12	<0.1	69	9	75	-	-	-	-	-	-	-	-	-	-	- UW, qz (75%), gs sc (25%), py in sc	
144	7376	C	0.23m	10	<0.1	26	9	14	-	-	-	-	-	-	-	-	-	-	- UW, qz (95%), gs sc (5%), ankerite, py	
144	7377	C	2.13m	1376	0.2	8	5	4	-	-	-	-	-	-	-	-	-	-	- TP, qz, 25% py on margin near sc	
144	7378	Rep		3303	0.7	58	14	26	-	-	<20	-	<20	-	-	-	<10	22	17 TP, py sc on fw of vein	
144	7379	C	1.22m	107	<0.1	13	5	15	-	-	-	-	-	-	-	-	-	-	- TP, qz (75%), alt gs sc (25%), py <1%	
144	7380	C	0.24m	190	<0.1	<1	4	5	-	-	-	-	-	-	-	-	-	-	- TP, qz w/limonite, no visible py	
144	7381	C	0.43m	<5	<0.1	2	<2	4	-	-	-	-	-	-	-	-	-	-	- TP, qz, py <1%	
144	7382	C	0.30m	7	<0.1	9	4	15	-	-	-	-	-	-	-	-	-	-	- OC, qz (90%), gs sc (10%), above adit	
144	7383	C	0.52m	409	0.3	17	7	47	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/py sc on hw/fw	
144	7384	C	0.98m	1515	0.2	81	8	18	-	-	<20	-	<20	-	-	-	<10	149	14 UW, qz veins/py sc in fault zone	
144	7388	C	0.46m	562	0.5	4	<2	5	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/minor sc, py in clots	
Puzzler																				
145	7001	C	1.52m	<5	0.1	137	5	64	-	-	-	-	-	-	-	-	-	-	- UW, sheared metadi - chl sc	
145	7002	C	1.22m	7	<0.1	41	4	82	-	-	-	-	-	-	-	-	-	-	- UW, sheared metadi, py 1-3%	
145	7003	C	1.52m	51	<0.1	121	10	54	-	-	10	-	<2	-	-	-	-	-	- UW, sheared metadi, py 1-3%	
145	7004	Rep		<5	0.1	53	6	116	-	-	-	-	-	-	-	-	-	-	- UW, fel sc w/abundant py, qz	
145	7005	C	1.22m	17	<0.1	37	4	61	-	-	-	-	-	-	-	-	-	-	- OC, metadi	
Bugge Basin																				
146	7320	C	0.34m	10	<0.1	19	6	81	-	-	-	-	-	-	-	-	-	-	- OC, qz vein, gs sc, py <1%	
Hoffman																				
147	7322	C	0.15m	2642	0.4	43	10	7	-	-	-	-	-	-	-	-	-	-	- UW, qz, py to 5%, 3m from face	
147	7323	C	0.30m	903	0.2	10	4	3	-	-	-	-	-	-	-	-	-	-	- UW, qz, py to 5%, 6m from portal	
Annie																				
148	7270	C	0.91m	314	0.1	66	9	79	-	-	-	-	-	-	-	-	-	-	- UW, qz (30%), gs sc (70%), py in clots	
148	7271	C	1.52m	9040	0.9	55	10	65	-	-	-	-	-	-	-	-	-	-	- UW, qz (30%), gs sc (70%), py to 15%	
148	7272	C	1.83m	5781	1.2	109	17	65	-	-	-	-	-	-	-	-	-	-	- UW, qz (20%), gs sc (80%), gouge zone	
148	7274	C	1.83m	5727	0.7	132	8	81	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (95%), qz (5%), py to 10% sc	
148	7275	C	0.30m	3663	0.3	69	16	67	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (40%), qz (60%), py halos	
148	7276	C	1.52m	181	<0.1	68	8	97	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (95%), qz (5%), face of drift	
148	7277	C	1.52m	1554	0.5	189	9	95	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), py along shear	
148	7278	C	1.52m	2416	0.3	123	5	25	-	-	-	-	-	-	-	-	-	-	- UW, qz (95%), gs sc (5%), at drift junction	
148	7279	C	1.52m	763	0.1	71	7	91	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (55%), qz (45%), py to 5%	
148	7281	C	1.52m	555	0.2	65	7	97	-	-	-	-	-	-	-	-	-	-	- UW, qz veins in gs sc, py to 10% in sc	
148	7282	C	1.68m	666	0.1	80	10	95	-	-	-	-	-	-	-	-	-	-	- UW, qz veins in gs sc/fault zone, hw-py	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
148	7283	C	1.52m	276	<0.1	82	7	108	-	-	-	-	-	-	-	-	-	-	- UW, gs sc w/minor qz stringers, 5% py	
149	7280	C	1.37m	13	<0.1	240	7	74	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (80%), qz (20%), sil, no py	
149	7285	C	0.24m	423	0.3	33	8	88	-	-	-	-	-	-	-	-	-	-	- UW, qz veins, gs sc, near shaft, py <1%	
149	7286	C	0.91m	54	0.1	79	7	71	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (75%), qz (25%), py to 3% sc	
149	7287	C	0.84m	6261	1.4	23	14	35	-	-	-	-	-	-	-	-	-	-	- UW, qz (50%), gs sc (50%), py to 20%	
149	7288	C	0.91m	565	0.1	87	8	105	-	-	-	-	-	-	-	-	-	-	- UW, gs sc, py to 5% near fw	
149	7289	C	0.91m	1317	1.0	53	9	85	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (85%), qz (15%), py 1-10%	
149	7290	C	1.52m	155	0.2	47	10	76	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (70%), qz (30%), py 2-3%	
149	7291	C	1.52m	910	0.1	57	8	103	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (95%), qz (5%), adj to 7290	
149	7292	C	1.52m	361	0.3	144	12	90	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), py to 10%	
149	7293	C	1.52m	954	0.4	75	11	88	-	-	-	-	-	-	-	-	-	-	- UW, sheared gs sc w/minor qz, py to 5%	
149	7294	C	1.68m	52	<0.1	74	7	95	-	-	-	-	-	-	-	-	-	-	- UW, py gs sc, sheared	
149	7295	C	1.68m	277	0.1	69	8	92	-	-	-	-	-	-	-	-	-	-	- UW, py gs sc w/0.33m qz vein, py in hw	
149	7296	C	1.07m	98	0.1	115	12	67	-	-	-	-	-	-	-	-	-	-	- UW, bleached sericite sc, gs, qz w/py	
149	7297	C	1.98m	49	<0.1	69	7	81	-	-	-	-	-	-	-	-	-	-	- UW, py gs sc w/qz pods, py to 20%	
149	7298	C	2.44m	20	<0.1	73	7	101	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (98%), qz (2%), py to 5%	
149	7299	S	0.40m	99.94*	18.3	21	16	18	-	-	-	-	-	-	-	-	-	-	- UW, qz vein w/gs sc, high-grade of 7287	
150	7284	C	0.30m	364	0.1	6	2	5	-	-	-	-	-	-	-	-	-	-	- UW, qz (95%), gs sc (5%), py in clots	
Lone Jack/Gold Mountain																				
151	7314	C	1.52m	2258	0.3	127	9	78	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), py to 10%	
151	7315	C	1.52m	333	0.2	167	10	109	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), py to 8%	
151	7316	C	1.52m	20	0.1	176	9	101	-	-	-	-	-	-	-	-	-	-	- UW, gs sc, py to 5% in fest zone	
152	7300	C	1.22m	564	0.6	60	6	68	-	-	-	-	-	-	-	-	-	-	- UW, broken qz in gs, trace py	
152	7301	C	1.52m	1995	0.5	88	9	65	-	-	-	-	-	-	-	-	-	-	- UW, qz veins in gs sc, main shear zone	
152	7302	C	1.37m	1501	0.1	37	7	49	-	-	-	-	-	-	-	-	-	-	- UW, qz (80%), gs sc (20%), visable Au, py to 5%	
152	7303	C	1.52m	350	0.1	218	7	74	-	-	-	-	-	-	-	-	-	-	- UW, qz (50%),gs sc (50%),py to 5% in sc	
Alexandra																				
153	7321	C	1.22m	<5	<0.1	26	5	50	-	-	-	-	-	-	-	-	-	-	- OC, qz (70%), alt fel sc (30%)	
Novatney																				
154	7317	C	0.64m	2830	4.1	20	9	27	-	-	-	-	-	-	-	-	-	-	- TP, qz vein, sc margins, py to 10% hw	
154	7318	C	1.04m	36	0.1	9	3	4	-	-	-	-	-	-	-	-	-	-	- TP, qz vein, limonite	
154	7319	C	0.76m	937	1.1	19	7	14	-	-	-	-	-	-	-	-	-	-	- TP, qz (95%), chl sc (5%), py to 15% sc	
Mountain Top																				
155	7304	C	0.61m	1570	0.7	55	6	117	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/in chl sc, oxidized	
155	7305	C	0.61m	106	<0.1	6	2	10	-	-	-	-	-	-	-	-	-	-	- TP, qz vein exposed in shaft	
156	7311	Rep		103	<0.1	3	3	11	-	-	-	-	-	-	-	-	-	-	- FL, qz excavated from trench	
156	7312	C	1.07m	22	0.1	118	9	90	-	-	-	-	-	-	-	-	-	-	- OC, bleached chl sc, fest, py to 8%	
Jewel																				
157	7306	C	0.84m	395	0.2	98	7	92	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (95%), qz (5%), minor py	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
157	7307	C	0.40m	17.21*	2.2	88	7	75	-	-	-	-	-	-	-	-	-	-	- UW, qz vein in gs sc, py to 4% in stringers	
157	7308	C	0.61m	11.38*	1.9	89	6	68	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (85%), qz (15%), py on vein margin	
157	7309	C	0.61m	5578	0.8	102	8	92	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (65%), qz (35%), py 1-10%	
157	7310	C	0.91m	1321	0.1	6	4	5	-	-	-	-	-	-	-	-	-	-	- TP, qz in vein above adit portal	
157	7313	C	0.76m	4473	0.6	53	4	36	-	-	-	-	-	-	-	-	-	-	- TP, qz vein, opposite gully from 7310	
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Rainy Day																				
158	7393	S		11.38*	27.7	16	1714	10	5	-	-	-	-	-	-	-	-	-	- MD, qz from dump, gn, cp	
158	7394	C	0.61m	4478	4.1	16	300	10	3	-	-	-	-	-	-	-	-	-	- TP, banded qz on fw, cp, gn, sl, py	
158	7395	C	0.52m	4605	13.7	17	694	11	7	-	-	-	-	-	-	-	-	-	- TP, qz, alt granite porph w/sulf	
158	7396	C	0.61m	4646	7.3	141	219	26	2	-	-	-	-	-	-	-	-	-	- TP, qz (60%), granite porph (40%), py>cp>gn>sl	
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Keystone																				
159	7256	C	1.83m	4470	0.5	131	13	105	-	-	-	-	-	-	-	-	-	-	- UW, qz (10%), chl sc (90%), py to 20%	
159	7257	C	1.52m	593	0.3	92	9	50	-	-	-	-	-	-	-	-	-	-	- UW, qz veins in py chl sc, py to 10%	
159	7258	C	1.52m	5453	0.9	32	12	47	-	-	-	-	-	-	-	-	-	-	- UW, qz (75%), chl sc (25%), py to 25%	
159	7259	C	1.07m	1106	0.1	106	14	73	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/qz veins, trace py	
159	7260	C	1.52m	7296	0.7	115	18	87	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/20% qz	
159	7261	C	1.22m	2852	0.4	40	14	76	-	-	-	-	-	-	-	-	-	-	- UW, chl sc, fault gouge, qz, py to 25%	
159	7262	C	1.52m	1017	0.1	85	13	100	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/qz veins/pods, py to 10%	
159	7263	C	1.22m	1295	0.1	108	14	97	-	-	-	-	-	-	-	-	-	-	- UW, sheared chl sc w/qz veins (85:15)	
159	7264	C	1.52m	4188	0.1	63	14	68	-	-	-	-	-	-	-	-	-	-	- UW, qz (45%), chl sc (55%), py to 15%	
159	7265	C	1.52m	703	0.1	136	15	116	-	-	-	-	-	-	-	-	-	-	- UW, qz (30%), chl sc (70%), py 5-20%, trace cp	
159	7266	C	1.22m	375	<0.1	110	11	91	-	-	-	-	-	-	-	-	-	-	- UW, qz (15%), chl sc (85%), py 8-15%	
159	7267	C	1.52m	433	0.2	136	14	166	-	-	-	-	-	-	-	-	-	-	- UW, qz (15%), chl sc (85%), py 5-10%	
159	7268	C	1.52m	201	0.1	79	13	78	-	-	-	-	-	-	-	-	-	-	- UW, qz (15%), chl sc (85%), py to 15% in sc	
159	7269	S	0.30m	1299	0.4	22	19	57	-	-	-	-	-	-	-	-	-	-	- UW, sheared chl sc w/qz, high-grade 7261	
159	7273	C	1.52m	50	0.1	130	17	63	-	-	-	-	-	-	-	-	-	-	- UW, sericite/chl sc w/10-15% py	
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American Eagle																				
160	7440	C	0.91m	35	<0.1	149	10	87	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/10% py, adj to fault	
160	7441	C	0.61m	23	<0.1	91	31	48	-	-	<20	-	<20	-	-	<10	91	21	21 UW, alt chl sc, py 5-10%, trace cp	
160	7442	C	1.83m	2984	0.2	137	9	84	-	-	-	-	-	-	-	-	-	-	- UW, alt chl sc (90%), qz (10%), py 2-10%	
160	7443	C	0.91m	56	0.1	168	16	65	-	-	-	-	-	-	-	-	-	-	- UW, alt chl sc, gouge, limonite	
160	7444	C	1.28m	826	<0.1	134	8	75	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (60%), qz (40%), py 1-5%	
160	7446	C	1.37m	84	0.1	122	8	71	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), py to 2%	
160	7447	C	1.22m	2367	0.2	271	9	85	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (85%), qz (15%), qz xcuts foliation	
160	7448	C	0.91m	5005	0.4	223	8	87	-	-	<20	-	<20	-	-	<10	75	34	34 UW, qz veins, chl sc, py to 10% in sc	
160	7449	C	0.91m	4480	0.3	297	6	73	-	-	<20	-	<20	-	-	<10	71	23	23 UW, chl sc w/qz veins adj to shear, py	
160	7451	C	1.07m	2610	<0.1	67	9	69	-	-	-	-	-	-	-	-	-	-	- UW, qz vein in chl sc, py to 15%	
160	7452	C	0.85m	1982	<0.1	64	9	36	-	-	-	-	-	-	-	-	-	-	- UW, qz veins, chl sc, py	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
Old Glory																				
161	7240	C	0.70m	8716	0.4	111	11	49	-	-	-	-	-	-	-	-	-	-	- UW, qz (60%), chl sc (40%), py to 1%	
161	7241	C	0.91m	622	0.2	133	13	75	-	-	-	-	-	-	-	-	-	-	- UW, qz (10%), chl sc (90%), py to 15%	
161	7242	C	1.13m	4148	0.2	144	9	51	-	-	-	-	-	-	-	-	-	-	- UW, qz (75%), chl sc (25%), py, trace cp	
161	7243	C	1.13m	4700	0.4	71	14	65	-	-	-	-	-	-	-	-	-	-	- UW, qz (45%), chl sc (55%), sulf in sc	
161	7246	C	0.61m	7308	0.5	120	17	72	-	-	-	-	-	-	-	-	-	-	- UW, qz (35%), chl sc (65%), py to 5%	
161	7247	C	0.61m	7527	0.3	228	13	93	-	-	-	-	-	-	-	-	-	-	- UW, qz (40%), chl sc (60%), py to 8%	
161	7248	C	1.22m	17.62*	1.3	112	10	69	-	-	-	-	-	-	-	-	-	-	- UW, qz (15%), chl sc (85%), py to 10%, in stope	
161	7249	C	1.22m	1599	0.1	12	9	7	-	-	-	-	-	-	-	-	-	-	- UW, qz vein in stope, trace py	
161	7250	C	0.91m	6275	0.6	24	14	28	-	-	-	-	-	-	-	-	-	-	- TP, qz (90%), chl sc (10%), py to 20% in sc	
161	7251	C	0.91m	557	0.2	188	15	104	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/15% qz veins, py to 2% in sc	
161	7252	C	0.85m	948	0.1	118	12	53	-	-	-	-	-	-	-	-	-	-	- UW, qz vein, minor chl sc partings, py	
161	7253	C	0.79m	1465	0.2	185	18	75	-	-	-	-	-	-	-	-	-	-	- UW, qz/chl sc (50:50), py in hw sc	
161	7254	C	0.76m	552	0.1	240	11	96	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/qz veins to 0.33m (15%), py	
161	7255	C	1.22m	1153	0.2	112	7	95	-	-	-	-	-	-	-	-	-	-	- TP, qz (20%), chl sc (80%), py to 8%	
161	7373	S		1662	0.5	116	10	52	-	-	-	-	-	-	-	-	-	-	- MD, qz, fel sc 50:50, py to 15%	
163	7232	C	1.52m	14.49*	2.2	167	43	88	-	-	-	-	-	-	-	-	-	-	- UW, chl sc (80%), qz (20%), py in sc	
163	7233	C	0.37m	5720	1.4	94	11	21	-	-	-	-	-	-	-	-	-	-	- UW, qz (70%), chl sc (30%), limonite	
163	7324	C	1.37m	26.36*	0.2	133	11	83	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), minor fest	
163	7325	C	1.52m	6	0.1	168	10	99	-	-	-	-	-	-	-	-	-	-	- UW, gs sc, no py, fest	
163	7326	C	1.37m	87	0.4	248	11	83	-	-	-	-	-	-	-	-	-	-	- UW, gs sc, py to 1%, minor ml	
163	7327	C	1.52m	40	0.2	331	11	276	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (95%), qz (5%), py to 5%	
163	7328	C	1.52m	11	0.1	155	7	64	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), py to 2%	
163	7329	C	1.52m	<5	<0.1	145	11	86	-	-	-	-	-	-	-	-	-	-	- UW, qz in gs sc, py disseminated to 10%	
163	7330	C	1.52m	11	0.1	148	12	75	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (95%), qz (5%), py 10-15%	
163	7331	C	1.52m	21	0.1	168	10	79	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (95%), qz (5%), py 10-15%, adj to 7332	
163	7332	C	0.91m	93	0.1	174	19	81	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (95%), qz (5%), best zone	
163	7333	C	1.52m	1593	0.5	106	15	98	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (70%), qz (30%), py 5-10%	
163	7334	C	0.91m	1044	0.3	48	12	43	-	-	-	-	-	-	-	-	-	-	- UW, qz (50%), gs sc (50%), across back	
163	7335	C	1.52m	633	0.2	103	17	79	-	-	-	-	-	-	-	-	-	-	- UW, qz (30%), gs sc (70%), cubby hole	
163	7336	C	1.52m	118	0.1	146	9	73	-	-	-	-	-	-	-	-	-	-	- UW, py sil gs sc, qz stringers	
163	7337	C	1.22m	<5	0.1	183	9	83	-	-	-	-	-	-	-	-	-	-	- UW, py sil gs sc, fest	
163	7338	C	1.52m	103	0.1	109	17	80	-	-	-	-	-	-	-	-	-	-	- UW, qz-rich zone in sil chl sc, py to 5%	
163	7339	C	1.83m	3949	0.4	106	12	82	-	-	-	-	-	-	-	-	-	-	- UW, qz veins in gs sc, py to 15% along margin	
163	7340	C	1.98m	327	0.1	105	18	88	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), py 10-15%	
163	7341	C	0.91m	268	0.1	34	14	64	-	-	-	-	-	-	-	-	-	-	- UW, qz (50%), chl sc (50%), shear zone	
163	7342	C	0.61m	660	0.1	125	15	74	-	-	-	-	-	-	-	-	-	-	- UW, qz veins in gs sc, py to 10% in qz	
163	7343	C	1.22m	478	0.1	143	13	61	-	-	-	-	-	-	-	-	-	-	- UW, qz veins in gs sc, near raise	
163	7344	C	0.95m	134	0.2	254	9	71	-	-	-	-	-	-	-	-	-	-	- UW, gs sc (90%), qz (10%), disseminated py	
163	7345	C	0.46m	60	0.1	48	19	79	-	-	-	-	-	-	-	-	-	-	- UW, qz vein, bleached sc, limonite	
163	7346	C	1.52m	992	0.3	132	14	60	-	-	-	-	-	-	-	-	-	-	- UW, qz veins adj to gs sc, main drift	
Last Chance/Gold Mountain																				
162	7230	C	1.07m	1632	0.3	128	17	44	-	-	-	-	-	-	-	-	-	-	- UW, qz (65%), chl sc (35%), cp, py	
162	7231	S		7748	3.3	4820	13	10	-	-	-	-	-	-	-	-	-	-	- UW, qz from shaft, cp to 2%	
162	7244	S		4005	0.3	225	10	22	-	-	-	-	-	-	-	-	-	-	- MD, qz from dump	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
162	7245	S	15.01*	1.4	99	14	96	-	-	-	-	-	-	-	-	-	-	-	- MD, py chl sc from dump	
162	7372	C	1.77m	5232	1.0	1420	8	55	-	-	-	-	-	-	-	-	-	-	- UW, qz (80%), gs sc (20%), trace ml	
===== Mary T =====																				
164	7412	SC	3.05m @ 0.15m	1844	4.5	5380	5	96	-	-	<20	420	<20	-	-	<10	113	29	TP, sil chl sc, py 1-10%	
164	7413	SC	3.05m @ 0.15m	597	4.8	6325	8	132	-	-	<20	320	<20	-	-	<10	91	26	TP, sil chl sc, cp to 5%, py to 15%	
164	7416	C	1.52m	609	1.1	703	6	83	-	-	-	-	-	-	-	-	-	-	- TP, chl sc w/minor sil layers, py to 2%	
164	7417	C	1.52m	1657	2.6	2931	5	95	-	-	-	-	-	-	-	-	-	-	- TP, chl sc w/minor sil layers, py to 5%	
164	7418	SC	3.05m @ 0.15m	371	2.6	2292	7	189	-	-	-	-	-	-	-	-	-	-	- TP, sil chl sc, cp, py	
164	7419	SC	3.05m @ 0.15m	707	1.5	597	4	108	-	-	-	-	-	-	-	-	-	-	- TP, sil chl sc, cp, py	
164	7420	SC	3.05m @ 0.15m	848	3.1	658	7	92	-	-	-	-	-	-	-	-	-	-	- TP, qz-rich chl sc, py locally to 2%	
===== US =====																				
165	7421	SC	3.05m @ 0.15m	22	0.2	68	156	210	-	-	-	-	-	-	-	-	-	-	- TP, mica sc w/minor qz pods, py to 3%	
165	7422	SC	3.05m @ 0.15m	159	<0.1	44	39	107	-	-	-	-	-	-	-	-	-	-	- TP, musc chl sc (65%), qz (35%), py	
165	7423	SC	3.05m @ 0.15m	5571	0.4	15	53	33	-	-	-	-	-	-	-	-	-	-	- UW, large qz pod	
165	7424	SC	3.05m @ 0.15m	41	<0.1	54	23	147	-	-	-	-	-	-	-	-	-	-	- TP, musc chl sc w/qz pods, adj to 7421	
===== Blue Bucket =====																				
166	7410	C	1.83m	2368	3.6	5526	19	134	-	-	<20	710	<20	-	-	<10	77	7	UW, qz-rich musc sc, cp, py	
166	7411	C	1.83m	3267	3.8	8162	14	87	-	-	<20	680	<20	-	-	<10	78	13	UW, sil chl sc (50%), qz (50%), py 15%	
166	7414	C	1.83m	918	1.0	2514	5	83	-	-	-	-	-	-	-	-	-	-	- UW, sil chl sc grading to gs sc	
166	7415	C	1.83m	153	0.8	1264	3	85	-	-	-	-	-	-	-	-	-	-	- OC, sil chl sc, sulf in stringers	
===== Francis =====																				
167	7171	S		<5	<0.1	44	6	18	-	-	-	-	-	-	-	-	-	-	- OC, qz, vein w/cp, PY	
167	7172	S		6	<0.1	47	6	12	-	-	-	-	-	-	-	-	-	-	- OC, qz, cp, py	
167	7173	Rep		<5	<0.1	19	7	20	-	-	-	-	-	-	-	-	-	-	- OC, qz, cp, py across several veins	
167	7182	S		7900	2.5	471	23	45	-	-	-	-	-	-	-	-	-	-	- FL, qz w/py pod 0.33m X 1m	
168	7170	C	0.46m	<5	<0.1	10	7	24	-	-	-	-	-	-	-	-	-	-	- OC, qz, trace py, cp, concordant	
169	7159	C	1.83m	<5	<0.1	3	3	4	-	-	-	-	-	-	-	-	-	-	- OC, qz vein in qz mica sc, py, cp	
169	7169	C	0.95m	<5	<0.1	16	5	10	-	-	-	-	-	-	-	-	-	-	- OC, qz, trace py, cp in gray sc	
===== Indian Point =====																				
170	7174	C	0.30m	9	0.2	118	10	18	-	-	-	-	-	-	-	-	-	-	- OC, qz vein, minor sc, trace cp, fest	
170	7175	SS		9	<0.2	60	9	113	2	28	<20	66	<20	-	-	21	<10	30	42 mixed material, black pl bedrock	
170	7176	Rep	3.05m	<5	<0.1	45	5	10	-	-	16	-	<2	-	-	-	-	-	- OC, qz vein mass, trace cp, py clots, fest	
170	7177	SS		<5	<0.2	28	4	73	1	15	<20	49	<20	-	-	9	<10	17	24 silt-clay, black pl bedrock	
170	7178	Rep		40	0.2	51	19	34	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/ankerite-calc margins	
171	7179	S	0.15m	16	0.2	39	18	1470	-	-	-	-	-	-	-	-	-	-	- OC, qz-calc vein, cp, po	
171	7180	S	0.40m	5840	2.9	384	15	15	-	-	-	-	-	-	-	-	-	-	- OC, qz vein, py clots to 0.25m	
171	7181	SS		<5	<0.2	83	5	137	1	39	<20	87	<20	-	-	19	<10	32	44 silt-clay, black pl, sc bedrock	
===== Swan Lake =====																				
172	7227	Rep		<5	0.3	41	15	34	-	-	-	-	-	-	-	-	-	-	- OC, qz in metafelsite, dissem py to 5%	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
Carroll Inlet																				
173	7228	Rep		<5	0.4	27	15	81	-	-	-	-	-	-	-	-	-	-	- OC, qz-musc-sillimanite sc w/py to 5%	
173	7229	Rep		<5	0.6	110	12	312	-	-	-	-	-	-	-	-	-	-	- OC, carbonaceous marble	
174	7237	Rep	0.91m	<5	<0.1	126	8	106	-	-	-	-	-	-	-	-	-	-	- OC, sil metavolc, py to 15%, trace sl	
174	7238	Rep	0.82m	<5	0.4	179	6	14	-	-	12	-	<2	-	-	-	-	-	- OC, qz vein, adj to 7237	
175	7234	Rep	0.67m	<5	1.0	108	15	15	3	-	-	-	-	-	-	-	-	-	- OC, qz vein in chl sc, py to 1%	
175	7235	Rep	0.91m	6	0.9	73	17	78	19	-	-	-	-	-	-	-	-	-	- OC, bleached py chl w/py to 15%	
175	7236	Rep	0.46m	<5	1.0	38	13	170	-	-	-	-	-	-	-	-	-	-	- OC, py alt metavolc, py to 15%	
Hump Island																				
176	7436	Rep	3.05m	<5	<0.1	122	<2	36	3	-	-	-	-	-	-	-	-	-	- OC, garnet bt sc, trace cp, py	
176	7437	Rep	4.57m	2519	0.3	401	3	34	3	-	-	-	-	-	-	-	-	-	- OC, qz mica sc near intrusive contact	
176	7438	S	0.15m x 0.30m	3837	2.2	1568	3	8	22	-	<20	-	<20	-	-	-	11	211	6 OC, qz vein, cp + py to 15%	
177	7439	Rep		14	1.2	1458	7	12	21	-	-	-	-	-	-	-	-	-	- OC, bt sc, cp to 2% in stringers	
178	7427	Rep		29	1.4	2197	3	46	99	-	-	-	-	-	-	-	-	-	- OC, sil musc sc, cp, mo, ml, py	
178	7428	Rep		11	1.0	1830	<2	36	61	-	-	-	-	-	-	-	-	-	- OC, sil musc sc, cp, py	
178	7429	Rep		38	1.0	1351	<2	18	10	-	-	-	-	-	-	-	-	-	- OC, sil musc sc, phaneritic to fg	
178	7430	Rep		75	1.5	2610	3	58	6	-	-	-	-	-	-	-	-	-	- OC, sil musc sc, cp clots, indurated	
179	7426	Rep		10	0.4	806	5	13	50	-	<20	-	<20	-	-	<10	97	18 OC, sil musc sc, cp, mo, py		
180	7425	Rep		22	0.7	1090	7	30	92	-	-	-	-	-	-	-	-	-	- OC, sil sc, cp, py, fest	
181	7431	Rep	4.57m	36	3.6	2848	3	109	236	-	<20	-	<20	-	-	<10	101	18 OC, qz musc sc, cp, py		
181	7432	Rep	4.57m	11	1.4	1829	<2	42	71	-	-	-	-	-	-	-	-	-	- OC, qz musc sc w/minor qz veinlets	
181	7433	Rep	4.57m	24	1.5	2571	<2	39	90	-	-	-	-	-	-	-	-	-	- OC, sil musc sc, sulf in clots, porph	
181	7434	Rep	4.57m	44	1.7	2497	<2	52	13	-	-	-	-	-	-	-	-	-	- OC, sil musc sc, porph, cp, py	
181	7435	Rep	4.57m	31	2.5	3080	4	86	29	-	-	-	-	-	-	-	-	-	- OC, qz musc sc, cp, py	
Bat Cove, Loujo																				
182	7195	S		<5	0.4	71	312	374	-	-	-	-	-	-	-	-	-	-	- RC, amphibolite garnet gneiss	
182	7198	SS		6	<0.2	194	5	87	<1	63	<20	<1	<20	-	-	100	<10	122	112 mixed sediments, gneiss bedrock	
182	7199	Rep		<5	0.3	<1	762	286	-	-	-	-	-	-	-	-	-	-	- OC, qz xcut amphibolite	
182	7204	SS		<5	<0.2	55	6	55	1	25	<20	<1	<20	-	-	64	<10	65	105 silt-clay, gneissic bedrock	
182	7205	SS		<5	<0.2	51	5	57	2	12	<20	<1	<20	-	-	20	<10	58	98 silt-clay, metasedimentary bedrock	
Alaska Mineral King																				
182	7206	SS		<5	<0.2	144	5	57	<1	31	<20	<1	<20	-	-	54	<10	106	113 silt-clay	
183	7202	S		<5	<0.1	29	50	57	-	-	-	-	-	-	-	-	-	-	- OC, qz in fold hinge, py, cp	
183	7203	S		20	0.3	17	31	39	-	-	-	-	-	-	-	-	-	-	- OC, qz in mica sc w/py in foliation	
183	7208	S	0.40m	<5	<0.1	49	22	31	-	-	-	-	-	-	-	-	-	-	- OC, qz vein in porph gs, ilmenite	
183	7209	S	0.34m	<5	<0.1	11	20	26	-	-	-	-	-	-	-	-	-	-	- OC, qz vein xcuts foliation, sulf to 3%	
183	7210	S		16	3.0	122	22	154	-	83	-	-	-	-	-	-	-	-	- OC, qz vein w/py-rich zone	
183	7212	SS		<5	<0.2	13	10	47	1	5	<20	<1	<20	-	-	6	<10	19	27 silt-clay, bt sc bedrock	
Vickie Rose, Rita Anne, Leask Cove																				
184	7200	C	0.27m	<5	0.2	6	321	191	-	-	-	-	-	-	-	-	-	-	- OC, qz cutting bt sc, sl, cp, py	
184	7201	Rep		<5	<0.1	2	90	66	-	-	-	-	-	-	-	-	-	-	- OC, qz in arg/black pl, trace sl, py	
184	7207	SS		<5	<0.2	32	4	66	2	15	<20	<1	<20	-	-	31	<10	46	66 silt-clay, garnet amphibolite bedrock	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Kg	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	CaO	MgO	SO ₃	LOI	Na ₂ O	K ₂ O	P ₂ O ₅	MnO	Cr ₂ O ₃	TiO ₂	Total	Titrated CaCO ₃	Sample Description
Curio (Marble Creek)																				
185	LS303	Rep	25m	4.94	7.85	1.08	0.67	28.83	18.35	0.04	42.07	0.01	0.06	0.12	0.03	<0.01	0.04	99.15	51.42	fg, micritic calc, mica beds present
185	LS304	Rep	15m	4.64	2.42	0.68	0.41	30.69	19.98	0.03	45.21	0.02	<0.05	0.06	0.02	<0.01	0.03	99.55	54.34	dirty, banded marble fractures
186	LS305	Rep	23m	3.70	0.67	0.20	0.21	31.10	20.49	<0.02	46.13	0.02	<0.05	0.1	0.01	<0.01	<0.01	98.94	55.47	msv white marble, dikes present
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
Ella Bay																				
187	8075	C	0.5m	<5	<0.1	4	<2	9	-	-	-	-	-	-	-	-	-	-	- OC, qz vein & dike	
187	8348	G		<5	<0.1	32	<2	23	-	-	-	-	-	-	-	-	-	-	- OC, mica-qz gneiss w/py	
188	8073	Rep	1.8m	<5	0.5	72	10	436	-	-	-	-	-	-	-	-	-	-	- OC, qz-mica sc	
188	8074	Rep	1.8m	<5	0.6	66	7	122	-	-	-	-	-	-	-	-	-	-	- OC, qz-mica sc	
188	8347	Rep	4.9m	<5	<0.1	10	3	11	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/py in sc	
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Cd	W	Pt	Pd	Co	Te	Cr	V	Sample Description
Mahoney																				
189	7183	Rep		49	<0.1	16	21	65	-	-	19	-	<2	-	-	-	-	-	- UW, fel dike, qz, py <0.5%	
189	7184	C	0.18m	154	1.1	97	400	7.08*	-	-	21	496.7	-	-	-	-	-	-	- UW, msv sulf vein, sl to 20%, gn to 3%	
189	7185	C	0.30m	320	24.8	195	3.18*	9.92*	-	-	28	729.7	-	-	-	-	-	-	- UW, msv sulf, black sc, w/sl, gn to 7%	
189	7186	C	0.52m	68	14.8	75	2.75*	7.12*	-	-	21	460.3	-	-	-	-	-	-	- UW, msv sulf, black sc, sl, gn in veins	
189	7187	C	0.46m	156	2.9	197	1800	11.57*	-	-	34	849.8	-	-	-	-	-	-	- UW, msv sulf, black sc, sl, gn to 25%	
189	7188	C	0.49m	90	2.8	178	2600	10.44*	-	-	31	725.8	-	-	-	-	-	-	- UW, msv sulf in stope, sl, gn to 20%	
189	7189	C	0.37m	94	30.9	88	5.78*	14.97*	-	-	10	1200.0	-	-	-	-	-	-	- UW, msv sulf lens in sil black pl, sl, gn	
189	7190	C	0.43m	146	6.5	261	7200	4.91*	-	-	21	339.7	-	-	-	-	-	-	- UW, sil min metasediment, sl, gn to 5%	
189	7191	C	0.27m	416	107.3*	127	13.25*	8.10*	-	-	10	602.9	-	-	-	-	-	-	- UW, msv sulf in sil black pl, sl, gn	
189	7192	C	0.52m	45	1.4	140	900	3.91*	-	-	9	259.0	-	-	-	-	-	-	- UW, black pl w/msv sulf veinlets	
189	7193	C	0.61m	262	55.20*	417	14.12*	8.26*	-	-	15	523.5	-	-	-	-	-	-	- UW, msv sulf in sil black pl, sl gn to 50%	
189	7194	C	0.34m	40	3.3	187	3275	5.86*	-	-	25	395.4	-	-	-	-	-	-	- UW, msv sulf, sil black pl, from stope	
189	7196	C	0.37m	366	86.10*	159	24.97*	5.15*	-	-	10	384.6	-	-	-	-	-	-	- UW, msv sulf pod, gn>sl	
189	7197	C	0.37m	359	56.60*	522	11.73*	10.33*	-	-	48	661.0	-	-	-	-	-	-	- TP, msv sulf in sil black pl, gn>sl	
Londrevan																				
190	7445	C	1.22m	18	3.0	23	584	1900	-	-	-	<2	-	-	-	-	-	-	- UW, banded qz vein-hn w/sl, gn, py clot	
190	7450	C	1.07m	16	237.7*	81	4300	18400	-	-	-	140	-	-	-	-	-	-	- UW, qz vein w/hn, sl, py	
190	7453	S	0.27m	24	936.0*	229	9720	6.43*	-	-	-	29	-	-	-	-	-	-	- UW, qz vein stockwork in hn w/gn, sl, cp in clots	
190	7454	C	0.91m	<5	4.2	25	120	385	-	-	-	<2	-	-	-	-	-	-	- UW, banded qz vein-hn	
190	7455	C	1.07m	<5	1.7	4	35	117	-	-	-	<2	-	-	-	-	-	-	- UW, qz	
190	7456	C	0.18m	54	69.30*	72	1740	3390	-	-	-	30	-	-	-	-	-	-	- UW, qz	
190	7457	Rep		<5	1.8	15	88	6242	-	-	-	<2	-	-	-	-	-	-	- UW, qz	
190	7458	C	0.30m	13	3.5	33	70	159	-	-	-	3	-	-	-	-	-	-	- UW, qz	
190	7459	C	0.40m	25	4.5	29	191	193	-	-	-	5	-	-	-	-	-	-	- UW, qz	
190	7460	C	1.83m	20	3.5	58	144	662	-	-	-	9	-	-	-	-	-	-	- UW, qz vein w/hn	
190	7461	C	1.83m	115	6.6	18	1110	401	-	-	-	13	-	-	-	-	-	-	- UW, qz w/graphitic sc	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
Alaska Lead & Silver																				
191	7211	C	0.58m		26	5.9	35	252	351	-	-	-	-	-	-	-	-	-	- UW, qz (50%), hn (50%) w/sl, py; in stope	
191	7213	C	0.61m		18	27.4	57	383	835	-	-	-	-	-	-	-	-	-	- UW, qz (45%), hn (55%), sl to 0.5%, py	
191	7214	C	0.61m	1440	5.7	16	88	215	-	-	-	-	-	-	-	-	-	-	- UW, qz in hn from stope, sl, py	
191	7215	C	0.70m	244	19.5	26	465	142	-	-	-	-	-	-	-	-	-	-	- UW, qz in hn from stope, trace sl, py	
191	7216	C	0.91m	7	1.1	18	43	100	-	-	-	-	-	-	-	-	-	-	- UW, qz near edge of cribbing, sl	
191	7217	C	0.40m	<5	63.10*	31	3590	2892	-	-	-	-	-	-	-	-	-	-	- UW, qz (80%), hn (20%), sl to 1%	
191	7218	C	0.40m	<5	3.3	23	327	320	-	-	-	-	-	-	-	-	-	-	- UW, qz (60%), hn (40%), sl, py	
191	7219	C	0.67m	16	10.9	19	334	1229	-	-	-	-	-	-	-	-	-	-	- UW, ribbon qz, dissem sulf and clots	
191	7220	C	0.52m	70	20.1	30	630	3334	-	-	-	-	-	-	-	-	-	-	- UW, qz vein, sl, gn in clots	
191	7221	S	0.24m	13	39.1	86	2000	2.66*	-	-	15	-	<2	-	-	10	21	284	2 UW, qz vein, high-grade of 7220	
191	7222	C	0.61m	20	6.2	14	127	150	-	-	-	-	-	-	-	-	-	-	- UW, qz vein, hn w/trace py	
191	7223	C	0.70m	9	45.5	16	493	102	-	-	-	-	-	-	-	-	-	-	- UW, qz vein, sulf on hw, sl, gn, py	
191	7224	C	0.64m	55	36.5	44	1675	7048	-	-	-	-	-	-	-	-	-	-	- UW, qz w/sl, py; trace gn	
191	7225	C	0.40m	20	58.60*	30	1100	3100	-	-	8	-	<2	-	-	4	24	289	5 UW, qz w/sl, gn, py	
191	7226	C	0.52m	53	11.3	1	200	300	-	-	-	-	-	-	-	-	-	-	- UW, qz vein at face, sl, gn to 5%	
Peterson																				
192	5452	C	1.5	9	1.1	52	13	181	6	-	-	-	-	-	-	-	-	-	- UW, sil gray black dike w/py	
192	5453	C	0.27	6	0.5	5	10	10	<1	-	-	-	-	-	-	-	-	-	- FL, vuggy qz vein	
192	5454	C	0.73m	<5	<0.1	12	<2	12	7	-	-	-	-	-	-	-	-	-	- RC, qz vein rubble	
192	5455	Rep	0.27m	23	6.2	860	4	399	2	-	-	-	-	-	-	-	-	-	- RC, qz po vein	
192	5879	G	0.24m	<5	0.3	23	4	41	2	-	-	-	-	-	-	-	-	-	- FL, qz boulder w/dissem py	
192	5880	C	0.61m	12	1.8	70	82	442	19	-	-	-	-	-	-	-	-	-	- OC, sheared mafic intrusive w/py & qz	
192	5881	G	0.12m	28	7.2	1066	8	2469	2	<2	-	-	-	-	-	-	-	-	- RC, msiv po w/some qz	
192	5882	G	0.43m	<5	0.4	20	11	1538	2	-	-	-	-	-	-	-	-	-	- FL, banded qz boulder w/py, sl	
192	7387	C	0.73m	<5	0.5	29	6	37	-	-	<20	-	<20	-	-	-	<10	211	19 OC, qz-hn br, py 5-10%	
192	7391	C	0.23m	<5	0.2	14	6	90	-	14	-	-	-	-	-	2	-	-	- OC, qz-hn br, py to 3%	
192	7392	C	0.23m	<5	0.5	65	10	351	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/sl, py, fest	
193	7386	Rep		8	0.7	278	4	55	-	215	-	-	-	-	-	84	-	-	- OC, alt gabbro from roadcut, py 5-50%	
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
Easter																				
194	8126	G		9	<0.1	28	3	19	-	-	-	-	-	-	-	-	-	-	- FL, gs clasts in qz vein	
194	8127	S		1976	0.7	6	8	7	-	-	-	-	-	-	-	-	-	-	- FL, qz vein w/aspy & py	
194	8128	RC		64	<0.1	67	7	7	-	-	-	-	-	-	-	-	-	-	- MD, qz vein w/minor py & aspy	
Easter area																				
195	8388	S		<5	<0.1	40	55	167	-	-	-	-	-	-	-	-	-	-	- FL, qz w/gs w/minor py	
Six Point area																				
196	8088	Rep	1.5m	<5	<0.1	13	14	55	-	-	-	-	<20	<20	-	124	173	7	- OC, qz vein in pl	
197	8089	Rep		52	3.1	877	135	117	7	32	23	<20	<20	-	-	-	-	-	- OC, metavolc, includes br w/py	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

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Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
Holden Clay																				
198	8363																		OC,	
198	8364																		OC,	
199	8090																		OC,	
199	8091																		OC,	light gray clay
199	8092																		OC,	up to 3+ m thick
199	8093																		OC,	
200	8094																		OC,	
Ire																				
201	8100	S		34	<0.1	548	3	6	<1	-	-	-	-	-	-	-	-	-	- TP, fel intrusive w/minor py, cp	
201	8101	S		25	1.2	4.9*	3	12	2	8	24	<20	<20	-	-	109	<5	34	-	- TP, sil intrusive w/cp
Dent Cove																				
202	8095	C	2.7m	<5	2.5	12760	19	127	6	-	-	-	-	-	-	-	-	-	- TP, metavolc w/cp, py, hem	
202	8096	C	0.7m	<5	3.3	10645	15	128	13	-	-	-	-	-	-	-	-	-	- TP, sil metavolc w/py + cp	
202	8097	C	1.1m	<5	2.3	19124	11	149	3	-	-	-	-	-	-	-	-	-	- TP, sheared metavolc w/py, cp, hem	
202	8098	Rep		<5	1.7	16710	10	151	<1	12	99	<20	<20	-	61	<5	45	-	- MD, metavolc w/py, lm + cp	
202	8099	S		<5	0.5	373	14	7	<1	-	-	-	-	-	-	-	-	-	- RC, porphyry w/sulf, py	
202	8365	S		<5	0.2	262	4	9	-	-	-	-	-	-	-	-	-	-	- TP, metarhyolite? w/py, hem	
202	8366	Rep	4.3m	<5	0.9	1287	9	32	-	-	-	-	-	-	-	-	-	-	- TP, metarhyolite? in shear zone w/py, cp	
202	8367	Rep		<5	0.2	2124	10	161	2	12	28	<20	<20	0.12	29	<5	22	-	- TP, aphanitic, mafic rock w/dissem cp	
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
Karlson Motors, road cut																				
203	5483	C	0.15m	<5	<0.1	12	4	34	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/sparse po	
Road Cut, 2.3 km north of Carlana Creek																				
203	5484	C	0.27m	<5	0.2	43	5	75	-	-	-	-	-	-	-	-	-	-	- OC, qz stringers & gray sc w/po	
Beach																				
204	5481	C	0.12m	35	<0.1	23	<2	185	-	-	-	-	-	-	-	-	-	-	- TP, qz vein/lens w(po)	
204	5482	C	0.88m	<5	<0.1	50	6	160	-	-	-	-	-	-	-	-	-	-	- TP, fest slate/pl	
204	5899	C	0.23m	<5	<0.1	26	3	27	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/sericite in pl	
204	5900	C	0.27m	6	0.3	112	7	146	-	-	-	-	-	-	-	-	-	-	- TP, black pl/slate w/py, qz stringers	
Ketchikan Ready Mix quarry																				
205	5432	Rep	0.61m	315	0.4	197	3	75	10	-	-	-	-	-	-	-	-	-	- TP, purple, fg sil rock	
205	5433	G	0.02m	480	0.4	472	<2	98	8	-	-	-	-	-	-	-	-	-	- TP, purple, fg sil rock	
205	5434	C	0.09m	96	0.5	89	<2	146	9	-	-	-	-	-	-	-	-	-	- TP, qz vein w/ep, po bleb	
205	5865	S		75	0.2	89	<2	177	5	-	-	-	-	-	-	-	-	-	- TP, hn w/sulf & concordant qz	
205	5866	S		1167	0.5	80	4	146	5	-	-	-	-	-	-	-	-	-	- TP, hn w/sulf and qz	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
Carlana Creek quarry																				
206	5867	S		12	0.3	217	3	109	1246	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/mo along shear
Carlana Creek vicinity																				
207	5435	CC	0.24m	270	0.1	48	2	92	3	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/sparse blebs of po
207	5436	Rep	0.15m	26	0.2	324	<2	32	2	-	-	-	-	-	-	-	-	-	-	- RC, qz vein w/1.3cm py cubes
207	5476	C	0.91m	10	0.3	54	9	74	-	-	-	-	-	-	-	-	-	-	-	- OC, fest sc and pl w/5% sulf
207	5477	C	0.06m	<5	0.3	46	5	89	-	-	-	-	-	-	-	-	-	-	-	- OC, qz lens
207	5910			69	1.0	48	16	80	-	-	-	-	-	-	-	-	-	-	-	- FL, stream sediment
207	5911			3058	<0.1	22	10	94	-	-	-	-	-	-	-	-	-	-	-	- FL, four 0.4m pans
Hoadley																				
208	5430	C	0.46m	88.25*	2.8	364	<2	17	4	-	-	-	-	-	-	-	-	-	-	- FL, fest qz vein cp, py, aspy
208	5431	S	0.02m	43.37*	1.6	207	<2	22	5	-	-	-	-	-	-	-	-	-	-	- FL, aspy, py, cp
208	5864	G	0.24m	139.7*	6.7	610	<2	14	2	-	-	-	-	-	-	-	-	-	-	- FL, qz boulder w/py, cp, aspy
Hoadley Creek, upper																				
209	5448	Rep	0.61m	13	<0.1	41	<2	63	2	3	-	-	-	-	-	-	-	-	-	- UW, di w/py
209	5449	CC	0.20m	38	2.4	4695	3	117	<1	<2	-	-	-	-	-	-	-	-	-	- UW, po vein w/sparse qz
209	5450	CC	0.14m	7	<0.1	117	<2	45	2	3	-	-	-	-	-	-	-	-	-	- UW, po vein w/sparse qz.
209	5451	CC	0.14m	30	2.3	4387	3	118	2	<2	-	-	-	-	-	-	-	-	-	- UW, po vein w/qz
209	5876	C	0.09m	1044	2.6	3420	2	64	7	-	-	-	-	-	-	-	-	-	-	- UW, vein of msv po
209	5877	Rep	0.76m	12	<0.1	28	<2	95	2	-	-	-	-	-	-	-	-	-	-	- UW, di w/interbedded sc
209	5878	C	0.18m	76	2.7	4314	<2	116	2	<2	-	-	-	-	-	-	-	-	-	- UW, msv po vein
Hoadley Creek, lower																				
210	5447	RC	0.24m x .46m	58	0.6	1101	<2	101	3	-	-	-	-	-	-	-	-	-	-	- UW, qz lens
Hoadley Creek, trapdoor																				
210	5485	SC	10.67m @ .30m	13	<0.1	30	6	73	-	-	-	-	-	-	-	-	-	-	-	- UW, di w/dissem po
210	5486	C	0.06m	7237	0.2	31	5	40	-	-	-	-	-	-	-	-	-	-	-	- UW, irregular qz vein
210	5487	C	0.91m	21	<0.1	80	5	32	-	-	-	-	-	-	-	-	-	-	-	- UW, di at shear w/dissem po
210	5901	C	0.91m	<5	<0.1	28	6	77	-	-	-	-	-	-	-	-	-	-	-	- UW, sulf-bearing di
210	5902	SC	8.84m @ .30m	<5	<0.1	31	5	70	-	-	-	-	-	-	-	-	-	-	-	- UW, sulf-bearing di
Hoadley Creek																				
210	5875	C	0.46m	43	<0.1	4	<2	18	8	-	-	-	-	-	-	-	-	-	-	- OC, qz vein in py-bearing di
211	5446	C	0.02m	4643	0.5	136	5	39	8	-	-	-	-	-	-	-	-	-	-	- OC, fest di w/py & qz lens/vein
211	5908	PC		2576	1.7	69	33	83	-	-	-	-	-	-	-	-	-	-	-	- sed, four 0.4m pans
211	5909	PC		2420	1.0	24	30	75	-	-	-	-	-	-	-	-	-	-	-	- sed, four 0.4m pans
White Cliff																				
212	5475	Rep	0.61m	<5	<0.1	63	5	101	-	-	-	-	-	-	-	-	-	-	-	- UW, qz & fest gs sc
212	5894	G		<5	<0.1	10	3	21	-	-	-	-	-	-	-	-	-	-	-	- MD, qz float w/py

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
212	5895	C	0.64m	<5	0.2	52	6	89	-	-	-	-	-	-	-	-	-	-	-	- OC, gray sc w/irregular qz bodies, py
Quarry, Forest Avenue and Schoenbar Road																				
213	5429	G	0.12m	222	1.3	2970	4	106	111	-	-	-	-	-	-	-	-	-	-	- RC, fg purple sil rock
213	5861	C	1.19m	196	0.9	2429	14	375	26	-	-	-	-	-	-	-	-	-	-	- OC, sil volc w/py, qz, ml, az
213	5862	C	1.19m	141	0.7	1731	7	76	26	-	-	-	-	-	-	-	-	-	-	- TP, sil volc w/py, cp, ml, az
Above quarry at Forest Avenue and Schoenbar Road																				
214	5863	G	0.08m	1229	0.9	760	40	3667	3	-	-	-	-	-	-	-	-	-	-	- FL, msv sulf in pl
1252 Upper Millar Road																				
215	5479	Rep	0.12m	<5	<0.1	34	<2	15	-	-	-	-	-	-	-	-	-	-	-	- OC, qz lens & sc w/py
215	5480	C	0.12m	<5	0.2	17	17	154	-	-	-	-	-	-	-	-	-	-	-	- OC, qz vein/lens/stringer
215	5898	S	0.12m	<5	<0.1	15	12	67	-	-	-	-	-	-	-	-	-	-	-	- MD, qz rubble on dump
Schoenbar Road (prison parking lot)																				
216	5421	CC	0.24m	6	<0.1	28	6	38	3	-	-	-	-	-	-	-	-	-	-	- TP, qz lens w/po
216	5422	G	0.24m	<5	0.3	86	9	195	6	-	-	-	-	-	-	-	-	-	-	- OC, py bearing, fest pl & sc
216	5423	C	0.70m	2067	0.2	73	7	132	4	-	-	-	-	-	-	-	-	-	-	- OC, shear zone w/qz & Fest sc
216	5856	C	1.68m	12	0.2	64	8	119	6	-	-	-	-	-	-	-	-	-	-	- OC, gray sc w/qz & po
216	5857	C	0.98m	27	<0.1	75	3	217	3	-	-	-	-	-	-	-	-	-	-	- OC, pl w/cp, sl
Summit Terrace Road																				
217	5424	C	0.6m	<5	<0.1	27	3	40	3	-	-	-	-	-	-	-	-	-	-	- OC, irregular, lensy qz vein
Nevada Lode (821 Sesame Street)																				
218	5488	C	0.12m	964	1.6	8187	12	93	-	-	-	-	-	-	-	-	-	-	-	- OC, qz lens w/cp, ml, az
218	5489	G	0.09m	1078	1.8	12010	7	70	-	-	-	-	-	-	-	-	-	-	-	- RC, min sil gs
218	5490	G	0.09m	2540	1.6	2584	12	44	-	-	-	-	-	-	-	-	-	-	-	- TP, sil gs w/py, cp
218	5912	C	0.17m	1577	3.2	8725	9	61	-	-	-	-	-	-	-	-	-	-	-	- OC, sulf zone in sil gs
218	5913	S	0.15m	890	1.5	5661	11	91	-	-	-	-	-	-	-	-	-	-	-	- MD, sil gs
218	5914	SC	2.44m @ .08m	1282	1.9	5705	8	99	-	-	-	-	-	-	-	-	-	-	-	- OC, sil gs
Bear Valley Mini Storage																				
219	5426	SC	2.74m @ .15m	165	<0.1	173	<2	45	2	-	-	-	-	-	-	-	-	-	-	- OC, fest sil zone w/10% py
219	5427	CC	0.15m	196	<0.1	188	4	15	6	-	-	-	-	-	-	-	-	-	-	- OC, qz vein/lens w/py, ml, az
219	5428	SC	3.51m @ .15m	88	<0.1	256	<2	33	4	-	-	-	-	-	-	-	-	-	-	- OC, sil zone w/py, ml, az,
219	5860	C	1.46m	34	0.2	345	<2	38	15	-	-	-	-	-	-	-	-	-	-	- OC, light gray metaqt w/dissem py
Corner of Forest and Millar Ridge Roads																				
220	5425	Rep	1.29m	129	0.8	202	10	59	2	-	-	-	-	-	-	-	-	-	-	- OC, qz stringers and lenses in shear
220	5859	S	3.05m	386	2.6	231	23	208	4	-	-	-	-	-	-	-	-	-	-	- OC, sc w/py

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
Millar Ridge Road, Northeast side																				
221	5858	C	0.58m	<5	<0.1	4	3	17	2	-	-	-	-	-	-	-	-	-	-	- OC, qz lens hosted in weathered sc
American Legion quarry																				
222	5905	Rep	1.04m	37	0.8	435	58	2235	-	-	-	-	-	-	-	-	-	-	-	- TP, gs sc w/qz veins & py
222	5906	C	0.46m	19	0.4	101	18	329	-	-	-	-	-	-	-	-	-	-	-	- TP, chl gs sc w/qz veins
Intersection of Park and Venetia Roads																				
223	5437	C	0.06m	16	<0.1	119	6	217	3	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/py-bearing gs
223	5462	SC	7.93m @ .15m	23	<0.1	69	3	72	3	-	-	-	-	-	-	-	-	-	-	- UW, green and gray sc w/py
223	5463	C	0.14m	<5	<0.1	41	9	17	6	-	-	-	-	-	-	-	-	-	-	- UW, qz-calc vein
Schoenbar Junior High School																				
224	5903	Rep	0.27m	30	<0.1	218	3	24	-	-	-	-	-	-	-	-	-	-	-	- TP, blue-gray sc w/qz and py
224	5904	C	0.21m	38	<0.1	62	4	33	-	-	-	-	-	-	-	-	-	-	-	- TP, blue-gray sc w/qz & banded py
Venetia Avenue at Cape Fox stairway																				
225	5438	Rep	3.05m	17	0.5	97	68	340	2	-	-	-	-	-	-	-	-	-	-	- OC, qz sericite sc w/py
Cape Fox adit																				
226	5440	C	0.30m	8	<0.1	53	8	109	2	-	-	-	-	-	-	-	-	-	-	- UW, qz stringer zone in greensc
226	5441	CC	0.17m	<5	<0.1	5	<2	14	4	-	-	-	-	-	-	-	-	-	-	- OC, irregular qz lens
226	5869	C	0.52m	9	0.2	134	12	274	8	-	-	-	-	-	-	-	-	-	-	- UW, greensc/pl w/qz
226	5870	C	0.15m	20	0.8	130	<2	24	2	-	-	-	-	-	-	-	-	-	-	- UW, qz lens in greensc
226	5871	C	0.18m	<5	<0.1	20	<2	33	2	-	-	-	-	-	-	-	-	-	-	- OC, irregular, folded qz lens
226	5872	C	0.37m	<5	<0.1	20	10	99	4	-	-	-	-	-	-	-	-	-	-	- UW, qz vein in greensc
912 Park Avenue																				
227	5478	C	0.12m	14	<0.1	24	6	23	-	-	-	-	-	-	-	-	-	-	-	- TP, qz-carbonate lens
227	5897	SC	3.81m @ .08m	41	0.3	60	7	150	-	-	-	-	-	-	-	-	-	-	-	- OC, sericite sc w/dissem py
Venetia Avenue at Cape Fox Road																				
228	5439	Rep	0.21m	24	0.2	37	11	71	3	-	-	-	-	-	-	-	-	-	-	- OC, qz & sil gs sc w/py
Cape Fox Lodge																				
229	5443	Rep	2.44m	13	0.3	64	4	75	3	-	-	-	-	-	-	-	-	-	-	- OC, qz & qz mica sc w/py
230	5868	S	2.22m	22	<0.1	74	20	401	15	-	-	-	-	-	-	-	-	-	-	- FL, br gs w/py & qz
Tatsuda Market																				
231	5444	C	0.30m	6	<0.1	50	4	52	2	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/sparse py
231	5445	C	0.55m	24	<0.1	110	8	106	3	-	-	-	-	-	-	-	-	-	-	- OC, gray fest qz mica sc w/py
231	5873	C	0.40m	<5	2.0	4	<2	8	3	-	-	-	-	-	-	-	-	-	-	- TP, qz vein

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
231	5874	C	0.37m	35	0.2	78	7	99	2	-	-	-	-	-	-	-	-	-	-	- TP, fest sc w/dissem py
Black Swan																				-
232	5470	C	0.06m	6	0.5	555	4	22	-	-	-	-	-	-	-	-	-	-	-	- OC, qz lens
232	5891	Rep	0.09m	9	<0.1	135	5	62	-	-	-	-	-	-	-	-	-	-	-	- TP, gs sc w/py, qz vein/stringer
Laundromat adit																				-
233	5885	SC	8.54m @ .30m	11	<0.1	101	5	86	-	-	-	-	-	-	-	-	-	-	-	- UW, min greensc w/qz
Ketchikan city dump																				-
234	5442	Rep	0.15m	<5	0.3	104	<2	10	2	-	-	-	-	-	-	-	-	-	-	- RC, fest py-bearing qz vein
Jim's cut																				-
235	5456	Rep	0.12m	32	0.7	765	10	84	10	-	-	-	-	-	-	-	-	-	-	- TP, fg gray min di
235	5457	S	0.02m	20	0.4	752	10	127	6	-	-	-	-	-	-	-	-	-	-	- RC, fg gray di w/cp
235	5458	C	0.06m	45	0.2	723	<2	18	97	-	-	-	-	-	-	-	-	-	-	- TP, qz feldspar vein
235	5459	Rep	0.06m	46	0.7	1496	10	46	10	-	-	-	-	-	-	-	-	-	-	- RC, di w/po and sparse cp
235	5460	Rep	0.02m	113	0.8	2148	<2	36	39	-	-	-	-	-	-	-	-	-	-	- RC, ml stained di w/dissem py & cp(?)
235	5461	Rep	0.61m	254	1.5	3856	<2	84	111	-	-	-	-	-	-	-	-	-	-	- TP, di w/dissem py, po, cp(?)
235	5471	SC	22.87m @ .61m	68	0.5	986	15	97	-	-	-	-	-	-	-	-	-	-	-	- OC, fel intrusive w/po, cp, ml
235	5472	Rep	0.12m	378	2.3	5820	4	60	-	-	-	-	-	-	-	-	-	-	-	- RC, di w/po, cp, ml
235	5883	C	0.46m	259	6.8	6445	<2	54	6	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/py, ml, cp(?)
235	5884	S	0.09m	240	2.3	5516	<2	31	945	-	-	-	-	-	-	-	-	-	-	- TP, fel intrusive w/mo, py, cp, qz
235	5892	SC	22.87m @ .61m	163	1.1	2632	3	48	-	-	-	-	-	-	-	-	-	-	-	- TP, min fel to intermediate intrusive
Gold Nugget No. 3 (Birdseye)																				-
236	5464	CC	0.26m	14.05*	7.9	85	829	1585	1	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/py, sl, gn
236	5465	C	0.21m	217	1.6	82	370	319	2	-	-	-	-	-	-	-	-	-	-	- OC, dike w/sparse sulf
236	5466	C	0.23m	1170	8.6	6	2819	682	7	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/py, gn
236	5467	C	0.30m	30	1.0	4	291	140	6	-	-	-	-	-	-	-	-	-	-	- OC, qz vein
236	5468	C	1.07m	30	<0.1	18	14	98	2	-	-	-	-	-	-	-	-	-	-	- OC, dike w/dissem sulf
236	5469	C	0.61m	37	0.2	115	9	110	-	-	-	-	-	-	-	-	-	-	-	- OC, gs-gs sc w/py
236	5886	C	0.61m	<5	<0.1	4	<2	19	<1	-	-	-	-	-	-	-	-	-	-	- OC, qz vein in metamorphosed dike
236	5887	SC	1.83m @ .15m	32	<0.1	21	7	93	2	-	-	-	-	-	-	-	-	-	-	- OC, micaceous, feldspathic dike w/py
236	5888	C	0.40m	18	0.8	4	316	61	2	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/py, gn
236	5889	C	0.67m	650	0.9	4	174	70	4	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/py, gn
236	5890	C	0.27m	79	3.3	39	822	356	3	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/gn, coarse py cubes
236	5893	C	1.04m	<5	0.2	47	9	152	-	-	-	-	-	-	-	-	-	-	-	- OC, black slate w/med-coarse py cubes
236	5896	G		1218	2.9	11	685	1423	-	-	-	-	-	-	-	-	-	-	-	- MD, qz rubble at edge of shaft
Gold Nugget No. 3																				-
237	5473	CC	0.15m	8	<0.1	32	<2	8	-	-	-	-	-	-	-	-	-	-	-	- OC, qz vein
237	5474	C	0.79m	<5	<0.1	13	3	25	-	-	-	-	-	-	-	-	-	-	-	- OC, qz carbonate lens

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	W	As	Sb	Zr	Ce	Ta	Th	U	Sm	Tb	Sample Description
Quarry south of Gold Nugget claims																				
238	5907	C	0.12m	8140	31.5	22	1.03*	0.06*	-	-	-	-	-	-	-	-	-	-	- TP, qz pegmatite vein w/py, cp, sl, gn	
238	8087	S		3318	5.2	359	485	2971	-	-	-	-	-	-	-	-	-	-	- RC, msv, coarse py, po, in qz	
Gold String																				
239	8150	Rep		365	0.2	121	<2	17	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/py & gs sc clasts	
239	8151	RC	0.2m	35	<0.1	65	15	12	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/py, in talc sc	
239	8152	C	1.2m	4728	47.4	975	7887	6.28*	-	-	-	-	-	-	-	-	-	-	- TP, qz lenses w/sl, gn, aspy, py in talc sc	
239	8398	G		213	2.9	46	1781	5032	-	-	-	-	-	-	-	-	-	-	- MD, gs sc w/qz	
239	8399	G		11	<0.1	35	20	201	-	-	-	-	-	-	-	-	-	-	- MD, gs & talc sc	
239	8400	S		8560	103.2*	524	7.2*	15.0*	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/sulf	
239	8401	G		565	0.5	100	150	269	-	-	-	-	-	-	-	-	-	-	- TP, qz w/py, aspy	
Gold Stone																				
240	8153	C	0.3m	4820	44.8	290	4.95*	2.59*	15	7	17	<20	<20	-	-	78	600	28	-	- OC, talc & chl sc w/py, sl, gn
240	8154	CC	.6m x.1m x.3m	1758	8.1	432	7000	2.16*	-	-	-	-	-	-	-	561	-	-	-	- OC, chl-talc sc w/qz lenses & py, sl, gn
Heckman																				
241	8155	SC	3.1m @ .2m	6260	2.5	289	815	15900	-	-	-	-	-	-	-	-	10000	-	-	- OC, talc-chl-qz sc w/py, sl, gn, aspy
241	8156	S		2280	29.9	551	1.8*	15.00*	-	-	-	-	-	-	-	-	7850	-	-	- RC, qz lenses w/msv sl, gn, py
Sea Breeze																				
242	8182	C	1.0m	9	0.4	104	8	69	-	-	-	-	-	-	-	-	-	-	- UW, sheared sc w/minor qz lenses	
242	8183	C	2.3m	114	0.2	18	26	203	2	26	21	<20	<20	-	279	26	22	-	- UW, qz vein hosted by sheared sc	
242	8184	C	0.9m	44	<0.1	3	4	43	-	-	-	-	-	-	-	-	-	-	- UW, qz vein	
242	8185	S		1708	10.2	7	2210	10110	7	10	7	<20	<20	-	288	13	4	-	- MD, qz vein w/sl, gn, py	
242	8432	RC	6.1m	402	1.7	8	49	2880	-	-	-	-	-	-	-	-	-	-	- MD, qz w/py, gn	
243	8181	SC	2.6m @ .2m	2046	0.3	3	11	11	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
243	8186	C	0.5m	3098	1.2	7	15	68	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
243	8431	G		<5	<0.1	3	3	3	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
243	8433	C	0.7m	219	0.1	3	3	12	-	-	-	-	-	-	-	-	-	-	- MD, qz	
Sealevel																				
244	8048	S		62.85*	23.1	1	387	123	-	-	-	-	-	-	-	-	-	-	- MD, qz w/sulf, py	
244	8180	C	1.6m	4022	1.3	5	10	78	4	8	19	<20	<20	-	222	51	18	-	- UW, qz vein in alt metavolc	
244	8429	C	0.6m	69	0.2	3	8	13	-	-	-	-	-	-	-	-	-	-	- UW, qz vein	
244	8430	Rep		2465	0.8	14	15	144	-	-	-	-	-	-	-	-	-	-	- UW, msv metavolc w/py	
244	8434	C	1.1m	615	0.3	3	5	15	-	-	-	-	-	-	-	-	-	-	- TP, qz	
245	8187	C	0.3m	76.59*	36.3	3	113	175	<1	15	27	<20	<20	-	280	115	2	-	- UW, qz vein	
245	8188	C	1.3m	4201	2.1	2	27	28	-	-	-	-	-	-	-	-	-	-	- UW, qz vein + alt metavolc	
245	8435	RC	15.3m	243	0.1	10	12	116	1	7	29	<20	<20	-	106	7	54	-	- MD, alt metavolc w/qz, py	
245	8436	C	0.4m	85	0.1	2	2	4	-	-	-	-	-	-	-	-	-	-	- OC, qz vein	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
245	8437	RC		363	0.1	3	3	5	1	5	4	<20	<20	-	348	7	5	-	- MD, qz w/py	
246	8179	SC	4.12m @ .1m	63	0.9	12	8	71	-	-	-	-	-	-	-	-	-	-	- TP, qz veins in alt metavolc	
246	8425	Rep		25	<0.1	3	6	4	-	-	-	-	-	-	-	-	-	-	- TP, qz	
246	8426	G		4276	1.4	17	41	107	1	13	39	<20	<20	-	44	47	36	-	-	- TP, metavolc w/py
246	8427	C	0.1m	7	<0.1	3	4	7	-	-	-	-	-	-	-	-	-	-	- TP, qz	
246	8428	Rep	0.4m	67	0.2	2	2	3	1	7	1	<20	<20	-	350	<5	3	-	-	- MD, qz
Goo Goo Extension No. 1																				
247	8047	S		542	<0.1	7	5	1210	-	-	-	-	-	-	-	-	-	-	- MD, qz w/sulf, py	
247	8329	G		117	<0.1	<1	3	11	-	-	-	-	-	-	-	-	-	-	- MD, qz w/py	
248	8046	C	1.4m	16	<0.1	<1	<2	5	-	-	-	-	-	-	-	-	-	-	- OC, qz	
248	8176	C	0.4m	<5	<0.1	2	3	8	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
248	8177	Rep		25	0.1	23	11	148	1	9	36	<20	<20	-	30	21	52	-	-	- TP, alt metavolc w/py
248	8178	G		17.35*	3.4	12	47	26	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/py-bearing sc	
248	8328	C	1.2m	48	<0.1	6	4	104	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
248	8423	C	1.1m	591	0.3	5	9	15	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/py	
248	8424	C	1.1m	<5	<0.1	4	4	45	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
249	8170	C	1.3m	495	0.1	2	9	9	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/minor py	
249	8171	SC	3.4m @ .1m	546	1.4	75	8	373	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/minor py	
249	8327	C	1.2m	475	0.7	<1	<2	8	-	-	-	-	-	-	-	-	-	-	- TP, qz w/py	
249	8412	C	2.1m	424	0.2	3	13	27	-	-	-	-	-	-	-	-	-	-	- TP, qz vein w/minor py	
249	8421	C	1.8m	1803	1.5	19	14	43	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
250	8173	G		<5	0.5	19	12	182	42	25	19	<20	<20	-	109	<5	68	-	- RC, graphitic mica sc	
Goo Goo																				
251	8174	Rep		7	0.1	2	6	3	-	-	-	-	-	-	-	-	-	-	- FL, qz vein	
252	8045	C	2.7m	9	<0.1	<1	<2	7	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
252	8172	SC	4.2m @ .1m	487	0.2	2	2	12	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
252	8326	RC		1601	1.3	<1	4	6	-	-	-	-	-	-	-	-	-	-	- MD, qz	
252	8422	C	1.9m	86	<0.1	18	6	18	1	10	6	<20	<20	-	330	<5	12	-	-	- TP, qz vein w/py
253	8044	Rep	16.8m	1447	0.5	<1	3	24	-	-	-	-	-	-	-	-	-	-	- MD, qz vein w/py	
253	8325	S		1685	0.3	<1	5	48	-	-	-	-	-	-	-	-	-	-	- MD, qz w/py	
Sealevel area																				
254	8175	SC	2.0m @ .1m	66	2.6	171	146	133	2	13	3	<20	<20	-	336	<5	6	-	-	- TP, qz vein
255	8169	C	0.4m	1993	3.5	4	596	251	3	10	6	<20	<20	-	288	56	8	-	-	- TP, qz vein w/py
255	8411	C	0.4m	36	0.4	4	79	20	-	-	-	-	-	-	-	-	-	-	- UW, qz, metavolc, fault gouge	
Gold Banner																				
256	8157	G		<5	0.1	3	35	140	1	9	<1	<20	<20	-	348	31	2	-	- UW, qz vein	
256	8158	G		16	0.2	3	93	339	-	-	-	-	-	-	-	-	-	-	- UW, qz vein	
256	8402	Rep		141	0.1	2	10	8	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
257	8168	G		<5	0.1	13	10	223	1	11	33	<20	<20	-	54	<5	226	-	-	- OC, gneiss w/py
257	8410	SC	7.6m @ .3m	102	0.3	17	33	127	4	11	33	<20	<20	-	65	<5	125	-	-	- OC, qz sc w/py
258	8159	C	2.1m	7	0.4	2	86	112	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
258	8160	C	0.9m	35	0.8	3	230	26	5	5	3	<20	<20	-	315	<5	6	-	-	- TP, qz vein in metavolc

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
258	8161	C	0.9m	12	<0.1	50	10	84	-	-	-	-	-	-	-	-	-	-	- TP, shear zone in metavolc w/qz stringers	
258	8162	C	1.5m	703	0.3	9	42	160	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
258	8163	Rep		53	<0.1	4	15	38	-	-	-	-	-	-	-	-	-	-	- UW, qz vein in metavolc	
258	8164	S		8991	2.4	5	43	73	2	36	94	<20	<20	-	56	61	17	-	-	- TP, sc w/py cubes in shear
258	8165	C	0.1m	<5	<0.1	2	5	4	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
258	8166	C	0.4m	16	<0.1	3	8	15	-	-	-	-	-	-	-	-	-	-	- UW, qz vein	
258	8167	G		7	1.9	145	15	68	<1	41	54	<20	<20	-	39	71	25	-	-	- UW, metavolc w/py
258	8403	C	0.6m	411	0.7	2	12	86	-	-	-	-	-	-	-	-	-	-	- UW, qz vein	
258	8404	C	0.7m	59	0.3	2	16	29	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
258	8405	C	0.5m	851	0.1	2	4	4	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
258	8406	Rep		221	0.3	9	14	50	-	-	-	-	-	-	-	-	-	-	- TP, qz vein	
258	8407	SC	3.7m @ .2m	1398	0.3	11	25	113	<1	9	27	<20	<20	-	49	9	54	-	-	- UW, qz in metavolc w/py
258	8408	C	0.8m	936	0.6	4	155	60	-	-	-	-	-	-	-	-	-	-	- UW, metavolc w/py	
258	8409	S		16.39*	59.31*	8	56.57*	44	<1	14	18	<20	<20	-	218	14	11	-	-	- UW, qz + sheared rock w/py
258																			- UW, qz w/py, gn	
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Sn	Ba	W	Pt	Pd	Co	Te	Cr	V	Sample Description
259	7239	S		86	9.2	19333	12	116	-	-	-	250	-	-	-	-	-	-	-	- FL, msv sulf float
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
260	8105	C	1.4m	32	4.6	2516	218	7152	-	-	-	-	-	-	-	-	-	-	-	- OC, qz-barite vein w/cp
260	8368	S		20	34.4	1000	20.36*	4.16*	25	2	13	<20	<20	-	52	27	<1	-	-	- OC, barite vein w/gn
261	8104	S		<5	<0.1	74	4	94	1	4	12	<20	<20	-	111	16	1	-	-	- RC, metavolc w/py
269	8103	S		<5	<0.1	102	77	102	-	-	-	-	-	-	-	-	-	-	- RC, gossan	
272	8102	S		<5	<0.1	179	9	110	1	3	<1	<20	<20	-	144	<5	1	-	-	- OC, gossan + metavolc
262	8132	C	1.8m	38	1	1383	26	47	-	-	-	-	-	-	-	-	-	-	- TP, gs w/qz vein & disseminated sulf	
262	8133	C	0.6m	55	1.1	1228	35	379	10	15	39	-	-	-	-	-	-	-	- TP, qz vein	
263	8122	C	1.9m	45	2.4	3340	43	1270	-	-	-	-	-	-	-	-	-	-	- UW, shear br w/minor cp	
263	8123	C	1.6m	29	1.9	5000	19	567	-	-	-	-	-	-	-	-	-	-	- UW, shear br w/cp	
263	8124	S		94	8.1	3.32*	58	223	23	27	64	<20	<20	-	106	662	1	-	-	- TP, min shear
263	8125	SC	5.8m @ .3m	<5	<0.1	160	19	237	-	-	-	-	-	-	-	-	-	-	- UW, chl sc in shear	
263	8384	SC	6.4m @ .3m	<5	0.2	775	16	133	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/py, cp	
263	8385	SC	5.5m @ .3m	<5	0.2	930	10	238	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/py, cp	
263	8386	SC	8.5m @ .3m	<5	<0.1	169	17	163	-	-	-	-	-	-	-	-	-	-	- UW, chl sc w/py, cp?	
263	8387	SC	8.5m @ .3m	<5	<0.1	165	22	176	-	-	-	-	-	-	-	-	-	-	- UW, chl sc & br w/py	
263	8412	C	0.9m	50	0.8	4760	24	181	11	10	10	<20	<20	-	91	<5	21	-	-	- UW, silicic chl sc in shear w/cp
263	8414	C	1.1m	14	0.2	1190	16	97	-	-	-	-	-	-	-	-	-	-	- UW, silicic chl sc in shear w/cp, hem	
263	8415	C	1.2m	25	0.7	6240	17	162	-	-	-	-	-	-	-	-	-	-	- UW, silicic chl sc in shear w/cp	
263	8416	C	2.3m	9	0.8	1180	22	269	7	10	14	<20	<20	-	62	<5	31	-	-	- UW, alt intrusive/sc w/cp, hem
263	8417	C	3.1m	<5	0.5	616	20	222	13	13	20	<20	<20	-	75	5	31	-	-	- UW, sheared silicic chl sc w/cp, ba
263	8418	SC	2.4m @ .2m	18	0.9	1930	21	340	10	7	10	<20	<20	-	101	8	14	-	-	- UW, msv microcrystalline qz, chert

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
263	8419	Rep	6.1m	11	0.6	461	24	105	29	13	30	<20	<20	-	79	19	72	-	-	UW, silicic chl sc
263	8420	S		<5	1.6	5790	16	229	3	14	15	<20	<20	-	58	<5	19	-	-	UW, br w/cp & barite
266	8390	Rep	3.7m	147	3.8	7210	33	157	-	-	-	-	-	-	-	-	-	-	MD, qz & gs/slate w/py, cp	
North Paula																				
264	8106	C	3.1m	177	0.8	1681	27	76	-	-	-	-	-	-	-	-	-	-	TP, sheared metavolc w/qz stringers & sulf	
264	8107	C	2.9m	74	0.4	1306	19	72	-	-	-	-	-	-	-	-	-	-	TP, sheared metavolc w/qz stringers & py, cp	
264	8108	C	1.2m	207	1.2	3230	37	20	12	15	27	<20	<20	-	163	254	35	-	-	TP, silica-rich shear in metavolc w/py & cp
264	8109	C	2.0m	91	0.4	2710	12	58	-	-	-	-	-	-	-	-	-	-	TP, sheared metavolc w/cp & py	
264	8110	Rep	0.6m	71	0.6	2574	36	37	-	-	-	-	-	-	-	-	-	-	TP, min shear	
264	8111	C	2.1m	108	0.3	1729	19	51	-	-	-	-	-	-	-	-	-	-	TP, min shear	
264	8369	C	1.8m	91	0.2	601	440	125	-	-	-	-	-	-	-	-	-	-	TP, qz vein in gs w/cp	
264	8370	C	1.7m	214	2.9	10790	99	96	-	-	-	-	-	-	-	-	-	-	UW, qz vein w/py	
264	8371	Rep	3.1m	103	0.4	485	113	147	5	61	44	<20	<20	-	163	133	108	-	-	UW, gs w/qz stringers and msv py
Bay View No. 2																				
265	8129	SC	4.4m @ .2m	38	1.2	3730	13	106	-	-	-	-	-	-	-	-	-	-	TP, slate w/qz vein, dissem py & cp	
265	8130	C	0.5m	196	2.1	10603	8	67	-	-	-	-	-	-	-	-	-	-	TP, qz vn w/cp & py	
265	8131	C	1.9m	210	0.3	8489	4	86	5	174	31	-	-	-	-	-	-	-	OC, slate or metavolc w/qz veins/ stringers, w/cp & py	
265	8389	Rep	3.4m	124	1.5	6305	65	175	-	-	-	-	-	-	-	-	-	-	TP, qz veins in gs or slate w/cp, py	
Bay View																				
267	8112	C	2.4m	200	0.7	7889	16	52	10	66	95	<20	<20	-	192	98	42	-	-	OC, min shear
267	8372	SC	9.2m @ .3m	27	0.3	1284	33	102	-	-	-	-	-	-	-	-	-	-	OC, fault gouge, qz stringers & msv sulf	
267	8373	C	1.5m	49	0.5	3020	39	58	-	-	-	-	-	-	-	-	-	-	OC, fault gouge, msv sulfs & qz stringers	
267	8374	C		297	0.4	7239	12	77	4	30	38	<20	<20	-	90	<5	79	-	-	OC, qz stringers, gs in shear zone
267	8375	C	2.7m	450	0.2	2720	15	85	-	-	-	-	-	-	-	-	-	-	OC, qz stringers, gs in shear zone	
267	8376	SC	0.2m	136	0.2	3240	23	93	2	46	38	<20	<20	-	91	10	69	-	-	OC, fault gouge & sheared rock w/sulf
267	8377	SC	4.6m @ .2m	51	0.7	7452	15	128	-	-	-	-	-	-	-	-	-	-	OC, fest rock in shear zone w/fault gouge	
Grotto																				
268	8117	RC		<5	2	546	298	500	1	5	15	<20	<20	-	121	10	12	-	-	RC, br of metavolc w/hem & ba
Hobo																				
270	8118	C	1.5m	204	<0.1	2819	35	70	-	-	-	-	-	-	-	-	-	-	UW, alt metavolc w/cp	
270	8119	C	1.7m	282	0.9	8545	36	71	-	-	-	-	-	-	-	-	-	-	UW, alt metavolc w/cp	
270	8120	S		9	1	148	14	409	-	-	-	-	-	-	-	-	-	-	UW, chl sc, alt metavolc & fel intrusive	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5-Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
War Eagle, Big Joe																				
271	8121	SC	13.7m @ .3m	18	<0.1	710	10	75	3	15	16	<20	<20	-	100	<5	96	-	- OC, alt fel intrusive w/cp	
271	8381	Rep	7.6m	199	0.5	7648	43	59	-	-	-	-	-	-	-	-	-	-	- MD, sheared gs w/qz stringers & py	
271	8382	C	2.7m	130	0.6	4957	30	49	-	-	-	-	-	-	-	-	-	-	- TP, qz veins w/py & hem in shear zone	
271	8383	S		206	1	7819	56	229	10	12	69	<20	<20	-	201	644	13	-	- OC, qz veins w/msv py & cp in shear	
War Eagle																				
273	8113	C	4.9m	167	0.3	3358	19	95	4	27	36	<20	<20	0.16	119	58	63	-	- TP, min shear in metavolc	
273	8114	SC	1.7m @ .2m	135	0.4	6880	8	34	-	-	-	-	-	-	-	-	-	-	- OC, min qz-rich shear in metavolc	
273	8115	S		487	2.7	5.27*	45	67	12	26	34	<20	<20	-	170	147	22	-	- MD, qz w/cp, py, hem	
273	8116	Rep		<5	<0.1	350	5	63	-	-	-	-	-	-	-	-	-	-	- TP, metavolc & intrusive w/dissem sulf	
273	8378	S		4511	5.7	10.35*	39	36	4	60	225	<20	<20	-	100	481	8	-	- MD, br gs & qz vein	
273	8379	Rep	6.1m	329	0.7	13142	18	91	3	33	70	<20	<20	0.17	101	67	70	-	- MD, br gs & qz vein	
273	8380	Rep	2.7m	206	0.6	7900	46	44	-	-	-	-	-	-	-	-	-	-	- TP, gs, min shear, silicic br	
Dall Bay area																				
274	8144	SC	6.4m @ .2m	362	0.7	6494	5	20	-	-	-	-	-	-	-	-	-	-	- TP, alt intrusive w/cp	
274	8145	S		864	1.8	2.51*	6	60	-	-	-	-	-	-	-	-	-	-	- MD, br leucocratic intrusive w/cp	
274	8146	SC	8.54m @ .3m	1845	1.2	11223	10	84	-	-	-	-	-	-	-	-	-	-	- TP, shear br w/cp in leucocratic intrusive	
274	8147	S		222	2.3	2.01*	8	31	-	-	-	-	-	-	-	-	-	-	- MD, min. sheared leucocratic intrusive	
274	8396	SC	7.0m @ .3m	203	0.7	7003	5	53	-	-	-	-	-	-	-	-	-	-	- & hem matrix br, both w/cp	
275	8142	C	1.3m	20	<0.1	570	<2	8	-	-	-	-	-	-	-	-	-	-	- TP, qz br w/cp, py, hem	
275	8143	S		551	0.2	5410	4	19	-	-	-	-	-	-	-	-	-	-	- UW, alt leucocratic intrusive w/minor sulf	
Dall Bay No. 5																				
276	8134	S		247	0.6	3.07*	4	11	-	-	-	-	-	-	-	-	-	-	- TP, alt intrusive w/cp & py	
276	8135	SC	3.4m @ .1m	12	<0.1	2229	<2	9	-	-	-	-	-	-	-	-	-	-	- TP, alt, sheared intrusive w/minor cp & py	
276	8136	S		476	0.5	20000	4	15	-	-	-	-	-	-	-	-	-	-	- MD, alt intrusive w/cp & py	
276	8137	S		<5	<0.1	17110	<2	5	-	-	-	-	-	-	-	-	-	-	- RC, qz-barite vein w/cp & py	
276	8141	C	1.5m	<5	<0.1	62	<2	6	-	-	-	-	-	-	-	-	-	-	- TP, alt leucocratic intrusive	
276	8391	SC	2.8m @ .2m	6	0.2	288	25	35	-	-	-	-	-	-	-	-	-	-	- OC, qz- & feldspar-rich intrusive w/py	
276	8394	C	7.6m	<5	<0.1	72	3	25	-	-	-	-	-	-	-	-	-	-	- TP, granitic intrusive	
276	8395	G		<5	<0.1	16	5	15	-	-	-	-	-	-	-	-	-	-	- OC, qz- & feldspar-rich intrusive w/hem + fault gouge	
Dall Bay No. 4, No. 2																				
277	8001	SC	6.7m @ .3m	194	0.2	5419	<2	4	-	-	-	-	-	-	-	-	-	-	- OC, qz-rich vein w/dissem cp & py	
277	8002	G		7	<0.1	59	<2	7	-	-	-	-	-	-	-	-	-	-	- OC, qz-rich, py-hem-bearing rock	
277	8138	SC	7.8m @ .1m	172	0.3	3733	3	4	-	-	-	-	-	-	-	-	-	-	- OC, leucocratic intrusive w/cp	
277	8139	SC	23.2m @ .3m	185	0.4	13702	4	6	-	-	-	-	-	-	-	-	-	-	- OC, leucocratic intrusive w/cp	
277	8140	SC	13.7m @ .3m	23	0.1	1019	2	5	-	-	-	-	-	-	-	-	-	-	- OC, leucocratic intrusive w/cp	

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
277	8392	SC	2.4m @ .2m	10	<0.1	362	4	10	-	-	-	-	-	-	-	-	-	-	-	- TP, leucocratic intrusive w/cp
277	8393	Rep	6.1m	36	0.2	5174	9	14	-	-	-	-	-	-	-	-	-	-	-	- MD, qz-rich metamorphic rock w/cp, py

Friday																				
278	8004	Rep		10	0.2	3620	15	197	-	-	-	-	-	-	-	-	-	-	-	- OC, siderite vein w/qz & cp
278	8005	Rep	2.1m	41	0.2	3256	359	1111	-	-	-	-	-	-	-	-	-	-	-	- TP, oxidized siderite vn w/cp
278	8301	C	0.9m	10	<0.1	1537	49	130	-	-	-	-	-	-	-	-	-	-	-	- TP, feldspar-rich rock w/minor cp
279	8006	S		112	0.9	2.03*	516	2090	-	-	-	-	-	-	-	-	-	-	-	- MD, qz vein
279	8302	S		7	<0.1	242	36	138	-	-	-	-	-	-	-	-	-	-	-	- OC, gossan

Abe																				
280	8007	RC		<5	<0.1	4287	7	174	-	-	-	-	-	-	-	-	-	-	-	- OC, gossan w/cp
280	8008	S		554	1.2	6.42*	10	209	-	-	-	-	-	-	-	-	-	-	-	- MD, min br w/cp

Nahenta Bay																				
281	8003	S		<5	2.4	7554	152	776	-	-	-	11	-	-	-	-	-	-	-	- OC, meta-igneous rock
282	8009	G		10	2.5	438	124	814	-	-	-	24	-	-	-	-	-	-	-	- OC, metavolc w/py lenses

Southwest Gravina Island																				
283	8148	SS		<5	<0.2	8	3	26	<1	6	5	-	<20	-	10	<5	-	-	-	stream sediment
284	8149	SS		6	0.4	11	20	75	4	13	14	-	<20	-	18	47	-	-	-	stream sediment
284	8397	G		6	<0.1	135	5	59	-	-	-	-	6628	-	-	-	-	-	-	- OC, gs

IXL No. 1																				
285	8080	C	1.3m	224	26.5	1029	619	9990	7	-	-	-	-	-	-	-	-	-	-	- UW, msv py in fel sc
285	8081	S		42	1.3	370	20	5.72*	7	-	-	-	-	-	-	-	-	-	-	- UW, massive py w/minor mica sc
285	8354	SC	7.6m @ .3m	20	3.7	1045	130	866	4	-	-	-	-	-	-	-	-	-	-	- UW, sc w/layers of py
285	8355	SC	7.6m @ .3m	372	14.2	711	1362	5067	7	-	-	-	-	-	-	-	-	-	-	- UW, sc w/py layers
285	8356	S		130	97.71*	1951	6964	2.48*	3	-	-	-	-	-	-	-	-	-	-	- MD, mainly py

Nanjan																				
286	8082	C	1.2m	<5	<0.1	14	7	235	343	-	-	-	-	-	-	-	-	-	-	- UW, qz vein w/py, mo
286	8083	C	1.3m	<5	<0.1	5	4	305	1978	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/py & mo, fault gouge, gneiss
286	8084	C	0.9m	<5	0.1	1	<2	18	55	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/minor py
286	8357	C	1.8m	<5	0.8	20	77	110	316	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/minor py, mo
286	8360	Rep	1.8m	<5	<0.1	2	12	149	358	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/py, mo
287	8085	S		<5	<0.1	<1	6	28	69	-	-	-	-	-	-	-	-	-	-	- OC, fault gouge, clay minerals
287	8358	Rep	5.5m	<5	2.6	50	259	450	4	-	-	-	-	-	-	-	-	-	-	- OC, qz w/minor py
287	8359	SC	4.0m @ .2m	<5	<0.1	2	6	12	15	-	-	-	-	-	-	-	-	-	-	- OC, qz vein in hbnd gd w/py
287	8361	C	1.5m	<5	<0.1	2	6	133	344	-	-	-	-	-	-	-	-	-	-	- OC, qz vein w/minor py
288	8086	Rep	1.2m	<5	<0.1	2	<2	10	16	-	-	-	-	-	-	-	-	-	-	- OC, qz vn w/py
288	8362	S		<5	<0.1	2	6	12	2468	-	-	-	-	-	-	-	-	-	-	- OC, qz vn w/py

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
Alava Bay																				
289	8062	Rep	<5	<0.1	20	<2	63	-	-	-	-	-	2.07	-	-	-	-	-	- OC, mag-bearing hornblendite	
289	8063	SC	16.5m @ .6m	<5	<0.1	20	<2	66	-	16	44	-	-	1.91	48	19	841	15	6	- OC, mag-bearing hornblendite
289	8064	SC	16.2m @ .6m	<5	<0.1	39	<2	60	-	14	49	-	-	1.85	40	28	711	<5	<1	- OC, mag-bearing hornblendite
289	8065	Rep	<5	<0.1	53	<2	52	-	-	-	-	-	1.67	-	-	-	-	-	- OC, mag-bearing hornblendite	
289	8339	SC	16.5m @ .6m	<5	<0.1	59	<2	65	-	-	-	-	-	1.87	-	-	-	-	- OC, mag-bearing hornblendite	
289	8340	SC	13.7m @ .6m	<5	<0.1	52	<2	62	-	-	-	-	-	1.96	-	-	-	-	- OC, mag-bearing hornblendite	
289	8341	SC	10.1m @ .6m	<5	<0.1	62	<2	65	-	-	-	-	-	1.97	-	-	-	-	- OC, mag-bearing hornblendite	
289	8342	SC	10.4m @ .6m	<5	<0.1	93	<2	65	-	-	-	-	-	1.98	-	-	-	-	- OC, mag-bearing hornblendite	
289	8343	S	<5	<0.1	76	<2	69	-	28	64	-	-	-	1.91	57	24	841	10	3	- OC, mag-bearing hornblendite
290	8066	Rep	<5	<0.1	10	<2	60	3	13	23	-	-	-	1.98	-	-	-	-	- OC, mag-bearing hornblendite	
290	8067	Rep	3.7m x 3.1m	<5	<0.1	14	<2	67	-	-	-	-	-	2.06	-	-	-	-	- OC, mag-bearing hornblendite	
290	8068	Rep	<5	<0.1	32	<2	50	-	-	-	-	-	-	1.31	-	-	-	-	- OC, hornblendite	
290	8069	Rep	<5	<0.1	12	<2	70	-	-	-	-	-	-	2.26	-	-	-	-	- OC, mag-bearing hornblendite	
290	8344	SC	9.6m @ .6m	<5	<0.1	17	3	69	-	-	-	-	-	2.02	-	-	-	-	- OC, mag-bearing hornblendite	
291	8070	Rep	<5	<0.1	41	<2	51	-	-	-	-	-	-	1.85	-	-	-	-	- OC, mag-bearing hornblendite	
291	8071	Rep	5.5m	<5	<0.1	14	<2	48	-	16	41	-	-	1.71	44	8	782	<5	4	- OC, mag-bearing hornblendite
292	8072	Rep	0.3m	<5	<0.1	20	<2	102	-	-	-	-	-	2.84	-	-	-	-	- OC, mag-bearing hornblendite	
293	8346	Rep	9.2m	<5	<0.1	16	<2	6	-	-	-	-	-	2.25	-	-	-	-	- OC, qz vein in sc	
																			- OC, mag-bearing hornblendite	
Marten River																				
294	8060	PC	2 pans	8	<0.2	21	12	84	13	17	-	-	<20	-	-	159	<5	-	- pan concentrate	
295	8336	G		18	0.9	111	4	119	-	-	-	-	-	-	-	-	-	-	- FL, fest rock w/py	
296	8059	PC	1 pan	193	<0.2	3	19	80	7	16	-	-	<20	-	-	164	<5	-	- pan concentrate	
Red River																				
297	8338	G		<5	0.3	27	4	165	19	29	5	-	-	-	-	-	-	-	- FL, qz bt sc	
298	8061	PC	2 pans	2248	<0.2	60	13	95	7	10	17	-	52	-	-	<5	-	-	- pan concentrate	
Percy Islands																				
299	8012	Rep	2.4m	<5	<0.1	58	<2	27	-	108	53	-	-	-	455	10	252	12	7	- OC, olivine pyroxenite
299	8306	S		<5	<0.1	61	<2	74	-	-	-	-	-	0.78	-	-	-	-	- OC, gabbro	
300	8010	G		<5	<0.1	248	2	76	-	328	144	-	-	0.2	222	33	83	<5	3	- OC, mag in hblc-pyroxe
300	8303	Rep		<5	<0.1	17	<2	18	-	-	-	-	-	0.57	-	-	-	-	- OC, hornblendite	
300	8304	C	1.2m	<5	<0.1	60	2	40	-	-	-	-	-	0.8	-	-	-	-	- OC, pegmatite	
301	8011	Rep	12.2m	<5	<0.1	70	3	62	-	15	-	-	-	1.15	-	-	-	-	- OC, mag-bearing hornblendite	
301	8305	SC	8.2m @ .3m	<5	<0.1	57	<2	41	-	-	-	-	-	1.61	-	-	-	-	- OC, gabbro	
Pond Bay																				
302	8014	Rep	2.7m	<5	<0.1	19	2	6	-	-	-	-	-	-	-	-	-	-	- OC, qz di to gd	
302	8307	Rep	2.4m	<5	<0.1	<1	3	46	-	-	-	-	-	-	-	-	-	-	- OC, fel dike in metagabbro host	
303	8308	Rep	1.2m	<5	<0.1	15	2	12	-	-	-	-	-	-	-	-	-	-	- OC, ultra-mafic (gabbro?)	
304	8013	RC		<5	<0.1	48	<2	79	-	21	41	-	-	2.21	55	9	371	<5	<1	- OC, ultra-mafic (gabbro?) w/mag

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description	
Hall Cove																					
305	8021	Rep	4.6m	<5	<0.1	15	<2	25	-	243	62	-	-	0.15	757	19	93	21	264	OC, peridotite w/minor chromite	
305	8022	Rep		<5	<0.1	5	<2	69	-	696	155	-	-	0.04	710	28	23	<5	<1	OC, olivine-rich peridotite/dunite w/chromite	
305	8023	Rep		<5	<0.1	5	<2	102	-	463	182	-	-	0.03	48	22	12	8	1	OC, peridotite	
305	8024	G		<5	<0.1	48	4	162	-	22	27	-	-	0.75	37	23	341	31	10	FL, py-bearing rock	
305	8311	SC	6.1m @ .6m	<5	<0.1	6	<2	25	-	256	62	-	-	0.24	1065	10	148	<5	9	OC, peridotite/dunite	
305	8312	SC	3.1m @ .6m	7	<0.1	<1	<2	68	-	-	-	-	-	0.04	-	-	-	-	-	OC, pyroxenite	
306	8019	Rep		<5	<0.1	46	<2	72	-	532	112	-	-	0.27	580	22	116	31	13	OC, olivine pyroxenite	
307	8018	Rep		<5	<0.1	161	<2	75	-	584	-	-	-	0.17	-	-	99	-	-	OC, pyroxenite	
308	8017	Rep	0.9m	5	<0.1	2223	<2	21	-	90	-	-	-	0.33	-	-	183	-	-	OC, fest pyroxenite	
308	8020	G		<5	<0.1	8	<2	44	-	408	95	-	-	0.12	824	48	70	9	165	OC, fg, olivine-rich peridotite	
309	8016	Rep		<5	<0.1	100	<2	63	-	61	-	-	-	1.68	-	-	892	-	-	OC, hbld pyroxenite w/mag	
Judd Harbor																					
310	8310	Rep	6.1m	<5	<0.1	5	<2	54	-	1240	131	-	-	0.05	661	27	25	23	9	OC, peridotite	
311	8015	G		<5	<0.1	7	<2	20	-	308	53	-	-	0.28	1071	16	132	8	5	OC, peridotite, cg	
311	8309	Rep	0.9m	<5	<0.1	3	<2	77	-	1028	149	-	-	0.05	203	22	18	7	<1	OC, peridotite	
312	8025	G		<5	<0.1	68	<2	19	-	-	-	-	-	-	-	-	-	-	-	RC, hnbd plagioclase pegmatite	
Very Inlet																					
313	8334	S		<5	<0.1	35	3	9	-	-	-	-	-	-	-	-	-	-	-	OC, qz vein w/py	
314	8332	Rep		<5	<0.1	16	<2	<1	-	-	-	-	-	-	-	-	-	-	-	OC, qz w/py	
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	La	Ce	Nd	Sm	Eu	Tb	Tm	Yb	Sc	Th	U	Sample description	
315	8053	RC		<5	<0.1	<1	<2	216	4.4	9.2	10	0.61	<0.5	<1	<2	<1	1.4	1.6	<1	OC, qz plag pegmatite	
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description	
317	8052	S		13	<0.1	<1	3	73	1026	5	<1	-	-	-	-	-	-	-	-	-	OC, qz vein w/py & mo
318	8335	S		<5	<0.1	5	12	9	3	13	2	-	-	-	-	-	-	-	-	-	OC, qz w/py
319	8330	Rep		<5	<0.1	12	<2	8	-	-	-	-	-	-	-	-	-	-	-	-	OC, qz w/minor sulf
320	8049	C	1.2m	122	<0.1	12	58	422	6	35	-	-	-	-	-	-	-	-	-	-	UW, qz stringers in qz mica sc
320	8050	C	1.4m	234	<0.1	25	51	1210	6	-	-	-	-	-	-	-	-	-	-	-	UW, sil qz mica sc
320	8051	S		19	0.8	33	192	3.94*	-	-	-	-	-	-	-	-	-	-	-	-	MD, qz-mica sc
321	8333	Rep		6	<0.1	<1	<2	2	-	-	-	-	-	-	-	-	-	-	-	-	OC, qz
Very Inlet Steatite																					
316	8054	Rep		6	<0.2	23	6	60	3	1016	72	-	<20	-	-	9	-	-	-	-	RC, steatite
316	8055	S		<5	<0.2	9	7	43	<1	603	43	-	<20	-	-	11	-	-	-	-	RC, steatite
316	8056	S		<5	<0.2	1	7	20	<1	141	14	-	<20	-	-	<5	-	-	-	-	RC, talc
316	8057	Rep		8	<0.2	14	6	49	<1	799	57	-	<20	-	-	6	-	-	-	-	RC, steatite

TABLE A-1. - Selected analytical results. Map numbers refer to figure 5--Continued

Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
316	8058	C	0.8m	98	<0.2	29	4	9	3	12	2	-	<20	-	-	<5	-	-	- OC, qz vein w/ py	
316	8331	G		<5	<0.1	18	<2	12	4	6	<1	-	-	-	-	-	-	-	- OC, qz w/minor sulf	
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	La	Ce	Nd	Sm	Eu	Tb	Tm	Yb	Sc	Th	U	Sample description
Nakat Bay																				
322	8324	Rep	6.1m	<5	<0.1	<1	<2	8	<0.5	<2	<10	<0.1	<0.5	<1	<2	<1	0.7	<0.5	<1	OC, pegmatite
323	8323	Rep	0.3m	<5	<0.1	<1	<2	<1	<0.5	<2	<10	<0.1	<0.5	<1	<2	<1	0.64	<0.5	<1	OC, muscovite plaq qz pegmatite
324	8043	C	2.6m	<5	<0.1	14	5	18	2.6	4.7	<10	0.42	<0.5	<1	<2	<1	0.12	<0.5	<1	OC, granitic pegmatite dike
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	La	Ce	Nd	Sm	Eu	Tb	Tm	Yb	Sc	Th	U	Sample description
Sitklan Passage Pegmatites																				
325	8042	Rep		<5	<0.1	<1	<2	5	1	<2	<10	<0.1	<0.5	<1	<2	<1	0.89	<0.5	<1	OC, plaq qz mica pegmatite
326	8040	Rep		<5	<0.1	<1	<2	4	0.9	<2	<10	<0.1	<0.5	<1	<2	<1	0.54	<0.5	<1	OC, plaq qz muscovite pegmatite
326	8041	Rep	4.6m	<5	<0.1	4	<2	7	0.9	<2	<10	<0.1	<0.5	<1	<2	<1	0.64	<0.5	<1	OC, pegmatite
327	8038	SC	12.2m @ .6m	<5	<0.1	<1	<2	2	0.9	<2	<10	<0.1	<0.5	<1	<2	<1	0.27	<0.5	<1	OC, pegmatite
327	8039	G		<5	<0.1	212	4	78	-	-	-	-	-	-	-	-	-	-	- RC, hornblendite w/po & py	
327	8320	S		8	<0.1	423	<2	3	<0.5	<2	<10	<0.1	<0.5	<1	<2	<1	<0.1	<0.5	<1	RC, qz pegmatite w/sulf, po
327	8321	SC	9.8m @ .6m	<5	<0.1	<1	<2	<1	<0.5	<2	<10	<0.1	<0.5	<1	<2	<1	0.11	<0.5	<1	OC, qz pegmatite
327	8322	SC	8.2m @ .6m	<5	<0.1	1	<2	2	<0.5	<2	<10	<0.1	<0.5	<1	<2	<1	0.19	<0.5	<1	OC, plaq bt musc qz pegmatite
327	8031	Rep		<5	<0.1	<1	<2	7	0.7	<2	<10	<0.1	<0.5	<1	<2	<1	1.1	<0.5	<1	RC, mica-bearing pegmatite
327	8032	SC	6.1m @ .6m	<5	<0.1	1	<2	2	0.7	<2	<10	<0.1	<0.5	<1	<2	<1	1.6	<0.5	<1	TP, pegmatite
327	8033	SC	8.2m @ .6m	<5	<0.1	83	<2	25	6.2	15	<10	2.3	0.6	<1	<2	<1	9	1	<1	TP, pegmatite
327	8034	SC	8.8m @ .6m	<5	<0.1	<1	<2	4	0.7	<2	<10	<0.1	<0.5	<1	<2	<1	0.49	<0.5	<1	TP, pegmatite
327	8035	SC	11.3m @ .6m	<5	<0.1	<1	<2	6	0.9	<2	<10	<0.1	<0.5	<1	<2	<1	0.53	<0.5	<1	TP, plaq qz mica pegmatite
327	8037	Rep	1.8m	<5	<0.1	1	<2	1	0.7	<2	<10	<0.1	<0.5	<1	<2	<1	0.23	<0.5	<1	OC, plaq qz mica pegmatite
327	8314	SC	9.2m @ .6m	<5	<0.1	11	<2	37	0.7	<2	<10	<0.1	<0.5	<1	<2	<1	2	<0.5	<1	TP, plaq qz mica pegmatite
327	8315	SC	10.4m @ .6m	7	<0.1	<1	<2	5	<0.5	<2	<10	<0.1	<0.5	<1	<2	<1	0.65	<0.5	<1	TP, plaq qz mica pegmatite
327	8316	SC	6.1m @ .6m	<5	<0.1	<1	<2	<1	<0.5	<2	<10	<0.1	<0.5	<1	<2	<1	0.11	<0.5	<1	TP, plaq qz mica pegmatite
327	8317	SC	7.9m @ .6m	<5	<0.1	<1	<2	7	<0.5	<2	<10	<0.1	<0.5	<1	<2	<1	0.58	<0.5	<1	TP, plaq qz mica pegmatite
327	8318	SC	7.9m @ .6m	<5	<0.1	24	<2	7	<0.5	<2	<10	0.16	<0.5	<1	<2	<1	1.3	<0.5	<1	TP, bt qz pegmatite
327	8319	SC	4.6m @ .6m	<5	<0.1	4	<2	10	<0.5	<2	<10	0.18	<0.5	<1	<2	<1	2.2	<0.5	<1	TP, bt qz pegmatite
Map No.	Sample No.	Sample type	Sample size	Au	Ag	Cu	Pb	Zn	Mo	Ni	Co	Sn	W	Ti	Cr	As	V	Pt	Pd	Sample description
Kanagunut Island																				
328	8313	G		<5	<0.1	13	<2	11	-	-	-	-	-	-	-	-	-	-	- OC, sulf-bearing qz vein in sc	
328	8026	G		<5	<0.2	124	5	70	3	30	18	-	<20	-	-	<5	-	-	- OC, qz vein w/po	
328	8027	SS		<5	<0.2	14	5	30	1	5	4	-	<20	-	-	<5	-	-	- OC, garnet beach sands	
329	8028	SS		<5	<0.2	13	6	29	5	6	4	-	<20	-	-	<5	-	-	- OC, garnet beach sands	
330	8029	SS		<5	<0.2	10	6	36	<1	4	4	-	<20	-	-	<5	-	-	- OC, garnet beach sands	
331	8030	G		<5	<0.2	14	7	17	<1	5	2	-	<20	-	-	<5	-	-	- OC, qz vein/boudin	

TABLE A-2. - Velikanje and Riverside placer and pan concentrate sample analyses

Sample number (type)	Weight of gold	Gold particle size	Remarks	g/m^3
8228 (PL)	0.87 mg		Hg	.011
8229 (PL)	11.61 mg/29.47 mg	1.9 x 1.6 mm	Hg/pik	0.54
8230 (PC, 1 pan)	0.04 mg		Hg	0.0084
8249 (PL)	2.75 mg/3.81 mg	0.9 x 0.8 mm	Hg/pik	0.085
8250 (PL)	0.67 mg/9.71 mg	1.4 x 0.9 mm	Hg/pik	0.14
8251 (PL)	0.88 mg/13.03 mg	1.4 x 0.9 mm	Hg/pik	0.18
8282 (PL)	0.27 mg/0.41 mg	0.9 x 0.4 mm	Hg/pik	0.0089
8283 (PC, 4 pans)	0.20 mg/0.92 mg	0.8 x 0.6 mm	Hg/pik	0.059
8616 (PC, 2 pans)	0.06 mg		Hg	0.0063
8617 (PC, 4 pans)	0.25 mg/26.01 mg	2.2 x 1.6 mm	Hg/pik	1.37
8618 (PC, 4 pans)	1.93 mg/10.15 mg	1.3 x 0.8 mm	Hg/pik	0.63
8619 (PC, 4 pans)	0.53 mg		Hg	0.028
8620 (PC, 2 pans)	0.04 mg		Hg	0.0042
8621 (PC, 2 pans)	0.09 mg		Hg	0.0094
8622 (PC, 1 pan)	0.15 mg		Hg	0.031

EXPLANATION OF TABLE A-2

Placer samples were collected by passing 0.077 m³ of material across a 1.22-m sluice box. The resulting sample was panned to further concentrate the heavy portion. Pan concentrate samples were collected by reducing 1 to 4 heaping 0.4-m pan(s) of material (approximately 0.0048 to 0.019 m³) to concentrate a heavy fraction.

Analyses of pan concentrate and placer samples from the Velikanje and Riverside placer properties (inset 5B) were analyzed by the Bureau, Juneau, Alaska. The weights of "gold" listed above include varying amounts of silver, as the color index of the gold particles differ and electrum is common in the area. Fineness determinations have not yet been made. Where two weights are listed, the first is the weight of a bead derived from a mercury separation of gold from a sediment concentrate (following the method of Wells, 1973 (109)). The second weight is of gold(-silver) particles hand-picked from the sediment. "Gold particle size" refers to the largest gold(-silver) particle hand-picked from the sample.

Abbreviations used:

PL	placer sample
PC	pan concentrate sample
Hg	mercury separation
pik	hand-picked separation

APPENDIX B - SAMPLING AND ANALYTICAL PROCEDURES

SAMPLING

Rock samples collected were of several types, including continuous chip, chip channel, channel, grab, representative chip, select, and spaced-chip. **Continuous chip** samples consist of ore or rock chips taken in a continuous line across an exposure; a **chip-channel** sample is cut with a relatively uniform width and depth across a mineralized body; **channel samples** consist of chips, fragments, and dust from a channel of uniform width and depth cut across an exposure of ore or mineralized rock; **grab samples** are collections of mineral or rock fragments, some broken from larger pieces, taken more or less at random from an outcrop, as float, or from a dump; **representative chip** samples characterize the proportions of various rock types present at an exposure; **select samples** are grab samples collected from the highest-grade portion of a mineralized zone; and **spaced-chip** samples are composed of rock fragments taken at specified intervals across an outcrop.

Stream samples collected include pan concentrate, placer, and stream sediment. **Pan concentrate** samples are taken to determine whether a placer sample is warranted at a specific location or for a quick determination of sediment metal content. A heaping 0.4-m gold pan of material is concentrated to collect a pan concentrate sample. **Placer samples** consist of 0.077 m³ of material processed through a 1.22-m sluice box. The resultant concentrates are visually examined to ascertain free gold content, then submitted for analysis. **Stream sediment** samples are taken on a limited basis to determine anomalous metal values in an area.

Beneficiation testing on metallurgical samples is being conducted by the Bureau's Salt Lake City Research Center. Results of the tests will be published in a future report.

ANALYTICAL PROCEDURES

Samples were prepared and subsequently analyzed using both atomic absorption spectroscopy (AA) and inductively coupled argon plasma emission spectroscopy (ICP) techniques. Gold was analyzed by fire assay preconcentration followed by an atomic absorption finish. If the analysis revealed concentrations in excess of 10,000 ppb gold, a gravimetric finish was performed. Silver, copper, lead, zinc, nickel, cobalt, and molybdenum were usually analyzed by atomic absorption techniques. Tungsten was analyzed by colorimetrics and x-ray fluorescence was used for barium and tin. A few samples were analyzed for platinum-group metals using fire-assay techniques. Most rare-earth elements were analyzed using neutron activation methods, although yttrium, cerium, and lanthanum were analyzed by x-ray fluorescence. Selected high-grade samples were analyzed for a suite of elements using a 16-element ICP package. A few samples were analyzed for the same element using two different techniques to quantify analytical error, the lower of the two results are presented in our table.

Rock samples were dried, crushed, and pulverized to at least minus 100 mesh. A sample weight of 0.5 g was put into solution using a hot-extraction HNO₃-HCL technique for the atomic absorption analyses.

Limestone samples (CaCO₃) were analyzed using standard wet analyses (oxide determinations by ICP and atomic absorption) and total carbonate acid/alkali procedures (CaCO₃ determined by volumetric/titration method ASTM C-25). Each sample was rinsed, dried, and weighed prior to analysis.

TABLE B-1. - Element detection limits by analytical techniques

Element	Minimum (ppm)	Maximum (ppm)
Fire assay, atomic absorption spectroscopy or gravimetric finish		
Au, Pt, Pd	0.005	none
Atomic absorption spectroscopy (AA)		
Ag	0.1	50
Cu, Zn, Mo, Co, V,	1	20,000
Pb	2	10,000
Ni	2	20,000
X-ray fluorescence spectroscopy (XRF)		
Ti	100	none
Ba	20	20,000
Sn	5	20,000
Ce, La	10	10,000
Y	5	10,000
Colorimetrics		
W	2	200
Inductively coupled plasma atomic emission spectroscopy (ICP)		
Ag	0.2	50
Pb	2	10,000
Cu, Zn, Mo, Ni, Co, Cr, Mn,	1	20,000
Sn, W	20	2,000
Fe	5	5,000
Bi	2	20,000
As, Sb	5	2,000
Hg	0.05	100
Ba	100	10,000
Te	10	2,000
Direct irradiation and instrumental neutron activation analysis (INAA)		
Sb	0.1	3,000
Zr	200	N/A
Ta	0.5	N/A
Nd	10	10,000
Sm	0.1	200
Eu	1	9,000
Tb	0.5	9,000
Tm, Yb	0.5	200
Sc	0.05	1,000
Th	0.2	9,000
U	0.2	2,000