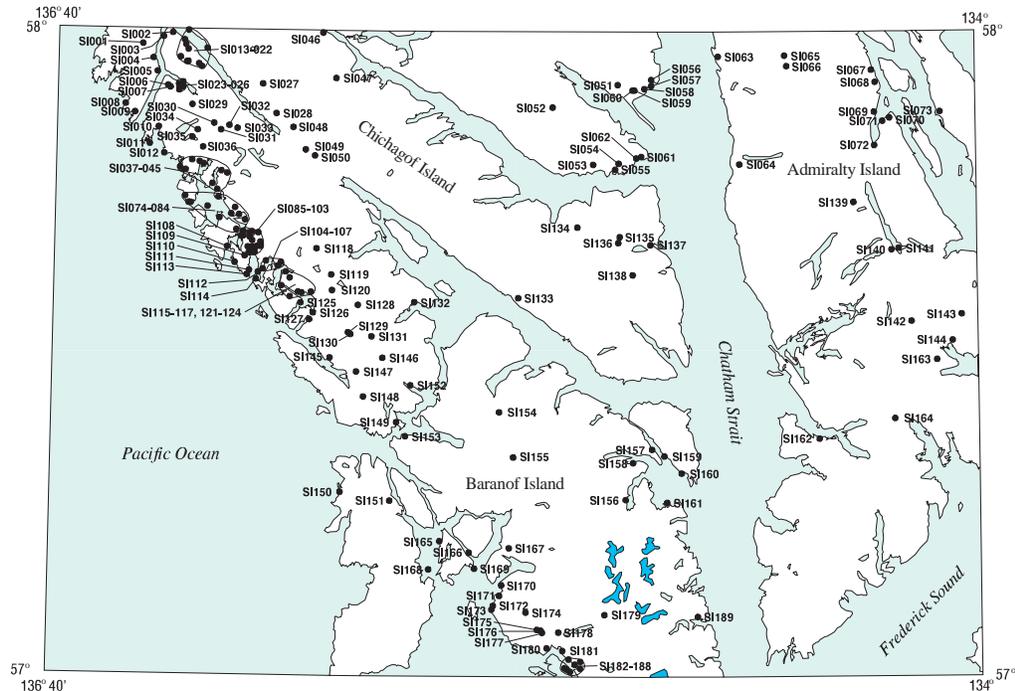


Sitka quadrangle

Descriptions of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for a description of the information content of each field in the records. The data presented here are maintained as part of a statewide database on mines, prospects and mineral occurrences throughout Alaska.

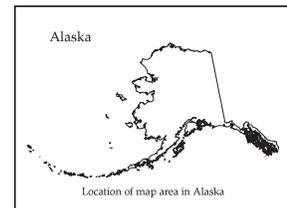


*Distribution of mineral occurrences in the Sitka
1:250,000-scale quadrangle, Alaska*

This and related reports are accessible through the USGS World Wide Web site <http://ardf.wr.usgs.gov>. Comments or information regarding corrections or missing data, or requests for digital retrievals should be directed to: Frederic Wilson, USGS, 4200 University Dr., Anchorage, AK 99508-4667, e-mail fwilson@usgs.gov, telephone (907) 786-7448. This compilation is authored by:

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This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic code. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Site name(s): Bohemia Basin; Basin; Takanis; Flapjack; Tunnel; Tripod; Muskeg; Side Hill**Site type:** Prospects**ARDF no.:** SI001**Latitude:** 57.9760**Quadrangle:** SI D-8**Longitude:** 136.4225**Location description and accuracy:**

This site consists of several prospects in about a half-square-mile area near Bohemia Basin on Yakobi Island. The prospects have had various names. Bittenbender and others (1999, fig. 5) call them the Basin, Takanis, and Flapjack deposits. Kennedy and Walton (1946 [B 947C]) and Cobb (1978, locs. 1, 2) called them the Tunnel, Tripod, Muskeg, Side Hill, and Takanis bodies. For this record, the site is plotted near the middle of a cluster of mine (adit) symbols on the USGS D-8 topographic map (1995 ed.), about 0.5 mile south-southeast of the center of sec. 12, T. 45 S., R. 55 E. The prospects are MAS no. 0021140017 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Cu, Ni**Other:** Au, Pd, Pt**Ore minerals:** Chalcopyrite, pentlandite, pyrite, pyrrhotite**Gangue minerals:****Geologic description:**

The Bohemia Basin prospects are magmatic segregation sulfide deposits in Tertiary gabbro and norite (Kennedy and Walton, 1946 [B 947-C]; Johnson and Karl, 1985; Still, 1988; Foley and others, 1997; Bittenbender and others, 1999). The mineralized gabbro and norite form a pluglike, basin-shaped component of a compositionally gradational stock that also includes tonalite, diorite, and gabbro. The stock intrudes Mesozoic or Paleozoic metamorphic rocks and Cretaceous or Jurassic diorite, melange, and graywacke (Johnson and Karl, 1985). The sulfides are pentlandite, chalcopyrite, pyrrhotite, and pyrite that occur as disseminated grains and blebs, interstitial veinlets, and small, massive aggregates.

The prospects were first staked in 1920 and subsequently explored by a 156-foot tunnel, magnetic surveys, and extensive trenching and diamond drilling (Bittenbender and others, 1999). Much of the early exploration was conducted by the U.S. Bureau of Mines in the 1940s. The most recent work was about 5,000 feet of diamond drilling by private interests in 1984.

There has been no production. Bittenbender and others (1999), citing Thornsberry and DeWilliam (1982), report the following estimates of resources at Bohemia Basin:

- 1) Basin deposit (based on 73 diamond drill holes): 16,186,000 tons that average 0.31 percent nickel, 0.18 percent copper, and 0.02 percent cobalt.
 - 2) Takanis deposit (based on 47 diamond drill holes): 3,971,500 tons that average 0.29 percent nickel, 0.18 percent copper, and 0.02 percent cobalt.
- Together, the Basin and Takanis deposits have proven resources accessible by open-pit mining of 15.1 million tons grading 0.37 percent nickel, 0.22 percent copper, and 0.02 percent cobalt, at a 2.5:1 stripping ratio.
- 3) Flapjack deposit (based on 4 diamond drill holes): 4,000,000 tons of inferred resources that average 0.21 percent nickel and 0.12 percent copper.

They also report that small amounts of gold, platinum, and palladium are recoverable from these deposits.

Alteration:**Age of mineralization:**

Contemporaneous with the emplacement of the Tertiary gabbro-norite and norite host rock.

Deposit model:

Synorogenic Ni-Cu (Cox and Singer, 1986; model 7a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

7a

Production Status: None

Site Status: Undetermined

Workings/exploration:

The prospects were first staked in 1920 and subsequently explored by a 156-foot tunnel, magnetic surveys, and extensive trenching and diamond drilling (Bittenbender and others, 1999). Much of the early exploration was conducted by the U.S. Bureau of Mines in the 1940s. The most recent work was about 5,000 feet of diamond drilling by private interests in 1984.

Production notes:**Reserves:**

Bittenbender and others (1999), citing Thornsberry and DeWilliam (1982), report the following estimates of resources at Bohemia Basin:

- 1) Basin deposit (based on 73 diamond drill holes): 16,186,000 tons that average 0.31 percent nickel, 0.18 percent copper, and 0.02 percent cobalt.
 - 2) Takanis deposit (based on 47 diamond drill holes): 3,971,500 tons that average 0.29 percent nickel, 0.18 percent copper, and 0.02 percent cobalt.
- Together, the Basin and Takanis deposits have proven resources accessible by open-pit mining of 15.1 million tons grading 0.37 percent nickel, 0.22 percent copper, and 0.02 percent cobalt, at a 2.5:1 stripping ratio.
- 3) Flapjack deposit (based on 4 diamond drill holes): 4,000,000 tons of inferred resources that average 0.21 percent nickel and 0.12 percent copper.

They also report that small amounts of gold, platinum, and palladium are recoverable from these deposits.

Additional comments:**References:**

Vevelstad, date unknown; Fleming, 1917; Rogers, 1917; Healy, 1918; Jackson, 1918; Winchell, 1918; Brooks, 1923; Kerr, 1924; Buddington, 1925; Buddington and Chapin, 1929; Roehm, 1938 (Bohemia Tunnel); Smith, 1939 (B 917-A); Ricker, 1941; Reed and Dorr, 1942; Laney, 1942; Traver, 1942; Kennedy, 1944; U.S. Bureau of Mines, 1944 (Yakobi Island); Walton and Kennedy, 1945; Kennedy and Walton, 1946 (B 947-C); Kennedy and Walton, 1946 (B 947-D); East and others, 1948; Twenhofel, 1953; Noel, 1966; Berg and Cobb, 1967; Cobb, 1972; Cobb, 1978; Kuhn, 1978; Thornsberry and DeWilliam, 1982; Jirik, 1982; Johnson and Karl, 1985; Himmelberg and other, 1987; Still, 1988; Foley and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Kennedy and Walton, 1946 (B 947-C); Johnson and Karl, 1985; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Goldwin**Site type:** Mine**ARDF no.:** SI002**Latitude:** 57.9936**Quadrangle:** SI D-8**Longitude:** 136.3359**Location description and accuracy:**

The Goldwin Mine is on northwestern Chichagof Island, near the tip of the point at the junction of Lisianski Strait and Lisianski Inlet. The mine is at an elevation of about 350 feet, about 0.6 mile southeast of the center of sec. 4, T. 45 S., R. 56 E. It is location P-13 of Bittenbender and others (1999), location 3 of Cobb (1972, 1978), and MAS. no. 0021140039 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Ag, Au, Cu**Other:****Ore minerals:** Chalcopyrite, gold, pyrite**Gangue minerals:** Quartz**Geologic description:**

The Goldwin deposit consists of auriferous, sulfide-bearing quartz veins along faults in Cretaceous or Jurassic diorite (Rossman, 1959; Johnson and Karl, 1985; Bittenbender and others, 1999). The veins pinch and swell, range in thickness from less than an inch to about 2.5 feet, and have been traced in surface and underground workings for about 400 feet. The quartz contains sparse pyrite and chalcopyrite, mainly near altered diorite inclusions in the veins. The gold is free-milling and mainly accompanies the sulfides; the altered wallrock also carries a little gold.

The deposit was located in 1920 and probably was mined intermittently until WW II. Workings included pits, trenches, and an adit about 250 feet long. An unknown, but probably small, amount of gold and silver were recovered. Picked samples reportedly assayed about 1.7 ounces of gold per ton (Reed and Coats, 1941) and 2.9 ounces of gold per ton (Buddington, 1925); Rossman (1959) reported an assay of 69 ounces of gold per ton over a half-foot section of pyrite-rich vein. Kimball (1982) collected representative samples that assayed up to 0.11 ounce of gold per ton.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:

Unspecified hydrothermal(?) alteration of diorite wallrock in and adjacent to the veins.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low sulfide, gold-quartz veins (Cox and Singer, 1986, model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Yes; small

Site Status: Undetermined

Workings/exploration:

The deposit was located in 1920 and probably was mined intermittently until WW II. Workings included pits, trenches, and an adit about 250 feet long.

Production notes:

The deposit was intermittently mined from 1920 to 1941 but there are no records of the amount of production.

Reserves:

Additional comments:

References:

Buddington, 1925; Roehm, 1936 (Goldwin); Reed and Coats, 1941; Rossman, 1959; Cobb, 1972; Cobb, 1978; Kimball, 1982; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Rossman, 1959; Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Gwinn**Site type:** Prospect**ARDF no.:** SI003**Latitude:** 57.9873**Quadrangle:** SI D-8**Longitude:** 136.3626**Location description and accuracy:**

This prospect is on northwestern Chichagof Island, at an elevation of about 100 feet, just inland from the east shore of Lisianski Strait. The prospect is 0.2 mile south of the northeast corner of sec. 8, T. 45 S., R. 56 E. It is MAS. no. 0021140083 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Ni**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous or Jurassic quartz diorite. The only published information about the prospect is that it has been staked for nickel (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:****Production notes:****Reserves:****Additional comments:****References:**

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Linda Nickel**Site type:** Prospect**ARDF no.:** SI004**Latitude:** 57.9540**Quadrangle:** SI D-8**Longitude:** 136.3914**Location description and accuracy:**

This prospect is at an elevation of about 100 feet on the east coast of Yakobi Island, about 2.4 miles east of the central part of Takanis Lake. The prospect is 0.4 mile east of the center of sec. 19, T. 45 S., R. 56 E. It is MAS no. 0021140078 (U.S. Bureau of Land Management, 2002). The location is accurate within about a mile.

Commodities:**Main:** Ni**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as part of the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The only published information about the prospect is that it has been staked for nickel (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:****Production notes:****Reserves:****Additional comments:****References:**

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Bessie**Site type:** Prospect**ARDF no.:** SI005**Latitude:** 57.9334**Quadrangle:** SI D-8**Longitude:** 136.3785**Location description and accuracy:**

This prospect is at an elevation of about 50 feet on the east coast of Yakobi Island, opposite the mouth of Stag Bay. The prospect is 0.4 mile south-southeast of the center of sec. 29, T. 45 S., R. 56 E. It is MAS no. 0021140081 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Cu, Ni**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map two geologic units in the area of this prospect. One is the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The other is the Khaz Formation, a Cretaceous melange of chaotically deformed rocks that consists of blocks of greenstone, greenschist, tuff, graywacke, argillite, chert, limestone, and phyllite in a foliated argillaceous and tuffaceous matrix. The Bessie prospect is at or near the contact between these units. The only published information about the prospect is that it has been staked for copper and nickel (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:****Production notes:****Reserves:****Additional comments:****References:**

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (southeast of mouth of Stag Bay)**Site type:** Prospect**ARDF no.:** SI006**Latitude:** 57.9119**Quadrangle:** SI D-8**Longitude:** 136.3477**Location description and accuracy:**

This prospect is on the northeast flank of Mount Hill about a mile south-southeast of the mouth of Stag Bay. The prospect is at an elevation of about 1,500 feet, 0.2 mile north-northeast of the center of sec. 4, T. 46 S., R. 56 E. It is location P-38 of Bittenbender and others (1999), MAS no. 0021140087 (U.S. Bureau of Land Management, 2002), and is included in location 7 of Cobb (1972, 1978). The location is accurate.

Commodities:**Main:** Cu, Fe**Other:** Ag**Ore minerals:** Chalcopyrite, magnetite, pyrite**Gangue minerals:** Epidote, quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The prospect is about 0.2 mile west of the Border Ranges Fault, a northwest-striking, steeply-dipping or vertical regional fault that separates Cretaceous or younger rocks on the southwest from Mesozoic or Paleozoic rocks on the northeast.

Twenhofel and others (1949) describe this deposit as sheared and altered, fine-grained gabbro or diorite containing magnetite, pyrite, and chalcopyrite. Two trenches expose 55 and 35 feet of mineralized rock that consists of about 60 percent magnetite, about 20 percent each of epidote and quartz, locally abundant pyrite, and up to 2 percent chalcopyrite. Bittenbender and others (1999), citing work by Asbury (1964) and Kimball (1982), describe the prospect as a porphyry deposit containing copper, iron, and tungsten, although tungsten is not reported in the sample analyses that they cite. Their samples contained up to 1.07 percent copper, 20-90 percent magnetite, and a trace of silver.

Alteration:

Unspecified [hydrothermal?] alteration of host rock.

Age of mineralization:

Probably Cretaceous or younger.

Deposit model:

Porphyry copper? (Cox and Singer, 1986; model 17).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

17?

Production Status: None**Site Status:** Probably inactive

Workings/exploration:

Two trenches.

Production notes:**Reserves:****Additional comments:**

The site is in West Chichagof-Yakobi Wilderness.

References:

Twenhofel and others, 1949; Asbury, 1964; Cobb, 1972; Cobb, 1978; Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Twenhofel and others, 1949; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (southeast of mouth of Stag Bay)**Site type:** Prospect**ARDF no.:** SI007**Latitude:** 57.9091**Quadrangle:** SI D-8**Longitude:** 136.3403**Location description and accuracy:**

This prospect is on the northeast flank of Mount Hill, about 1.3 miles southeast of the mouth of Stag Bay. The prospect is at an elevation of about 500 feet, 0.4 mile east-southeast of the center of sec. 4, T. 46 S., R. 56 E. It is location P-37 of Bittenbender and others (1999), MAS no. 0021140088 (U.S. Bureau of Land Management, 2002), and is included in location 7 of Cobb (1972, 1978). The location is accurate within about 0.2 mile.

Commodities:**Main:** Cu, Fe**Other:****Ore minerals:** Chalcopyrite, magnetite**Gangue minerals:****Geologic description:**

Johnson and Karl map two geologic units in the area of this prospect. One is the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The other is Mesozoic or Paleozoic amphibolite, gneiss, schist, and marble. The contact between the units is the Border Ranges Fault, a northwest-striking, steeply-dipping or vertical regional fault that separates Cretaceous or younger rocks on the southwest from Mesozoic or Paleozoic rocks on the northeast. The prospect is on or near this fault.

Bittenbender and others (1999), citing work by Asbury (1964) and Kimball (1982), describe the deposit as an iron-copper skarn in a fault near a diorite-gabbro contact with marble. Samples of the mineralized rock contained up to 51 percent iron, 0.93 percent titanium dioxide, and 100 parts per million copper. Workings included 3 trenches, one of which is caved.

Alteration:

Unspecified skarn minerals.

Age of mineralization:**Deposit model:**

Fe skarn (Cox and Singer, 1986; model 18d).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

18d

Production Status: None**Site Status:** Probably inactive**Workings/exploration:**

Workings included three trenches, one of which is caved.

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Asbury, 1964; Cobb, 1972; Cobb, 1978; Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (east of outer Squid Bay)**Site type:** Prospect**ARDF no.:** SI008**Latitude:** 57.8824**Quadrangle:** SI D-8**Longitude:** 136.4700**Location description and accuracy:**

This prospect is at an elevation of about 50 feet, east of outer Squid Bay and about 2.5 miles north of the south tip of Yakobi Island. The prospect is about 0.4 mile north-northeast of the center of sec. 15, T. 46 S., R. 55 E. It is location P-10 of Bittenbender and others (1999) and MAS no. 0021140079 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Cu, Ni**Other:****Ore minerals:** Chalcopyrite?, pentlandite?, pyrite, pyrrhotite?**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the Squid Bay area as Cretaceous graywacke intruded by Tertiary gabbro-norite and tonalite. Bittenbender and others (1999), citing the work of Kimball (1982) and Loney and others (1975), describe the prospect as a magmatic segregation, copper-nickel deposit in gabbro-norite. A composite grab sample contained 0.38 percent copper and 0.05 percent nickel. These values and the geologic setting of the deposit suggest that the ore minerals probably are chalcopyrite, pentlandite, pyrrhotite, and pyrite, as they are, for example, at the nearly Bohemia Basin deposit (SI001).

Alteration:**Age of mineralization:**

The deposit probably is roughly contemporaneous with intrusion of the Tertiary gabbro-norite host rock.

Deposit model:

Duluth Cu-Ni-PGE (Cox and Singer, 1986; model 5a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

5a

Production Status: None**Site Status:** Probably inactive**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:**

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Loney and others, 1975; Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Joanne**Site type:** Prospect**ARDF no.:** SI009**Latitude:** 57.8696**Quadrangle:** SI D-8**Longitude:** 136.4420**Location description and accuracy:**

This prospect is on southern Yakobi Island at an elevation of about 100 feet, east of the head of Greentop Harbor and 1.8 miles north-northeast of the south tip of the island. The prospect is 0.6 mile east of the center of sec. 23, T. 46 S., R. 56 E. It is MAS no. 0021140080 (U.S. Bureau of Land Management, 2002). The location is accurate within about a mile.

Commodities:**Main:** Ni**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke intruded by Tertiary gabbrorite and tonalite. The only published information about the prospect is that it has been staked for nickel (U.S. Bureau of Land Management, 2002). It may be similar to the prospect near Squid Bay (SI008), which is associated with similar rocks.

Alteration:**Age of mineralization:**

Tertiary?

Deposit model:

Duluth Cu-Ni-PGE? (Cox and Singer, 1986; model 5a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

5a?

Production Status: None**Site Status:** Probably inactive**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Stranger River**Site type:** Prospect**ARDF no.:** SI010**Latitude:** 57.8474**Quadrangle:** SI D-8**Longitude:** 136.3723**Location description and accuracy:**

This placer prospect is on northwest Chichagof Island at the mouth of Stranger River. The prospect is about 0.4 mile south of the center of sec. 29, T. 46 S., R. 56 E. It is location P-39 of Bittenbender and others (1999) and MAS no. 0021140105 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this placer prospect as Tertiary tonalite. Bittenbender and others (1999), citing the work of Kimball (1982), report that panned-concentrate samples contained up to 0.00005 ounce of gold per cubic yard, and a trace of silver.

Alteration:**Age of mineralization:**

Quaternary.

Deposit model:

Placer gold (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: None**Site Status:** Probably inactive**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Slim and Jim**Site type:** Prospect**ARDF no.:** SI011**Latitude:** 57.8211**Quadrangle:** SI D-8**Longitude:** 136.3977**Location description and accuracy:**

The Slim and Jim prospect is at sea level on an unnamed islet at the west mouth of Islas Bay. The prospect is about 0.4 mile south-southeast of the center of section 6, T. 47 S., R. 56 E. It is location P-40 of Bittenbender and others (1999) and MAS no. 0021140119 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Cu, Ni, Zn**Other:****Ore minerals:** Chalcopyrite?, sphalerite?**Gangue minerals:** Quartz?**Geologic description:**

Johnson and Karl (1985) describe the rocks in the area of this prospect as Cretaceous graywacke, cut by one or more northwest-striking, high-angle faults. Bittenbender and others (1999), citing the work of Kimball (1982), describe the deposit as a copper-bearing [quartz?] vein in a fault in graywacke. Samples across about 7 feet of the vein contained up to 1 percent copper, 0.3 percent zinc, and 200 parts per million nickel.

Alteration:**Age of mineralization:**

Cretaceous or younger.

Deposit model:

Polymetallic vein? (Cox and Singer, 1986; model 22c).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c?

Production Status: None**Site Status:** Probably inactive**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (north shore of outer Bertha Bay)**Site type:** Prospect**ARDF no.:** SI012**Latitude:** 57.8067**Quadrangle:** SI D-8**Longitude:** 136.3550**Location description and accuracy:**

This prospect is at sea level at the north mouth of Bertha Bay. The prospect is at the head of a small bay just east of Pt. Dougherty, and 0.4 mile southwest of the center of sec. 9, T. 47 S., R. 56 E. It is location P-41 of Bittenbender and others (1999), location 15 of Cobb (1972, 1978), and MAS no. 0021140014 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Chalcopyrite, pyrrhotite**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke that is intruded by Tertiary gabbro and tonalite, and cut by high-angle faults that mainly strike northwest. The graywacke is thermally metamorphosed to hornfels near the contact of the gabbro and tonalite. The deposit consists of stringers of chalcopyrite and pyrrhotite in mafic intrusive rock (gabbro?) near its contact with the metamorphosed country rock. Bittenbender and others (1999) interpret the prospect as a magmatic segregation deposit, presumably similar to the one at Bohemia Basin (SI001).

Alteration:

Thermal metamorphism of country rocks.

Age of mineralization:

Assuming that the deposit is a magmatic segregation, it is Tertiary, the age of the gabbro(?) host rock.

Deposit model:

Duluth Cu-Ni-PGE? (Cox and Singer, 1986; model 5a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

5a?

Production Status: None**Site Status:** Probably inactive**Workings/exploration:****Production notes:**

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Copper Junction**Site type:** Prospect**ARDF no.:** SI013**Latitude:** 57.9977**Quadrangle:** SI D-7**Longitude:** 136.2894**Location description and accuracy:**

The Copper Junction prospect is at sea level on northwest Chichagof Island, about one mile east of Junction Island in Lisianski Inlet. The prospect is in the SE1/4 sec. 2, T. 45 S., R. 56 E. It is MAS no. 0021140091 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Loney and others (1975) map the rocks in the area of this prospect as Triassic or Jurassic, sedimentary and volcanic strata that are regionally metamorphosed to greenschist, greenstone, phyllite, and semischist. The metamorphic rocks are intruded by stocks of Cretaceous diorite and Tertiary tonalite. They also are cut by numerous faults. The most prominent is the regional-scale, northwest-striking, high-angle, Peril Strait Fault whose extension is just southwest of the prospect. The only published information about the prospect is that it has been staked for copper (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Nilsen**Site type:** Prospect**ARDF no.:** SI014**Latitude:** 57.9826**Quadrangle:** SI D-7**Longitude:** 136.3012**Location description and accuracy:**

The Nilsen prospect is at sea level on northwest Chichagof Island, about 1.2 miles southeast of Junction Island in Lisianski Inlet. The prospect is in the NW1/4 sec. 11, T. 45 S., R. 56 E. It is location P-14 of Bittenbender and others (1999) and MAS no. 0021140070 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:** Quartz?**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as a stock of Cretaceous or Jurassic diorite. The stock is cut by diverse faults, the most prominent of which is the Peril Strait Fault, a regional-scale, northwest-striking, high-angle fault that truncates the stock on the northeast.

Bittenbender and others (1999), citing Buddington (1925), report that the Nilsen prospect is a gold-bearing quartz vein. Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:**

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Buddington, 1925; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Buddington, 1925

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (north end of Yakobi Island)**Site type:** Occurrence**ARDF no.:** SI015**Latitude:** 57.9754**Quadrangle:** SI D-7**Longitude:** 136.2968**Location description and accuracy:**

This occurrence is at an elevation of about 500 feet on northwest Chichagof Island, about 1.7 miles south-southeast of Junction Island. The occurrence is in the SW1/4SE1/4 sec. 11, T. 45 S., R. 56 E. It is location 4 of Cobb (1972, 1978). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:** Quartz?**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as a stock of Cretaceous or Jurassic diorite. The stock is cut by diverse faults, the most prominent of which is the Peril Strait Fault, a regional-scale, northwest-striking, high-angle fault that truncates the stock on the northeast. Cobb (1972, 1978), citing Rossman (1959), reports that this prospect is a mineralized fault zone between diorite and quartz diorite. A sample contained a trace of gold.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:**

Additional comments:

References:

Rossman, 1959; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997.

Primary reference: Rossman, 1959

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (north end of Yakobi Island)**Site type:** Occurrence**ARDF no.:** SI016**Latitude:** 57.9683**Quadrangle:** SI D-7**Longitude:** 136.2900**Location description and accuracy:**

This occurrence is at an elevation of about 1,000 feet about 0.9 mile east of peak 3003 on northwest Chichagof Island. The occurrence is 0.2 mile east of the center of sec. 14, T. 45 S., R. 56 E. It is location P-15 of Bittenbender and others (1999), location 5 of Cobb (1972, 1978), and MAS no. 0021140201 (U.S. Bureau of Land Management, 2002). Bittenbender and others call the occurrence the 'Rossman vein'; Cobb refers to it as Cann Creek, the nearest named geographic feature. The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as a stock of Cretaceous or Jurassic diorite. The stock is cut by diverse faults, the most prominent of which is the Peril Strait Fault, a regional-scale, northwest-striking, high-angle fault that truncates the stock on the northeast.

Rossman (1959) describes this prospect as a quartz vein 6 to 12 inches wide that crops out for 35 feet. He estimates that the vein carries as much as 1 ounce of gold per ton, but it is probably too small to be of commercial value.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: None**Site Status:** Probably inactive**Workings/exploration:**

Production notes:

Reserves:

Additional comments:

References:

Rossman, 1959; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; U.S. Bureau of Land Management, 2002.

Primary reference: Rossman, 1959

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Columbine group**Site type:** Prospect**ARDF no.:** SI017**Latitude:** 57.9561**Quadrangle:** SI D-7**Longitude:** 136.3124**Location description and accuracy:**

The Columbine prospect is at an elevation of about 1,400 feet, at the east end of the larger of two lakes at the head of Cann Creek. The prospect is 0.4 mile southeast of the center of sec. 22, T. 45 S., R. 56 E. It is location P-16 of Bittenbender and others (1999) and MAS no. 0021140084 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:** Quartz?**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as a stock of Cretaceous or Jurassic diorite. The stock is cut by diverse faults, the most prominent of which is the Peril Strait Fault, a regional-scale, northwest-striking, high-angle fault that truncates the stock on the northeast.

Bittenbender and others (1999), citing Buddington (1925), report that this prospect is an auriferous quartz vein. No other information about the prospect has been made public.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:**

Reserves:

Additional comments:

References:

Buddington, 1925; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; U.S. Bureau of Land Management, 2002.

Primary reference: Buddington, 1925

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Apex-El Nido**Site type:** Mines**ARDF no.:** SI018**Latitude:** 57.9490**Quadrangle:** SI D-7**Longitude:** 136.2936**Location description and accuracy:**

The Apex and El Nido mines are at the head of Cann Creek on northwest Chichagof Island, and are named on the USGS D-7 topographic map (1997 ed.). The mines are about 0.4 mile apart. The Apex Mine is at an elevation of about 1,050 feet, 0.3 mile south-southwest of the center of sec. 23, T. 45 S., R. 56 E.; the El Nido Mine is about at the same elevation, 0.4 mile southeast of the center of sec. 23. For this record, the site is plotted about midway between the mines. It is location P-17 of Bittenbender and others (1999), location 6 of Cobb (1972, 1978), and MAS no. 0021140008 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Ag, Au, Cu, Pb, W, Zn**Other:****Ore minerals:** Arsenopyrite, chalcopyrite, galena, gold, pyrite, scheelite, sphalerite, tetrahedrite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of the Apex and El Nido mines as a stock of Cretaceous or Jurassic diorite. The stock is cut by diverse faults, the most prominent of which is the Peril Strait Fault, a regional-scale, northwest-striking, steeply-dipping fault that truncates the stock on the northeast.

The deposits at the mines are auriferous, sulfide-bearing quartz veins and stockworks (Buddington, 1925; Reed and Coats, 1941; Twenhofel and others, 1949; Rossman, 1959). The country rocks are a mixture of diorite, gabbro, pyroxenite, hornblendite, and aplitic dike rock. The rocks near the veins are intensely altered to quartz, calcite, and sericite. The veins, which locally display ribbon structure, are mostly quartz, but in places contain up to 50 percent sulfides. The sulfides, which also are disseminated in the wallrocks, are arsenopyrite, pyrite, sphalerite, chalcopyrite, and sparse tetrahedrite; gold and scheelite are also present. The veins pinch and swell from a few inches to about 7 feet. The stockwork at the El Nido Mine occurs at an abrupt change in orientation of the principal vein or where the vein is offset. A vertical fault separates the Apex and El Nido veins, which are symmetrical on either side of the fault.

Assays of the Apex lode averaged about 1.9 ounces of gold per ton in underground workings and about 4.57 ounces of gold per ton in surface outcrops. Assays of the El Nido vein were a little lower, but some outcrop samples ran as much as 24.2 ounces of gold per ton. The mines were in production from 1919-1920, when the veins were discovered, until 1939, when the mines closed (Cobb, 1978). Incomplete data record production of between 10,000 and 50,000 ounces of gold and about the same amount of silver. There were a total of about a mile of workings. The Apex Mine had 4 levels and about 3,600 feet of workings; the El Nido had about 1,800 feet of workings.

Bittenbender and others (1999), citing Holmes (1941) and Kimball (1982), report that the Apex and El Nido mines produced a cumulative total of about 17,000 ounces of gold and 2,400 ounces of silver in the periods 1924-28, 1934-35, and 1937-39. They describe the deposits as 1- to 4-foot-thick, steeply-dipping, gold-bearing quartz veins in diorite and amphibolite. Scheelite is erratically distributed in the veins. The main Apex vein strikes northeast and dips about 50 northwest; the El Nido vein strikes N70E and dips 30-80SE. The two vein systems are separated by about 2,000 feet of country rock. The U.S. Bureau of Mines

examined the mines in 1978-79 (Kimball, 1982), sampled the underground workings, and collected outcrop samples of the veins over a strike length of 800 feet. Their samples contained a trace to 3.8 ounces of gold per ton across 0.2- to 3.8-foot-thick veins, and a trace to 0.4 ounce of gold per ton in aplite dikes. They identified an indicated resource of 26,633 tons of material with an average grade of 0.945 ounce of gold per ton. According to Bittenbender and others, the claims are active.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:

The rocks near the veins are intensely altered to quartz, calcite, and sericite.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Polymetallic veins (Cox and Singer, 1986; model 22c).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c

Production Status: Yes; large

Site Status: Active

Workings/exploration:

There were a total of about a mile of workings. The Apex Mine had 4 levels and about 3,600 feet of workings; the El Nido had about 1,800 feet of workings. The U.S. Bureau of Mines examined the mines in 1978-79, sampled the underground workings, and collected outcrop samples of the veins over a strike length of 800 feet.

Production notes:

According to Cobb (1978), incomplete data for the Apex and El Nido mines recorded the production of between 10,000 and 50,000 ounces of gold and about the same amount of silver from 1919 to 1939. Bittenbender and others (1999), citing Holmes (1941) and Kimball (1982), report that the Apex and El Nido mines produced a cumulative total of about 17,000 ounces of gold and 2,400 ounces of silver in the periods 1924-28, 1934-35, and 1937-39.

Reserves:

The U.S. Bureau of Mines examined the mines in 1978-79 (Kimball, 1982), sampled the underground workings, and collected outcrop samples of the veins over a strike length of 800 feet. They identified an indicated resource of 26,633 tons of material with an average grade of 0.945 ounce of gold per ton.

Additional comments:**References:**

Buddington, 1925; Holmes, 1941; Reed and Coats, 1941; Twenhofel and others, 1949; Williams, 1955 (El Nido); Rossman, 1959; Cobb, 1972; Cobb, 1978; Kimball, 1982; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Buddington, 1925; Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Cann Creek**Site type:** Prospect**ARDF no.:** SI019**Latitude:** 57.9494**Quadrangle:** SI D-7**Longitude:** 136.2900**Location description and accuracy:**

This placer prospect is on Cann Creek at an elevation of about 800 feet. The prospect is 0.3 mile south-southeast of the center of sec. 23, T. 45 S., R. 56 E. It is MAS no. 0021140020 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the Cann Creek area as a stock of Cretaceous or Jurassic diorite. The stock is cut by diverse faults, the most prominent of which is the Peril Strait Fault, a regional-scale, northwest-striking, high-angle fault that truncates the stock on the northeast.

The only published information about this placer prospect is that it has been staked for gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Quaternary.

Deposit model:

Au placer (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Jay and Kathy B**Site type:** Prospect**ARDF no.:** SI020**Latitude:** 57.9458**Quadrangle:** SI D-7**Longitude:** 136.2584**Location description and accuracy:**

The Jay and Kathy B prospect is at an elevation of about 1,300 feet on northwest Chichagof Island, about 1.5 miles southwest of the town of Pelican. The prospect is 0.6 mile north-northeast of the center of sec. 25, T. 45 S., R. 56 E. It is MAS no. 0021140187 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Ag, Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as part of a batholith of Cretaceous or Jurassic quartz diorite. The rocks are cut by numerous faults, the most prominent of which is the Peril Strait Fault, a regional-scale, northwest-striking, steeply-dipping fault whose trace is just northeast of the prospect. The only published information about the prospect is that it has been staked for gold and silver (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:****References:**

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Elk**Site type:** Prospect**ARDF no.:** SI021**Latitude:** 57.9416**Quadrangle:** SI D-7**Longitude:** 136.2497**Location description and accuracy:**

The Elk prospect is at an elevation of about 1,800 feet on northwest Chichagof Island, about 1.5 miles south-southwest of the town of Pelican, across Lisianski Inlet. The prospect is 0.4 mile west-northwest of the center of sec. 30, T. 45 S., R. 57 E. It is MAS no. 0021140155 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as part of a batholith of Cretaceous or Jurassic quartz diorite. The rocks are cut by numerous faults, the most prominent of which is the Peril Strait Fault, a regional-scale, northwest-striking, steeply-dipping fault that passes just northeast of the prospect. The only published information about the prospect is that it has been staked for gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is near the boundary or just inside the Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Oso**Site type:** Prospect**ARDF no.:** SI022**Latitude:** 57.9702**Quadrangle:** SI D-7**Longitude:** 136.2347**Location description and accuracy:**

The Oso prospect is at an elevation of about 200 feet near the mouth of an unnamed creek, about a mile north-northwest of the town of Pelican. The prospect is 0.2 mile north of the center of sec. 18, T. 45 S., R. 57 E. It is MAS no. 0021140002 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Loney and others (1975) map the rocks in the area of this prospect as Paleozoic sedimentary and volcanic rocks that are intruded by, or are roof pendants in a Cretaceous diorite batholith. The Paleozoic rocks have been thermally metamorphosed to hornfels, granofels, marble, schist, and amphibolite. The rocks are cut by numerous faults of diverse strike, the most prominent of which is the Peril Strait Fault, a regional-scale, northwest-striking, steeply-dipping fault whose trace is along Lisianski Inlet just southwest of the prospect. The only published information about this prospect is that is a lode claim for an unspecified commodity (U. S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (northeast shore of upper Stag Bay)**Site type:** Prospect**ARDF no.:** SI023**Latitude:** 57.9173**Quadrangle:** SI D-7**Longitude:** 136.3041**Location description and accuracy:**

This prospect is at sea level on the northeast shore of Stag Bay, about 2 miles from the head of the bay. The prospect is on the south boundary of sec. 35, T. 45 S., R. 56 E. It is location P-36 of Bittenbender and others (1999), location 9 of Cobb (1972, 1978), and MAS no. 0021140085 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous or Jurassic diorite that intrudes Mesozoic or Paleozoic amphibolite, gneiss, and schist.

Cobb (1972, 1978), citing Overbeck (1919), describes the deposit as gold-quartz veins in diorite and adjacent metamorphic rocks. There are no other visible metallic minerals. The principal vein is 1 to 3 feet thick. Bittenbender and others (1999), citing Kimball (1982), report that 2 samples of vein quartz contained 0.05 ounce of gold per ton across 1.1 foot of the vein and 0.36 ounce of gold per ton across 0.5 foot of vein.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Overbeck, 1919; Cobb, 1972; Cobb, 1978; Kimball, 1982; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Etna**Site type:** Prospect**ARDF no.:** SI024**Latitude:** 57.9141**Quadrangle:** SI D-7**Longitude:** 136.3155**Location description and accuracy:**

The Etna prospect is at sea level on the southwest shore of Stag Bay, about 2.2 miles from the head of the bay. The prospect is 0.4 mile north-northeast of the center of sec. 3, T. 46 S., R. 56 E. It is location 8 of Cobb (1972, 1978) and MAS no. 0021140032 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Mesozoic or Paleozoic amphibolite, gneiss, and schist that are intruded by a northwest-trending, linear stock of Cretaceous or Jurassic, quartz diorite and tonalite. Cobb (1978), citing Buddington (1925), reports that the deposit is an auriferous quartz vein averaging 16 to 18 inches wide in diorite. Early workings included 150 feet of stripping. Buddington reported that the vein had 'medium gold content.'

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Early workings included 150 feet of stripping.

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Buddington, 1925; Cobb, 1972; Cobb, 1978; Haeussler and others, 1995; Johnson and Karl, 1985; Goldfarb, 1997; Goldfarb and others, 1997; U.S. Bureau of Land Management, 2002.

Primary reference: Buddington, 1925

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Armenta**Site type:** Prospect**ARDF no.:** SI025**Latitude:** 57.9096**Quadrangle:** SI D-7**Longitude:** 136.3035**Location description and accuracy:**

The Armenta prospect is at sea level on the southwest shore of Stag Bay, about 1.6 miles from the head of the bay. The prospect is 0.4 mile northwest of the center of sec. 2, T. 46 S., R. 56 E. It is MAS no. 0021140086 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Mesozoic or Paleozoic, amphibolite, gneiss, and schist that are intruded by a northwest-trending, linear stock of Cretaceous or Jurassic quartz diorite and tonalite. The only published information about this prospect is that it has been staked for lode gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Hoonah**Site type:** Prospect**ARDF no.:** SI026**Latitude:** 57.9050**Quadrangle:** SI D-7**Longitude:** 136.3149**Location description and accuracy:**

The Hoonah prospect is at an elevation of about 1,950 feet on the northwest ridge of Cub Mountain, about 0.6 mile from the 3,012-foot peak of the mountain. The prospect is 0.4 mile southeast of the center of sec. 3, T. 46 S., R. 56 E. It is MAS no. 0021140089 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Mesozoic or Paleozoic amphibolite, gneiss, and schist that are intruded by a northwest-trending, linear stock of Cretaceous or Jurassic quartz diorite and tonalite. The prospect is at or near the intrusive contact of the metamorphic and plutonic rocks. The only published information about the prospect is that it has been staked for lode gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Phonograph**Site type:** Prospect**ARDF no.:** SI027**Latitude:** 57.9163**Quadrangle:** SI D-7**Longitude:** 136.0713**Location description and accuracy:**

The Phonograph prospect is at an elevation of about 800 feet, on the east valley wall of lower Phonograph Creek. The prospect is 0.5 mile north-northeast of the center of sec. 6, T. 46 S., R. 58 E. It is location P-18 of Bittenbender and others (1999) and MAS no. 0021140092 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Ni**Other:** Au**Ore minerals:** Pyrite?, pyrrhotite?**Gangue minerals:****Geologic description:**

Loney and others (1975) map the rocks in the area of this prospect as Paleozoic, sedimentary and volcanic rocks that are intruded by and are roof pendants in a Cretaceous quartz diorite batholith. The Paleozoic rocks have been thermally metamorphosed to hornfels, granofels, marble, schist, and amphibolite. The rocks are cut by numerous high-angle faults of diverse strike.

Bittenbender and others (1999) describe the prospect as a magmatic segregation deposit in pyroxenite. A sample contained 0.31 percent nickel and a trace of gold. They do not specify the ore minerals, but other magmatic segregation deposits on northwest Chichagof Island (for example, SI001) contain at least pyrite and pyrrhotite.

Alteration:**Age of mineralization:**

Assuming Bittenbender and others' interpretation that this a magmatic segregation deposit, it is cogenetic with the pyroxenite host rock, which is probably part of a Cretaceous batholith (Loney and others, 1975).

Deposit model:

Magmatic segregation.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:****Production notes:**

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Saloma (Soloma?)**Site type:** Prospect**ARDF no.:** SI028**Latitude:** 57.8707**Quadrangle:** SI D-7**Longitude:** 136.0308**Location description and accuracy:**

The Saloma (Soloma?) prospect is at an elevation of about 1,000 feet, approximately 1.5 miles northeast of Soloma Point near the head of Lisianski Inlet. The prospect is about 0.4 mile northwest of the center of sec. 21, T. 46 S., R. 58 E. It is MAS no. 0021140093 (U.S. Bureau of Land Management, 2002). The location is accurate within about a mile.

Commodities:**Main:** Cu, Ni**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Paleozoic(?) marble, hornfels, schist, and gneiss that are intruded by stocks of Cretaceous or Jurassic, quartz diorite and gabbro. The rocks are cut by northwest-striking, steeply-dipping faults, the most prominent of which is the regional-scale Peril Strait Fault that extends along Lisianski Inlet about 2 miles southwest of the prospect. The only published information about this prospect is that it is a lode staked for copper and nickel (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (southeast end of Cub Mountain)**Site type:** Prospect**ARDF no.:** SI029**Latitude:** 57.8826**Quadrangle:** SI D-7**Longitude:** 136.2757**Location description and accuracy:**

This prospect is at an elevation of about 1,700 feet at the southeast end of Cub Mountain on northwest Chichagof Island. The prospect is about 0.1 mile west of peak 1780, in the NW1/4 sec. 13, T. 46 S., R. 56 E. It is location P-35 of Bittenbender and others (1999), location 10 of Cobb (1972, 1978), and MAS no. 0021140028 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Mesozoic or Paleozoic siliceous metasedimentary and metavolcanic rocks that are intruded by Cretaceous or Tertiary quartz diorite and tonalite. The prospect is at or near the contact between the metamorphic and intrusive rocks. The rocks are cut by numerous high-angle faults of diverse, but generally northwest, strike. The Border Ranges Fault, a regional-scale, northwest-striking, steeply-dipping fault is about a mile southwest of the prospect.

Cobb (1972, 1978), citing Rossman (1959), describes the deposit as an auriferous quartz vein about a foot thick in diorite. The vein is traceable for about 50 feet and contains visible gold. Assays indicate that the vein contains about an ounce of gold per ton.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Only surface sampling.

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Rossman, 1959; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Rossman, 1959

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Cobol; Mine Mountain; Cobol North**Site type:** Mine**ARDF no.:** SI030**Latitude:** 57.8543**Quadrangle:** SI D-7**Longitude:** 136.2115**Location description and accuracy:**

The Cobol Mine is identified as an abandoned mine and marked by an adit symbol on the USGS D-7 topographic map (1997 ed.). It is at an elevation of about 750 feet at the northwest foot of Mine Mountain on northwest Chichagof Island. The mine is 0.2 mile north of the center of sec. 29, T. 46 S., R. 57 E. It is location P-34 of Bittenbender and others (1999), who call it 'Mine Mountain', or 'Cobol North'; location 11 of Cobb (1972, 1978); and MAS no. 0021140025 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au, Cu, Pb, Zn**Other:****Ore minerals:** Arsenopyrite, chalcopyrite, galena, pyrite, pyrrhotite, sphalerite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) describe the rocks in the area of the Cobol Mine as Mesozoic or Paleozoic siliceous metasedimentary and metavolcanic rocks that are intruded by an elongate stock of Cretaceous or Tertiary quartz diorite and tonalite. The mine is at the contact between the metamorphic and intrusive rocks. The rocks are cut by high-angle faults of diverse, but mainly northwest, strike. The most prominent is the Border Ranges Fault, a regional-scale, northwest-striking, steeply-dipping fault whose trace is about 3 miles southwest of the mine.

Cobb (1972, 1978), citing Buddington (1925) and Reed and Coats (1941) reports that the Cobol Mine claims were located and development begun in 1922. The deposit consists of auriferous, sulfide-bearing, quartz fissure veins in albite-quartz diorite and greenstone that are intruded by an aplite dike. The wallrock is sericitized near the veins. The vein that was mined was about 2 feet thick and contained generally sparse sulfides, including arsenopyrite, sphalerite, and galena, with minor pyrite, chalcopyrite, and pyrrhotite. Free gold occurred in the vein and in gouge along the hanging wall. Mining and milling in 1933-35 produced about 1,000 ounces of gold from 135 tons of ore from a stope about 70 feet long and 40 feet high. The mining equipment was removed in 1936.

Bittenbender and others (1999), citing Kimball (1982), call this property the Mine Mountain Mine and note that it was developed by an adit and 250 feet of crosscuts and drifts. Samples across a 1.2-foot-wide vein in a 70-foot stope assayed up to 2.45 ounces of gold per ton. Samples from 120 feet of other workings contained up to 0.15 ounce of gold per ton across veins 0.2 to 0.7 foot thick.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:

The wallrock is sericitized near the veins.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eo-

cene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Polymetallic vein (Cox and Singer, 1986; model 22c).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c

Production Status: Yes; small

Site Status: Undetermined

Workings/exploration:

Bittenbender and others call this property the Mine Mountain Mine and note that it was developed by an adit and 250 feet of crosscuts and drifts.

Production notes:

Mining and milling in 1933-35 produced about 1,000 ounces of gold from 135 tons of ore that was mined from a stope about 70 feet long and 40 feet high. The mining equipment was removed in 1936.

Reserves:**Additional comments:**

The mine is in West Chichagof-Yakobi Wilderness.

References:

Buddington, 1925; Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Kimball, 1982; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): South-side**Site type:** Prospect**ARDF no.:** SI031**Latitude:** 57.8441**Quadrangle:** SI D-7**Longitude:** 136.1913**Location description and accuracy:**

The South-side prospect is at an elevation of about 2,000 feet on the southwest flank of Mine Mountain on northwest Chichagof Island. The prospect is 0.5 mile north-northwest of the center of sec. 33, T. 46 S., R. 57 E. It is location 13 of Cobb (1972, 1978). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) describe the rocks in the area of this prospect as Mesozoic or Paleozoic, siliceous metasedimentary and metavolcanic rocks that are intruded by an elongate stock of Cretaceous or Tertiary, quartz diorite and tonalite. The prospect is at the contact between the metamorphic and intrusive rocks. The rocks are cut by high-angle faults of diverse, but mainly northwest, strike; the most prominent is the Border Ranges Fault, a regional-scale, northwest-striking, steeply-dipping fault whose trace is about 3 miles southwest of the prospect.

Cobb (1972, 1978), citing Buddington (1925), describes the prospect as a 20-inch-thick quartz vein that carries free gold. The vein is exposed for 300 feet and a tunnel reportedly was driven 8 to 10 feet along it. The host rock is not described and there are no assay data, but the crushed vein reportedly panned well.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

A tunnel 8- to 10-feet long reportedly was driven.

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Buddington, 1925; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997.

Primary reference: Buddington, 1925

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (northeast flank of Mine Mountain)**Site type:** Prospect**ARDF no.:** SI032**Latitude:** 57.8512**Quadrangle:** SI D-7**Longitude:** 136.1672**Location description and accuracy:**

This prospect is at an elevation of about 1,700 feet on the northeast flank of Mine Mountain on northwest Chichagof Island. The prospect is 0.4 mile west-southwest of the center of sec. 27, T. 46 S., R. 57 E. It is location P-33 of Bittenbender and others (1999), location 12 of Cobb (1972, 1978), and MAS no. 0021140065 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Au, Cu**Other:****Ore minerals:** Chalcopyrite?, gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Mesozoic or Paleozoic metasedimentary and metavolcanic rocks intruded by northwest-trending, linear stocks of Cretaceous or Tertiary quartz diorite, tonalite, and diorite. The prospect is at or near the contact between the metamorphic rocks and the quartz diorite-tonalite.

Cobb (1972, 1978), citing Rossman (1959), reports that the prospect consists of gold-bearing quartz float and a mineralized zone containing 0.01 ounce of gold per ton. The source of the quartz float may be quartz veins in diorite near the top of Mine Mountain. Bittenbender and others (1999), citing Kimball (1982), report that samples contained up to 0.30 parts per million (ppm) gold and 2,100 ppm copper, and that the host rocks are diorite and granodiorite.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined

Workings/exploration:

Apparently only surface sampling.

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Rossman, 1959; Cobb, 1972; Cobb, 1978; Kimball, 1982; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Rossman, 1959; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Cable**Site type:** Prospect**ARDF no.:** SI033**Latitude:** 57.8470**Quadrangle:** SI D-7**Longitude:** 136.1436**Location description and accuracy:**

The location of the Cable prospect is only known approximately to be about 1.4 miles east of the top of Mine Mountain on northwest Chichagof Island. For this record, the prospect is plotted at an elevation of 1,000 feet, 0.6 mile southwest of the center of sec. 26, T. 46 S., R. 57 E. It is location P-32 of Bittenbender and others (1999) and MAS no. 0021140305 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Cu, Zn**Other:****Ore minerals:** Chalcopyrite?, sphalerite?**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Mesozoic or Paleozoic, metamorphosed sedimentary and volcanic rocks intruded by northwest-trending, linear stocks of Cretaceous or Tertiary quartz diorite and tonalite. The prospect is at or near the contact between the metamorphic and intrusive rocks. The rocks are cut by prominent northwest-striking, steeply-dipping faults; the most prominent is the regional-scale Border Ranges Fault whose trace is about 4 miles southwest of the prospect.

Bittenbender and others (1999), citing Kimball (1982), describe the prospect as a mineralized fault zone in metasedimentary rocks. The zone contains unspecified disseminated copper and zinc minerals; samples assayed up to 2,200 parts per million (ppm) copper and 4,800 ppm zinc across 5 feet.

Alteration:**Age of mineralization:****Deposit model:**

Polymetallic vein? (Cox and Singer, 1986; model 22c).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c?

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Apparently only surface sampling.

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Kimball, 1982; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (east of Lake Elfendahl)**Site type:** Prospect**ARDF no.:** SI034**Latitude:** 57.8436**Quadrangle:** SI D-7**Longitude:** 136.2592**Location description and accuracy:**

This prospect is at an elevation of about 1,500 feet, about 1.2 miles east of Lake Elfendahl and 0.6 mile north-northeast of the 2,605-foot peak of Mount Fritz. The prospect is just east of an unnamed lake in the NE1/4 sec. 36, T. 46 S., R. 56 E. It is location P-43 of Bittenbender and others (1999), location 14 of Cobb (1972, 1978), and MAS no. 0021140054 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Cu, Pb, Zn**Other:** Au?**Ore minerals:** Chalcopyrite, galena, pyrite, sphalerite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Triassic greenstone intruded by Tertiary(?) granodiorite. The rocks are cut by high-angle faults that mainly strike northwest; the most prominent is the regional-scale Border Ranges Fault whose trace is about a mile southwest of the prospect.

Cobb (1972, 1978), citing Rossman (1959), describes the prospect as a small quartz vein that contains pyrite, chalcopyrite, sphalerite, and galena. The vein is in a fault near the contact between greenstone and diorite. There are no assay data but Rossman speculated that the vein also contains gold.

Alteration:**Age of mineralization:****Deposit model:**

Polymetallic vein (Cox and Singer, 1986; model 22c).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:**

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Rossman, 1959; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Rossman, 1959

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (shore of Lake Morris southwest of Mount Fritz)**Site type:** Prospect**ARDF no.:** SI035**Latitude:** 57.8321**Quadrangle:** SI D-7**Longitude:** 136.2742**Location description and accuracy:**

The location of this prospect is only known approximately to be on the northeast shore of Lake Morris at the southwest foot of Mount Fritz. For this record, the prospect is plotted at an elevation of about 1,000 feet, 0.4 mile south-southwest of the center of sec. 36, T. 46 S., R. 56 E. It is location P-42 of Bittenbender and others (1999) and MAS no. 0021140304 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Cu**Other:****Ore minerals:** Chalcopyrite?**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Triassic(?) greenstone intruded by Tertiary(?) granodiorite. The rocks are cut by high-angle, mainly northwest-striking faults; the most prominent is the regional-scale Border Ranges Fault whose trace is a few hundred feet southwest of the prospect.

Bittenbender and others (1999), citing Kimball (1982), describe the prospect as a disseminated copper deposit in the greenstone. They report secondary copper minerals on slip surfaces, but do not describe the primary copper mineral(s). Other copper-bearing deposits in Triassic(?) greenstone on northwest Chichagof Island (for example, SI036) contain chalcopyrite as their primary copper sulfide.

Alteration:**Age of mineralization:**

The primary copper mineralization probably is Triassic, the probable age of the greenstone host rock.

Deposit model:

Basaltic copper? (Cox and Singer, 1986; model 23).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

23?

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:**

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Mt. Baker; Baker Peak**Site type:** Prospect**ARDF no.:** SI036**Latitude:** 57.8171**Quadrangle:** SI D-7**Longitude:** 136.2426**Location description and accuracy:**

This prospect is at an elevation of about 1,800 feet on the north flank of Mount Baker. The prospect is 0.4 mile south-southwest of the center of sec. 6, T. 47 S., R. 57 E. It is location P-44 of Bittenbender and others (1999) and MAS no. 0021140009 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Ag, Au, Cu**Other:** Pb**Ore minerals:** Chalcopyrite, pyrite**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Triassic(?) greenstone. The greenstone is cut by high-angle faults that mainly strike northwest. The most prominent is the regional-scale Border Ranges Fault, whose trace is about a mile southwest of the prospect.

Cobb (1972, 1978), citing Overbeck (1919), describes the host rocks as greenstone cut by aplite dikes. Both are mineralized and intensely altered. The mineralization consists of abundant pyrite and locally massive chalcopyrite. Assays of the mineralized rock showed gold, silver, and lead, but no lead mineral is identified. The deposit was discovered in 1910 and explored by about 300 feet of tunnels and crosscuts, a shallow shaft, and open cuts.

Bittenbender and others (1999) report that the largest concentration of copper is in a 400-foot-long, north-west-striking, vertical fault(?) zone. Samples at a shallow shaft at the northwest end of the zone contained up to 7.5 percent copper and some silver, across 2 feet. Samples from a trench at the southeast end of the zone contained 2.0 percent copper across 13 feet. Underground and surface workings expose mineralized rock between 1,300 and 2,000 feet in elevation. The U.S. Bureau of Mines sampled the property at the surface and underground in 1960 (Thorne, 1960); it was explored in 1962 by magnetic and self-potential surveys (Bush and Kenly, 1962); and soil sampled in 1971 (Moerlein, 1971). There has been no production.

Alteration:

Intense unspecified alteration of greenstone and aplite host rocks.

Age of mineralization:

The primary copper mineralization probably is Triassic, the probable age of the greenstone host rock.

Deposit model:

Basaltic copper (Cox and Singer, 1986; model 23).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

23

Production Status: None

Site Status: Undetermined

Workings/exploration:

The deposit was discovered in 1910 and explored by about 300 feet of tunnels and crosscuts, a shallow shaft, and open cuts. Underground and surface workings expose mineralized rock between elevations of 1,300 and 2,000 feet. The U.S. Bureau of Mines sampled the property at the surface and underground in 1960 (Thorne, 1960); it was explored in 1962 by magnetic and self-potential surveys (Bush and Kenly, 1962); and soil sampled in 1971 (Moerlein, 1971).

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Overbeck, 1919; Thorne, 1960; Ryason, 1961; Bush and Kenly, 1962; Moerlein, 1971; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Douglas**Site type:** Prospect**ARDF no.:** SI037**Latitude:** 57.7968**Quadrangle:** SI D-7**Longitude:** 136.2733**Location description and accuracy:**

This prospect is at an elevation of about 1,100 feet on the northwest flank of Mount Douglas. The prospect is about 0.4 mile northwest of the center of sec. 13, T. 47 S., R. 56 E. It is MAS no. 0021140066 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The only published information about the prospect is that it has been staked for copper (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Snow Slide**Site type:** Prospect**ARDF no.:** SI038**Latitude:** 57.7945**Quadrangle:** SI D-7**Longitude:** 136.2518**Location description and accuracy:**

The Snow Slide prospect is at an elevation of about 600 feet, about 0.15 mile north of the north head of Baker Cove in Goulding Harbor. The prospect is 0.5 mile west of the center of sec. 18, T. 47 S., R. 57 E. It is location P-47 of Bittenbender and others, (1999), location 19 of Cobb (1972, 1977), and MAS no. 0021140107 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Chalcopyrite, pyrite, pyrrhotite?**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The rocks are cut by high-angle, mainly northwest-striking faults, one of which transects the prospect area.

Cobb (1972, 1978), citing Overbeck (1919), describes the prospect as a 6-foot zone of quartzose greenschist containing pyrite, chalcopyrite, and possibly some pyrrhotite. Two claims were located in 1916. A 171-foot tunnel driven to intersect the zone at depth did not reach it.

Alteration:**Age of mineralization:****Deposit model:**

Basaltic copper? (Cox and Singer, 1986; model 23).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

23?

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Two claims were located in 1916. A 171-foot tunnel driven to intersect the mineralized zone at depth did not reach it.

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Overbeck, 1919; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Cox Brothers**Site type:** Prospect**ARDF no.:** SI039**Latitude:** 57.7914**Quadrangle:** SI D-7**Longitude:** 136.2398**Location description and accuracy:**

The Cox Brothers prospect is at an elevation of about 400 feet on the peninsula between Baker Cove and inner Goulding Harbor. The prospect is about 0.2 mile south of the center of sec. 18, T. 47 S., R. 57 E. It is location P-48 of Bittenbender and others (1999) and MAS no. 0021140203 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The rocks are cut by high-angle, mainly northwest-striking faults, one of which transects the prospect area.

Bittenbender and others (1999), citing Still and Weir (1981), describe this prospect as an auriferous quartz vein that has been explored by a 16-foot adit and several trenches and pits. The host rocks are not described. Samples of the vein assayed up to 0.30 ounce of gold per ton across 2.5 feet, and up to 0.1 ounce of gold per ton across 2.7 feet.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

The prospect has been explored by a 16-foot adit and several trenches and pits.

Production notes:

Reserves:

Additional comments:

References:

Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Mirror Harbor; Davison Bay; Fleming Island**Site type:** Prospects**ARDF no.:** SI040**Latitude:** 57.7855**Quadrangle:** SI D-7**Longitude:** 136.3082**Location description and accuracy:**

This site is near the center of a 2-mile by 3-mile area of geologically similar prospects along the west coast of northwest Chichagof Island. The area extends from Little Bay to Bertha Bay and includes Davison Bay and Fleming Island; most commonly the occurrences have been referred to under the name Mirror Harbor, which is not named on the D-7 USGS topographic map (1997 ed.). For this record, the site is plotted about at sea level at the northeast corner of sec. 22, T. 47 S., R. 56 E. It is location P-45 of Bittenbender and others (1999), location 16 of Cobb (1972, 1978), and MAS no. 0021140068 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Co?, Cu, Ni**Other:****Ore minerals:** Chalcopyrite, niccolite, pentlandite, pyrrhotite**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the Mirror Harbor area as a Tertiary, composite stock of gabbronorite and norite, enclosed by a discontinuous shell of tonalite. About 5 square miles of the stock are above sea level. The stock intrudes and thermally metamorphoses Cretaceous graywacke and melange. The stock postdates several high-angle, northwest-striking faults.

Cobb (1972, 1978), summarizing several early USGS reports (see References at the end of this record), describes the deposit as intergrown pyrrhotite, pentlandite, and chalcopyrite that form magmatic segregations in norite. The sulfides locally are concentrated into podlike masses and are accompanied by some secondary niccolite.

Cobb (1978) reports that the largest body of concentrated sulfides is on Fleming Island and is estimated to contain about 8,000 tons of material that averages 1.57 percent nickel, 0.88 percent copper, and probably a little cobalt. A disseminated deposit near Davison Bay contains an estimated several million tons of rock that averages about 0.2 percent nickel and 0.1 percent copper.

Bittenbender and others (1999) report that nickel-copper-cobalt mineralization was discovered near Mirror Harbor in 1911. In 1915, a 175-foot shaft (since flooded) was sunk, with crosscuts at 75 and 175 feet below the surface (Pecora, 1942). During WW II the US Bureau of Mines mapped, trenched, and drilled the property; private interests mapped, sampled, and conducted geochemical and geophysical surveys from 1972-1982.

Bittenbender and others (1999) estimate the resources of 3 deposits in the Mirror Harbor area; two are massive bodies of sulfides and the other is disseminated sulfides. A body of massive sulfides near the shaft contains 7,300 tons of rock that averages 1.60 percent nickel and 0.90 percent copper. A body of massive sulfides on the south side of Davison Bay contains a few tons of rock with slightly less grade than the one at the shaft. A disseminated deposit between Mirror Harbor and Davison Bay contains one million tons of rock that averages 0.32 percent nickel and 0.12 percent copper (Still, 1988). Bittenbender and others report that there has been no production and there are no active claims.

Alteration:**Age of mineralization:**

The magmatic segregation deposits are roughly contemporaneous with the crystallization of the Tertiary gabbro-norite host rock.

Deposit model:

Duluth Cu-Ni-PGE (Cox and Singer, 1986; model 5a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

5a

Production Status: None

Site Status: Probably inactive

Workings/exploration:

Bittenbender and others (1999) report that nickel-copper-cobalt mineralization was discovered near Mirror Harbor in 1911. In 1915, a 175-foot shaft (since flooded) was sunk, with crosscuts at 75 and 175 feet below the surface (Pecora, 1942). During WW II the US Bureau of Mines mapped, trenched, and drilled the property, and private interests mapped, sampled, and conducted geochemical and geophysical surveys from 1972-1982.

Production notes:**Reserves:**

Cobb (1978) reports that the largest body of concentrated sulfides is on Fleming Island and is estimated to contain about 8,000 tons of material that averages about 1.57 percent nickel, 0.88 percent copper, and probably a little cobalt. A disseminated deposit near Davison Bay contains an estimated several million tons grading about 0.2 percent nickel and 0.1 percent copper.

Bittenbender and others (1999) estimate the resources of 3 deposits in the Mirror Harbor area; two are massive bodies of sulfides and the other is disseminated sulfides. A body of massive sulfides near the shaft contains 7,300 tons of rock that averages 1.60 percent nickel and 0.90 percent copper. A body of massive sulfides on the south side of Davison Bay contains a few tons of rock with slightly less grade than the one at the shaft. A disseminated deposit between Mirror Harbor and Davison Bay contains one million tons of rock that averages 0.32 percent nickel and 0.12 percent copper (Still, 1988).

Additional comments:

The prospects are in West Chichagof-Yakobi Wilderness.

References:

Brooks, 1918; Martin, 1919; Overbeck, 1919; Buddington, 1925; Sanford, 1942; Pecora, 1942; Traver, 1944; U.S. Bureau of Mines, 1944 (Mirror Harbor); Kennedy and Walton, 1946 (B 947-C); Traver, 1948; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Still, 1988; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (head of Little Bay)**Site type:** Prospect**ARDF no.:** SI041**Latitude:** 57.7817**Quadrangle:** SI D-7**Longitude:** 136.2921**Location description and accuracy:**

This prospect is at sea level at the head of Little Bay. The prospect is about 0.1 mile east of the center of sec. 23, T. 47 S., R. 56 E. It is location P-46 of Bittenbender and others (1999), location 17 of Cobb (1972, 1978), and MAS no. 0021140057 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Ag, Au, Cu, Ni**Other:****Ore minerals:** Chalcopyrite, pyrrhotite**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks around this prospect as a Tertiary, composite stock of gabbro-norite and norite, enclosed by a discontinuous shell of tonalite. About 5 square miles of the stock are above sea level. The stock intrudes and thermally metamorphoses Cretaceous graywacke and melange. The stock postdates several high-angle, northwest-striking faults.

Cobb (1972, 1978), citing Overbeck (1919), describes this prospect as chalcopyrite and pyrrhotite in a quartzitic rock, probably near a contact with granitic rocks. Assays reportedly showed copper, silver, gold, and a trace of nickel. Only a little work had been done in 1916.

Bittenbender and others (1999), also citing Overbeck, describe the prospect as an extension of the Cu-Ni magmatic segregation deposit at Mirror Harbor (SI040), but this does not seem to agree with Overbeck's description. Bittenbender and others report a trench at the prospect.

Alteration:**Age of mineralization:**

If Bittenbender and others' description is correct, the deposit is Tertiary.

Deposit model:

Duluth Cu-Ni-PGE? (Cox and Singer, 1986; model 5a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

5a?

Production Status: None**Site Status:** Undetermined**Workings/exploration:**

Limited surface exploration in the early 1900s.

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Overbeck, 1919; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): New Chichagof Mining Syndicate**Site type:** Prospect**ARDF no.:** SI042**Latitude:** 57.7807**Quadrangle:** SI D-7**Longitude:** 136.1883**Location description and accuracy:**

This prospect is at an elevation of about 150 feet, about 0.4 mile east of the head of Pinta Bay. The prospect is 0.1 mile northwest of the center of sec. 21, T. 47 S., R. 57 E. It is location P-49 of Bittenbender and others (1999), location 21 of Cobb (1972, 1978), and MAS no. 0021140069 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Calcite, quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Triassic(?) marble and greenstone, Cretaceous(?) phyllite, and a collage of metamorphosed Cretaceous and Cretaceous(?) sedimentary and volcanic rocks. The Triassic(?) and Cretaceous(?) rocks are separated by the Border Ranges Fault, a regional-scale, northwest-striking, steeply-dipping fault whose trace is at or near the prospect. The rocks are also cut by other northwest-striking faults, and by northeast-striking faults.

Reed and Coats (1941) describe the prospect as a mineralized fault zone in sheared limestone, shale, greenstone schist, marble, and diorite. There also is an 8-foot-thick dike of unspecified composition. Quartz locally forms a vein up to 3 inches thick in the fault zone, and cements irregular breccia zones. The breccias constitute the ore, which reportedly carries free gold. The prospect was developed by 2 tunnels along the fault zone. One is about 795 feet long; the other, 85 feet higher, is about 145 feet long.

Bittenbender and others (1999) report that the prospect was discovered in 1933 along a northeast-striking fault zone, and that the gold occurs in a quartz-carbonate-cemented, limestone breccia. A 110-foot section of mineralized quartz exposed in the underground workings averaged 0.24 ounce of gold per ton across a 4-foot mining width (Still and Weir, 1981). Numerous surface cuts expose mineralized quartz along a strike length of more than 500 feet. There is no record of production, but the extent of the workings suggests that some gold may have been produced.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz veins (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

The prospect was developed by 2 tunnels along the fault zone. One is about 795 feet long; the other, 85 feet higher, is about 145 feet long (Cobb, 1978). Numerous surface cuts intermittently expose mineralized quartz along a strike length of more than 500 feet.

Production notes:

There is no record of production, but the extent of the workings suggests that some gold may have been produced.

Reserves:**Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Nelson, 1936; Roehm, 1936 (New Chichagof); Racey, 1938; Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999**Reporter(s):** H.C. Berg (U.S. Geological Survey)**Last report date:** 10/16/2004

Site name(s): Golden Hand Apex**Site type:** Mine**ARDF no.:** SI043**Latitude:** 57.7773**Quadrangle:** SI D-7**Longitude:** 136.1713**Location description and accuracy:**

The Golden Hand Apex Mine is at an elevation of about 500 feet, about 1.3 miles east of upper Pinta Bay. The mine is 0.5 mile west-southwest of the center of sec. 22, T. 47 S., R. 57 E. It is location P-51 of Bittenbender and others (1999), location 22 of Cobb (1972, 1978), and MAS no. 0021140037 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of the Golden Hand Apex Mine as Triassic(?) marble and greenstone, Cretaceous(?) phyllite, and a collage of metamorphosed Cretaceous and Cretaceous(?) sedimentary and volcanic rocks. The Triassic(?) and Cretaceous(?) rocks are separated by the Border Ranges Fault, a regional-scale, northwest-striking, steeply-dipping fault whose trace crosses the mine area. The rocks are also cut by other northwest-striking faults, and by northeast-striking faults.

Reed and Coats (1941) report that prospect pits expose limestone intruded by a small mass of quartz diorite, and that at least some of the contact is a fault; other faults also cut the limestone. Quartz replaces some of the limestone near the contact and there is some quartz-cemented limestone breccia. A few specks of gold are visible in quartz veinlets.

Bittenbender and others (1999) report that the Golden Hand Apex Mine was staked in 1921 along a quartz-bearing, northwest-striking fault zone (Stewart, 1923). Workings, mostly in the 1920s, included a 120-foot sloughed trench, 140 feet of crosscut, and 85 feet of drift. Still and Weir (1981) sampled a quartz vein exposed for 23 feet in two trenches; it averaged 0.34 ounce of gold per ton across a 3-foot mining width. A representative sample across a 0.2-foot by 3-foot, high-grade mineralized zone in the footwall of the same vein assayed 187 ounces of gold per ton, and a single selected sample assayed 489 ounces of gold per ton. A small amount of rich ore was produced in 1979 by the claim holder. According to Bittenbender and others, the property is an active inholding within the West Chichagof-Yakobi Wilderness area.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Yes; small**Site Status:** Active**Workings/exploration:**

Bittenbender and others (1999) report that the Golden Hand Apex Mine was staked in 1921 along a quartz-bearing, northwest-striking fault zone (Stewart, 1922). Workings, mostly in the 1920s, included a 120-foot sloughed trench, 140 feet of crosscut, and 85 feet of drift.

Production notes:

A small amount of rich ore was produced in 1979 by the claim holder.

Reserves:**Additional comments:****References:**

Stewart, 1923; Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999**Reporter(s):** H.C. Berg (U.S. Geological Survey)**Last report date:** 10/16/2004

Site name(s): Princess Pinder**Site type:** Prospect**ARDF no.:** SI044**Latitude:** 57.7609**Quadrangle:** SI D-7**Longitude:** 136.2134**Location description and accuracy:**

The Princess Pinder prospect is at sea level in the west shore of lower Pinta Bay. The prospect is about 0.4 mile south of the center of sec. 29, T. 47 S., R. 57 E. It is location 18 of Cobb (1972, 1978) and MAS no. 0021140073 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au, Cu**Other:****Ore minerals:** Chalcopyrite, pyrrhotite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The rocks are cut by high-angle faults that mainly strike northwest.

Knopf (1912) describes the prospect as 7 feet of coarse, white quartz between a footwall of slate and hanging wall of greenstone breccia. The quartz carries scattered pods of chalcopyrite and pyrrhotite. Assays of samples across the lode averaged about 0.48 ounce of gold per ton. The deposit was discovered in 1910. There is no record of development or production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Apparently only surface sampling.

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Knopf, 1912; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; U.S. Bureau of Land Management, 2002.

Primary reference: Knopf, 1912; Cobb, 1978

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Martha-Brown Cub**Site type:** Prospect**ARDF no.:** SI045**Latitude:** 57.7516**Quadrangle:** SI D-7**Longitude:** 136.1991**Location description and accuracy:**

The Martha-Brown Cub prospect is at an elevation of about 400 feet, about 0.3 mile inland from the east shore of outermost Pinta Bay. The prospect is 0.4 mile south of the northwest corner of sec. 33, T. 47 S., R. 57 E. It is location P-50 of Bittenbender and others (1999) and MAS no. 0021140110 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The rocks are cut by high-angle faults that mainly strike northwest.

Bittenbender and others (1999) describe the prospect as a gold-quartz vein in graywacke. There is no information about any workings or production. Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:**

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Tenakee**Site type:** Prospect**ARDF no.:** SI046**Latitude:** 57.9963**Quadrangle:** SI D-6**Longitude:** 135.8981**Location description and accuracy:**

The Tenakee prospect is at an elevation of about 200 feet on the southwest valley wall of the tidal flat at the head of Tenakee Inlet. The prospect is 0.3 mile west-northwest of the center of sec. 5, T. 45 S., R. 58 E. It is MAS no. 0021140095 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Ni**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Loney and others (1975) map the rocks in the area of this prospect as Paleozoic(?) sedimentary and volcanic rocks that are intruded by, or are roof pendants in, a Cretaceous diorite-tonalite-granodiorite batholith. The sedimentary and volcanic rocks have been thermally metamorphosed to hornfels, granofels, marble, schist, and amphibolite. These metamorphic and plutonic rocks in turn are intruded by stocks of Tertiary(?) leucogabbro. The rocks are cut by numerous high-angle faults of varying, but mainly northwest, strike. The only published information about this prospect is that it has been staked for nickel (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Fish-Pool**Site type:** Prospect**ARDF no.:** SI047**Latitude:** 57.9262**Quadrangle:** SI D-6**Longitude:** 135.8580**Location description and accuracy:**

The Fish-Pool prospect is at an elevation of about 130 feet, on or near an unnamed creek that enters the southwest side of upper Tenakee Inlet. The prospect is 0.2 mile northeast of the center of sec. 33, T. 45 S., R. 59 E. It is MAS no. 0021140096 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Loney and others (1975) map the rocks in the area of this prospect as Paleozoic sedimentary and volcanic rocks that are intruded by or are roof pendants in a Cretaceous diorite-tonalite-granodiorite batholith. The strata have been thermally metamorphosed to hornfels, granofels, marble, schist, and amphibolite. These metamorphic and plutonic rocks in turn are intruded by stocks of Tertiary(?) leucogabbro. The rocks are cut by numerous high-angle faults of varying, but mainly northwest strike. The only published information about this prospect is that it has been staked for an unspecified commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Late**Site type:** Prospect**ARDF no.:** SI048**Latitude:** 57.8495**Quadrangle:** SI D-6**Longitude:** 135.9810**Location description and accuracy:**

The Late prospect is at an elevation of about 2,500 feet, about 1.5 miles northeast of the head of Lisianski Inlet. The prospect is 0.4 mile west-southwest of the center of sec. 26, T. 46 S., R. 58 E. It is MAS no. 0021140191 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Loney and others (1975) and Johnson and Karl (1985) map the rocks in the area of this prospect as Paleozoic volcanic and sedimentary rocks that are intruded by, or are roof pendants in, a Cretaceous or Jurassic batholith of granodiorite, diorite, gabbro, and tonalite. The strata are thermally metamorphosed to hornfels, granofels, schist, gneiss, and marble. The rocks are cut by numerous high-angle faults of varying, but mainly northwest, strike. The most prominent of these is the regional-scale Peril Strait Fault that extends along Lisianski Inlet just southwest of the prospect. The only published information about the prospect is that it has been staked for an unspecified commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:****References:**

Loney and others, 1975; Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Koby; Shepard**Site type:** Prospect**ARDF no.:** SI049**Latitude:** 57.8150**Quadrangle:** SI D-6**Longitude:** 135.9441**Location description and accuracy:**

The Koby prospect is at an elevation of about 100 feet on a trail along the southwest side of Lisianski River, about 3.5 miles from the head of Lisianski Inlet. The prospect is 0.5 mile north of the center of sec. 12, T. 47 S., R. 58 E. It is location P-31 of Bittenbender and others (1999); location 23 of Cobb (1972, 1978), who calls it Koby (and Shepard); and MAS no. 0021140051 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au, Pb, Zn**Other:** Bi, Cd, Cu**Ore minerals:** Arsenopyrite, galena, gold?, pyrite, sphalerite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as part of a batholith of Cretaceous or Jurassic tonalite and gabbro. The rocks are cut by numerous high-angle faults of varying, but mainly north-west, strike. The most prominent of these is the regional-scale Peril Strait Fault that follows the Lisianski River. The prospect is on or near this fault.

Cobb (1972, 1978), citing Reed and Coats (1941) and Rossman (1959), reports that the prospect consists of quartz lenses as much as 7 feet thick along a fault zone in quartz-chlorite schist. The quartz contains about one percent sulfides, including arsenopyrite, pyrite, sphalerite, and galena; in 1959, the owners claimed that it also carries free gold. The deposit was explored by pits, trenches, and a 280-foot adit and crosscut that did not intersect mineralization.

Bittenbender and others (1999), mainly citing Kimball (1982), describe the prospect as a quartz vein in greenstone schist. It was explored by a 300-foot adit, and by surface cuts for about 300 feet along strike. Samples across 3- to 6-foot widths of the vein assayed up to 0.02 ounce of gold per ton and 0.5-0.9 ounce of silver per ton. Selected dump samples contained up to 2.96 ounces of gold per ton, 52.5 ounces of silver per ton, and 1 percent lead. They report that the deposit also contains copper, bismuth, and cadmium. There is no record of any production, but the extent of the workings suggests that some gold may have been produced.

Alteration:**Age of mineralization:****Deposit model:**

Polymetallic vein (Cox and Singer, 1986; model 22c).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

According to Cobb (1978), the deposit was explored by pits, trenches, and a 280-foot adit and crosscut that did not intersect mineralization. Bittenbender and others (1999) report that it was explored by a 300-foot adit and by surface cuts for about 300 feet along the strike of the vein.

Production notes:

There is no record of any production, but the extent of the workings suggests that some gold may have been produced.

Reserves:

Additional comments:

References:

Reed and Coats, 1941; Rossman, 1959; Cobb, 1972; Cobb, 1978; Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Star**Site type:** Prospect**ARDF no.:** SI050**Latitude:** 57.8058**Quadrangle:** SI D-6**Longitude:** 135.9173**Location description and accuracy:**

The Star prospect is at an elevation of about 150 feet, 0.3 mile west of the mouth of lake 136 in sec. 7, T. 47 S., R. 59 E. The prospect is MAS no. 0021140094 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about a mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as part of a batholith of Cretaceous or Jurassic tonalite and gabbro. The rocks are cut by numerous high-angle faults of varying but mainly north-west strike; the most prominent is the regional-scale Peril Strait Fault that follows the valley of the Lisianski River. The prospect is on or near this fault. The only published information about this prospect is that it has been staked for gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:****References:**

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (logging road, north side of Gypsum Creek)**Site type:** Occurrences**ARDF no.:** SI051**Latitude:** 57.9179**Quadrangle:** SI D-4**Longitude:** 135.0389**Location description and accuracy:**

This record consists of several occurrences of mineralization in rock pits and roadcuts along about 3 miles of a logging road on the northeast side of Gypsum Creek. For this record, the site is plotted on the road at about the midpoint of the occurrences at the southwest corner of sec. 34, T. 45 S., R. 64 E. It is location P-19 of Bittenbender and others (1999), and MAS no. 0021140307 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:****Other:****Ore minerals:** Chalcopyrite, pyrite, pyrrhotite**Gangue minerals:** Calcite, diopside, epidote, garnet**Geologic description:**

The rocks in the vicinity of these occurrences are part of the Mississippian, Iyoukeen Formation (Lathram and others, 1965). The upper half of the formation is cherty fossiliferous limestone; the lower half is fossiliferous shale with minor limestone. A Cretaceous hornblende-biotite quartz monzonite stock is just north of the prospect and is probably the cause of the skarns at these occurrences.

This site includes two borrow pits about 2.5 miles apart along a logging road (Bittenbender and others, 1999). In the east pit, there is a zone about 60 feet wide of sheared hornfels and garnet-epidote-diopside-calcite endoskarn. There is locally abundant pyrite and pyrrhotite, and minor chalcopyrite in the hornfels and skarn. A sample of massive pyrrhotite contained 116 parts per million (ppm) copper and 310 ppm nickel, but no silver or gold. Similar skarn is exposed in the west pit where a 2-foot-wide zone of mineralized hornfels contains pyrite and pyrrhotite. A sample contained 2,210 ppm copper. A sample of rubble in the pit contained up to 1,950 ppm copper, 28 ppm molybdenum, 300 ppm cobalt, 0.4 ppm silver and 50 parts per billion gold.

Alteration:

The mineralization is associated physically and probably genetically with hornfels and skarn.

Age of mineralization:

Probably related to a nearby Cretaceous intrusive.

Deposit model:

Copper skarn (Cox and Singer, 1986, model 18b).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

18b

Production Status: None

Site Status: Undetermined

Workings/exploration:

Only surface sampling by government geologists.

Production notes:

Reserves:

Additional comments:

References:

Lathram and others, 1965; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (upper Kennel Creek)**Site type:** Occurrence**ARDF no.:** SI052**Latitude:** 57.8829**Quadrangle:** SI D-4**Longitude:** 135.2282**Location description and accuracy:**

This site is a rock pit on a logging road along Kennel Creek, about 3 miles south-southwest of the logging camp on Freshwater Bay. The pit is at an elevation of about 300 feet, 0.6 mile west-northwest of the center of sec. 16, T. 46 S., R. 63 E. It is location P-22 of Bittenbender and others (1999) and MAS no. 0021140308 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Cu, Mo**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

This occurrence is near the center of a Jurassic intrusion that consist of quartz monzonite, alaskite, and monzonite, surrounded mainly by the Silurian and/or Devonian Kennel Creel Limestone (Lathram and others, 1965). Maas and others (1996) and Bittenbender and others (1999) have classified this as a porphyry deposit with minor skarn. High grade samples contained up to 0.2 percent molybdenum and 155 parts per million copper.

Alteration:

Formation of skarn.

Age of mineralization:

Jurassic or younger based on the age of the host rocks.

Deposit model:

Molybdenum porphyry.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Apparently only sampling by government geologists.

Production notes:**Reserves:**

Additional comments:

References:

Latham and others, 1965; Maas and others, 1996; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (north of Columbia Point)**Site type:** Occurrence**ARDF no.:** SI053**Latitude:** 57.7944**Quadrangle:** SI D-4**Longitude:** 135.1100**Location description and accuracy:**

This occurrence is at an elevation of about 2,000 feet, about 1.2 miles north of Columbia Point in Tenakee Inlet. The occurrence is 0.2 mile northwest of the center of sec. 18, T. 47 S., R. 64 E. It is location P-27 of Bittenbender and others (1999) and MAS no. 0021140200 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Chalcopyrite, covellite, hematite, malachite**Gangue minerals:** Calcite**Geologic description:**

The rocks in the vicinity of this occurrence are part of the Devonian, Kennel Creek Limestone which consists of limestone, minor dolomite, limestone breccia, shale, and siltstone (Lathram and others, 1965). Calcite veins in a diabase dike contain chalcopyrite, malachite, hematite, and covellite. (Loney and others, 1963).

Alteration:**Age of mineralization:**

Devonian or younger based on the age of the host rock.

Deposit model:

Calcite veins with copper minerals in a diabase dike.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:****Additional comments:**

References:

Loney and others, 1963; Lathram and others, 1965; Cobb, 1972; Cobb, 1978; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Loney and others, 1963

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Baldy**Site type:** Prospect**ARDF no.:** SI054**Latitude:** 57.7961**Quadrangle:** SI D-4**Longitude:** 135.0361**Location description and accuracy:**

The Baldy prospect is at an elevation of about 2,300 feet, about 2 miles northeast of Cannery Point in Tenakee Inlet. The prospect is 0.5 mile northwest of the center of sec. 15, T. 47 S., R. 64 E. It is location P-25 of Bittenbender and others (1999) and MAS no. 0021140010 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Cu, W**Other:****Ore minerals:** Chalcopyrite, hematite, magnetite, pyrrhotite**Gangue minerals:** Garnet, pyroxene, quartz**Geologic description:**

This prospect is at the contact of Cretaceous granodiorite with the Devonian, Kennel Creek Limestone which consists of limestone, minor dolomite, limestone breccia, shale, and siltstone (Lathram and others, 1965). The contact is marked by oxidized masses of skarn composed of magnetite, garnet, pyroxene, hematite, and minor quartz. (Buddington, 1925) The skarn contains chalcopyrite and pyrrhotite. Bittenbender and others (1999) collected samples that contained up to 0.29 percent copper and 240 ppm tungsten.

Alteration:

Oxidization; formation of skarn.

Age of mineralization:

Probably related to the adjacent Cretaceous granodiorite pluton.

Deposit model:

Copper-tungsten skarn.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Three claims were staked prior to 1925; only surface sampling by government geologists since.

Production notes:**Reserves:**

Additional comments:

References:

Buddington, 1925; Lathram and others, 1965; Cobb, 1972; Cobb, 1978; Bittenbender and others, 1999; U. S. Bureau of Land Management, 2002.

Primary reference: Buddington, 1925

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): 3-J; Three J; 3 J**Site type:** Prospects**ARDF no.:** SI055**Latitude:** 57.7868**Quadrangle:** SI D-4**Longitude:** 135.0461**Location description and accuracy:**

According to the U.S. Bureau of Land Management (2002), the 3-J prospect (MAS no. 0021140211) is at an elevation of about 150 feet, about 0.4 mile north of Coffee Cove in Tenakee Inlet, and the Three J prospect (MAS no. 0021140102) is at sea level at the northeast corner of an unnamed cove about 0.5 mile west of Coffee Cove. The prospects are about 0.4 mile apart. Bittenbender and others' location P-26 (1999) coincides with the Bureau's 3-J prospect, and Cobb's location 47 (1972, 1978) coincides with the Bureau's Three J prospect. For this record, the site is plotted at Cobb's location 47 (which he calls the 3 J (no hyphen)) prospect, at the northeast corner of the unnamed cove. The location is accurate.

Commodities:**Main:** Cu, Mo**Other:****Ore minerals:** Chalcopyrite, molybdenite**Gangue minerals:****Geologic description:**

Several prospect are in a stock of Cretaceous granodiorite (Lathram and others, 1965). Smith (1942) reports aplite(?) dikes up to 20 feet thick that cut the granodiorite. Chalcopyrite and molybdenite occur in the dikes and in the granodiorite, but more chalcopyrite is in the granodiorite and more molybdenite is in the aplite. A chip sample of the dike contained 0.1 percent copper and 0.7 percent molybdenum; a chip sample of the granodiorite contained less than 0.01 percent copper and molybdenum. Bittenbender and others (1999) collected several samples; a 0.3-foot sample contained 0.3 percent copper and 0.02 percent molybdenum. At least one claim was staked in 1941.

Alteration:**Age of mineralization:**

Cretaceous or younger based on the age of the host rock.

Deposit model:

Porphyry molybdenum-copper deposit.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

At least one claim as staked in 1941; some surface sampling since by government geologists.

Production notes:

Reserves:

Additional comments:

References:

Smith, 1942; Lathram and others, 1965; Berg and Cobb, 1967; Cobb, 1972; Eakins, 1975; Cobb, 1978; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Smith, 1942; Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Richard 1-4**Site type:** Prospect**ARDF no.:** SI056**Latitude:** 57.9258**Quadrangle:** SI D-3**Longitude:** 134.9414**Location description and accuracy:**

The Richard 1-4 gypsum prospect is at an elevation of about 100 feet near a logging road that crosses Wukuklook Creek about 1.5 miles north-northeast of Flints Point. The prospect is 0.2 mile east-northeast of the center of sec. 31, T. 45 S., R. 65 E. It is MAS no. 0021140168 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about 0.5 mile.

Commodities:**Main:** Gypsum**Other:****Ore minerals:** Gypsum**Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Mississippian, Iyoukeen Formation (Lathram and others, 1965). The upper half of the formation is cherty fossiliferous limestone; the lower half is fossiliferous shale with minor limestone. A Cretaceous hornblende-biotite quartz monzonite stock is about 1.5 miles north of the prospect. Little is known about this prospect other than that a claim was staked here for gypsum. The deposit is probably similar to the deposit at the nearby Kaiser Gypsum Mine (SI059).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Little is known about this prospect other than that a claim was staked for gypsum.

Production notes:**Reserves:****Additional comments:****References:**

Latham and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Richard Gypsum**Site type:** Prospect**ARDF no.:** SI057**Latitude:** 57.9163**Quadrangle:** SI D3**Longitude:** 134.9414**Location description and accuracy:**

The Richard Gypsum prospect is at sea level about 0.9 mile northeast of Flints Point in Iyoukeen Cove. The prospect is 0.7 mile east of the center of sec. 6, T. 46 S., R. 65 E. It is MAS no. 0021140103 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Gypsum**Other:****Ore minerals:** Gypsum**Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Mississippian, Iyoukeen Formation (Lathram and others, 1965). The upper half of the formation is cherty fossiliferous limestone; the lower half is fossiliferous shale with minor limestone. A Cretaceous hornblende-biotite quartz monzonite stock is about 1.5 miles north of the prospect. Little is known about this prospect other than a claim was staked here for gypsum (U. S. Bureau of Land Management, 2002). The deposit is probably similar to the deposit at the nearby Kaiser Gypsum Mine (SI059).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Little is known about this prospect other than a claim was staked here for gypsum.

Production notes:**Reserves:****Additional comments:****References:**

Latham and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Camel Gypsum**Site type:** Prospect**ARDF no.:** SI058**Latitude:** 57.9118**Quadrangle:** SI D-3**Longitude:** 134.9613**Location description and accuracy:**

The Camel Gypsum prospect is at an elevation of about 100 feet, about 0.4 mile northwest of Flints Point in Iyoukeen Cove. The mine is 0.4 mile east-northeast of the center of sec. 1, T. 46 S., R. 64 E. It is location P-20 of Bittenbender and others (1999) and MAS no. 0021140040 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Gypsum**Other:****Ore minerals:** Gypsum**Gangue minerals:****Geologic description:**

The rocks in the vicinity of the Camel Gypsum prospect are part of the Mississippian, Iyoukeen Formation (Lathram and others, 1965). The upper half of the formation is cherty fossiliferous limestone; the lower half is fossiliferous shale with minor limestone. A Cretaceous hornblende-biotite quartz monzonite stock is about 1.5 miles north of the prospect.

The Camel Gypsum deposit was discovered in 1902 and is similar to the nearby Kaiser Gypsum Mine (SI059) which was discovered a few years earlier. By 1942, the deposit was developed by 5 adits, 3 winzes, and more than 1,000 feet of underground workings (Jermain and Rutledge, 1950). In 1948, the U.S. Bureau of Mines reopened some of the workings, sampled them, and drilled two holes. They drilled four more holes in 1962. There has been no production. Jermain and Rutledge (1950) estimated the indicated and inferred resources at the Camel Gypsum deposit as 92,500 tons of gypsum.

The origin of the deposit is unclear and most people who have described it or the nearby Kaiser Gypsum Mine (SI059) are uncertain whether they are bedded syngenetic deposits or epigenetic deposits related to a nearby quartz monzonite intrusion (Wright, 1907; Burchard, 1920; Steward, 1932; Flint and Cobb, 1953; Bittenbender and others, 1999). At least locally, the deposit is underlain by limestone breccia and overlain by conglomerate. Solution cavities filled with gravel are common.

Alteration:**Age of mineralization:**

If sedimentary, the gypsum is Mississippian, the age of the formation that hosts it. If epigenetic, the gypsum may be related to nearby Cretaceous quartz monzonite.

Deposit model:

Gypsum of debatable origin.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None

Site Status: Undetermined

Workings/exploration:

The Camel Gypsum deposit was discovered in 1902 and is similar to the nearby Kaiser Gypsum Mine (SI059) which was discovered a few years earlier. By 1942, the deposit was developed by 5 adits, 3 winzes, and more than 1,000 feet of underground workings (Jermain and Rutledge, 1950). In 1948, the U.S. Bureau of Mines reopened some of the workings, sampled them, and drilled two holes. They drilled four more holes in 1962.

Production notes:

Reserves:

Jermain and Rutledge (1950) estimated the indicated and inferred resources at the Camel Gypsum deposit as 92,500 tons of gypsum.

Additional comments:

References:

Wright, 1907; Burchard, 1920; Smith, 1930; Stewart, 1932; Twenhofel and others, 1949; Jermain and Rutledge, 1950; Jermain and Rutledge, 1952; Flint and Cobb, 1953; Gnagy, 1962; Herreid, 1962; U.S. Bureau of Mines, 1962; Loney and others, 1963; Lathram and others, 1965; Cobb, 1972; Roppel, 1973; Loney and others, 1975; Cobb, 1978; Redman, 1989; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Kaiser Gypsum**Site type:** Mine**ARDF no.:** SI059**Latitude:** 57.9095**Quadrangle:** SI D-3**Longitude:** 134.9902**Location description and accuracy:**

The Kaiser Gypsum Mine is at an elevation of about 80 feet on an unnamed north tributary of Gypsum Creek. The mine is in the SE1/4 sec. 2, T. 46 S., R. 64 E. It is location P-21 of Bittenbender and others (1999), MAS no. 0021140041 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Gypsum**Other:****Ore minerals:** Anhydrite, gypsum**Gangue minerals:****Geologic description:**

The rocks in the vicinity of the Kaiser Gypsum Mine are part of the Mississippian, Iyoukeen Formation (Lathram and others, 1965). The upper half of the formation is fossiliferous cherty limestone; the lower half is fossiliferous shale with minor limestone. A Cretaceous hornblende-biotite quartz monzonite stock is about 1.5 miles north of the mine.

The deposit was discovered in 1902 and was soon acquired by Pacific Coast Gypsum who developed it with two shafts, a raise, and 3,500 feet of drifts to a depth of 300 feet (Wright and Wright, 1907; Burchard, 1920; Steward, 1932; Flint and Cobb, 1953; Bittenbender and others, 1999). They operated the property from 1906 to 1923 and produced about 500,000 tons of gypsum. In 1923, the mine flooded and closed. It is unclear, however, whether it closed because it had exhausted the deposit and the company decided to stop pumping a wet mine or the flooding made the deposit uneconomic. Roppell (1973) has a particularly informative history of the discovery of the deposit, the personalities and companies involved, and the history of mining to the end of production. The deposit is on 6 patented claims that were acquired by Kaiser Gypsum Company in the late 1950's. The deposit was drilled by the U.S. Bureau of Mines in the 1960's. Unpublished data from industry in the office of the U.S. Bureau of Land Management in Juneau, Alaska, indicate that a reserve of 4.5 million tons of gypsum may remain (Bittenbender and others, 1999).

The origin of the deposit is unclear and most people who have described it are uncertain whether it is a bedded syngenetic deposit or an epigenetic deposit related to a nearby quartz monzonite intrusion (Wright and Wright, 1907; Burchard, 1920; Steward, 1932; Flint and Cobb, 1953; Bittenbender and others, 1999). At least locally, the deposit is underlain by limestone breccia and overlain by conglomerate. Solution cavities filled with gravel are common. The structure of the deposit is complex with much folding and faulting, and the gypsum is deformed. The deposit is cut by thin basaltic dikes. At the 300 level of the mine, the workings covered an area about 600 by 800 feet and at the 160-foot level, the workings were about 500 by 1000 feet. An anhydrite vein 6 inches to more than 10 feet thick was found on the 160-foot level.

Alteration:**Age of mineralization:**

If sedimentary, the gypsum is Mississippian, the age of the formation that hosts it. If epigenetic, the gypsum may be related to nearby Cretaceous quartz monzonite.

Deposit model:

Gypsum of debatable origin.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production Status: Yes; medium

Site Status: Active?

Workings/exploration:

The deposit was discovered in 1902 and was soon acquired by Pacific Coast Gypsum who developed it with two shafts, a raise, and 3,500 feet of drifts to a depth of 300 feet (Wright and Wright, 1907; Burchard, 1920; Steward, 1932; Flint and Cobb, 1953; Bittenbender and others, 1999). In 1923, the mine flooded and closed. It is unclear however, whether it closed because it had exhausted the deposit and the company decided to stop pumping a wet mine or the flooding made the deposit uneconomic. The deposit was drilled by the U.S. Bureau of Mines in the 1960's.

Production notes:

Pacific Coast Gypsum operated the mine from 1906 to 1923 and produced about 500,000 tons of gypsum. Roppell (1973) has a particularly informative history of the discovery of the deposit, the personalities and companies involved, and the history of mining to the end of production.

Reserves:

Unpublished data from industry in the files of the U.S. Bureau of Land Management in Juneau, Alaska, indicate that a reserve of 4.5 million tons of gypsum may remain (Bittenbender and others, 1999).

Additional comments:

The deposit is on 6 patented claims that were acquired by Kaiser Gypsum Company in the late 1950's.

References:

Wright and Wright, 1905; Wright, 1907; Wright, 1908; Wright, 1909; Knopf, 1912; Brooks, 1913; Brooks, 1915; Chapin, 1916; Smith, 1917 (BMB 142); Smith, 1917 (BMB 153); Brooks, 1918; Brooks, 1919; Burchard, 1920; Martin, 1920; Brooks, 1921; Brooks, 1922; Brooks, 1923; Brooks and Capps, 1924; Brooks, 1925; Smith, 1926; Moffit, 1927; Buddington and Chapin, 1929; Smith, 1920; Smith, 1930; Stewart, 1932; Gustafson, 1946; Twenhofel and others, 1949; Jermain and Rutledge, 1952; Flint and Cobb, 1953; Gnagy, 1962; Herreid, 1962; Loney and others, 1963; Lathram and others, 1965; Cobb, 1972; Roppel, 1973; Loney and others, 1975; Cobb, 1978; Redman, 1989; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Gypsum Creek**Site type:** Prospect**ARDF no.:** SI060**Latitude:** 57.9094**Quadrangle:** SI D-3**Longitude:** 134.9957**Location description and accuracy:**

The Gypsum Creek placer prospect is at an elevation of about 100 feet on Gypsum Creek. The prospect is just south of the center of sec. 2, T. 46 S., R. 64 E. It is MAS no. 0021140218 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Mississippian, Iyoukeen Formation (Lathram and others, 1965). The upper half of the formation is cherty fossiliferous limestone; the lower half is fossiliferous shale with minor limestone. A Cretaceous hornblende-biotite quartz monzonite stock is about 1.5 miles north of the mine. The only information about this prospect is that one or more claims were staked for placer gold.

Alteration:**Age of mineralization:**

Quaternary.

Deposit model:

Placer gold (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: None**Site Status:** Probably inactive**Workings/exploration:**

The only information about this prospect is that one or more claims were staked for placer gold.

Production notes:**Reserves:****Additional comments:**

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (west of East Point)**Site type:** Occurrence**ARDF no.:** SI061**Latitude:** 57.8065**Quadrangle:** SI D-3**Longitude:** 134.9705**Location description and accuracy:**

This occurrence is at an elevation of about 600 feet in a rock pit along a logging road 0.8 mile west of East Point at the mouth of Tenakee Inlet. The occurrence is 0.2 mile south-southeast of the center of sec. 12, T. 47 S., R. 64 E. It is location P-23 of Bittenbender and others (1999) and MAS no. 0021140303 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Ag, Cu, Pb, Zn**Other:****Ore minerals:** Chalcopyrite, galena, pyrite, sphalerite**Gangue minerals:****Geologic description:**

The rocks in the vicinity of this occurrences are part of the Devonian and/or Silurian, Kennel Creek Limestone which consists of limestone, minor dolomite, limestone breccia, shale, siltstone, and conglomerate (Lathram and others, 1965). Bittenbender and others (1999) collected samples in a (borrow?) pit of mineralized marble and basalt with pyrite. One limestone boulder contained up to 50% sphalerite in clots; another sample of marble contained up to 20 percent sphalerite, 1 percent galena, and chalcopyrite. High grade samples contained up to 26 percent zinc, 1.74 percent lead, 460 parts per million (ppm) copper, and 52 ppm silver.

Alteration:**Age of mineralization:**

Silurian or younger based on the age of the host rock.

Deposit model:

Silver, copper, lead, and zinc minerals in marble.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Apparently only surface sampling by government agencies.

Production notes:**Reserves:**

Additional comments:

References:

Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Big Ledge**Site type:** Prospect**ARDF no.:** SI062**Latitude:** 57.8041**Quadrangle:** SI D-3**Longitude:** 134.9848**Location description and accuracy:**

Bittenbender and others (1999) report that the Big Ledge prospect is in a gully at an elevation of 500 feet, 1.6 miles west-southwest of East Point, but this location does not seem to agree in elevation with the D-3 topographic map at that site. For this record, the site is plotted along a logging road at the west edge of the SW1/4 sec. 12, T. 47 S., R. 64 E. It is location P-24 of Bittenbender and others (1999), location 48 of Cobb (1972, 1978), and MAS no. 0021140015 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Cu, Ni**Other:** Co, Zn**Ore minerals:** Chalcopyrite, pentlandite, pyrite, pyrrhotite, sphalerite**Gangue minerals:** Calcite, quartz**Geologic description:**

The rocks in the vicinity of the Big Ledge prospect are part of the Devonian and/or Silurian, Kennel Creek Limestone which consists of limestone, minor dolomite, limestone breccia, shale, siltstone, and conglomerate (Lathram and others, 1965). A gabbro or diabase dike about 20 feet thick cuts conglomerate at this prospect (Buddington, 1925; Bittenbender and others, 1999). About 6 feet of the center of the dike is faulted and fractured, and rare quartz and calcite stringers cut it. The dike contains stringers of pyrrhotite up to 6 inches thick as well as disseminated pyrrhotite. There is small amount of pyrite and chalcopyrite along fractures. One sulfide-rich sample contained pyrrhotite, chalcopyrite, pentlandite, a secondary nickel mineral, a little pyrite, and a trace of sphalerite. Bittenbender and others (1999) sampled the deposit. Several samples of the mafic dike rock contained up to 0.91 percent copper, 0.84 percent nickel, and 910 parts per million cobalt.; a select sample with about 50 percent sulfides contained 7.02 percent copper, 4.4 percent nickel, and 910 parts per million cobalt. A claim was staked on the prospect but there was no development as of 1924 (Buddington, 1925).

Alteration:**Age of mineralization:**

Silurian or younger based on the age of the host rocks.

Deposit model:

Gabbro dike with copper and nickel.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined

Workings/exploration:

A claim was staked on the prospect prior to 1923 but there was no development as of that date.

Production notes:**Reserves:****Additional comments:****References:**

Buddington, 1925; Buddington and Chapin, 1929; Lathram and others, 1965; Berg and Cobb, 1967; Cobb, 1972; Cobb, 1978; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Buddington, 1925; Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): PT**Site type:** Prospect**ARDF no.:** SI063**Latitude:** 57.9615**Quadrangle:** SI D-3**Longitude:** 134.7472**Location description and accuracy:**

The PT claims are at an elevation of about 500 feet, about 1.3 miles southeast of Cube Point on Admiralty Island. The claims are 0.3 mile northeast of the sec. 20 numeral, in T. 45 S., R. 66 E. They are MAS no. 0021140038 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.2 mile.

Commodities:**Main:** Cu, Pb, Zn**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Devonian Retreat Group which consists of schist with marble interbeds (Lathram and others, 1965). The only information about this prospect is that one or more claims were staked here for copper, lead, and zinc by WGM, Inc. (U.S. Bureau of Land Management, 2002). Although there is scant information on this prospect, it may be in the same age of rocks as the nearby Greens Creek Mine (Barnett and Miller, 2003; ARDF JU253).

Alteration:**Age of mineralization:**

Devonian or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

The only information about this prospect is that one or more claims were staked for copper, lead, and zinc by WGM, Inc.

Production notes:**Reserves:****Additional comments:**

This prospect is within the Wilderness of the Admiralty Island National Monument.

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002; Barnett and Miller, 2003.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): President**Site type:** Prospect**ARDF no.:** SI064**Latitude:** 57.7945**Quadrangle:** SI D-3**Longitude:** 134.6860**Location description and accuracy:**

The President prospect is at an elevation of about 250 feet, about 1.1 miles north-northeast of Fishery Point on western Admiralty Island. The prospect is on an unnamed south tributary to the west end of Lake Florence, about 0.5 mile southwest of the center of sec. 14, T. 47 S., R. 66 E., It is location 66 of Cobb (1972, 1978) and MAS no. 0021140072 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.2 mile (but Williams (1955) could not find it.).

Commodities:**Main:** Cu, Pb, Zn**Other:****Ore minerals:****Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of the President prospect are part of the Devonian Retreat Group which consists of schist with marble interbeds (Lathram and others, 1965). There is a small stock of Cretaceous felsic plutonic rocks nearby. Wright (1906) reported 3 quartz 'ledges' and mineralized schist that average 30 feet wide; they are separated by narrow bands of barren schist. The mineralization consists of pyrrhotite, pyrite, and chalcopyrite, with minor galena and sphalerite. As of 1903, the deposit was exposed in open cuts and a shaft was being sunk. Williams (1955) was unsuccessful in a search for the prospect and there has apparently been no work on it since the turn of the 20th century. Although there is scant information on this prospect, the rocks may be the same age as the nearby and well-known Greens Creek Mine (Barnett and Miller, 2003; ARDF JU253).

Alteration:**Age of mineralization:**

Devonian or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Open cuts and a shaft prior to 1904.

Production notes:

Reserves:

Additional comments:

This prospect is within the Wilderness of the Admiralty Island National Monument.

References:

Wright, 1906; Williams, 1955 (President); Lathram and others, 1960; Lathram and others, 1965; Berg and Cobb, 1967; U.S. Bureau of Land Management, 2002; Barnett and Miller, 2003.

Primary reference: Wright, 1906

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Pyrola**Site type:** Prospect**ARDF no.:** SI065**Latitude:** 57.9629**Quadrangle:** SI D-2**Longitude:** 134.5540**Location description and accuracy:**

The Pyrola prospect is at an elevation of about 2,600 feet, about 0.2 mile north-northeast of the southwest corner of sec. 15, T. 45 S., R. 67 E. The prospect is MAS no. 0021140184 (U.S. Bureau of Land Management, 2002). The location is accurate with 0.2 mile.

Commodities:**Main:** Ag, As, Au, Cu, Pb, Zn**Other:****Ore minerals:** Boulangerite, chalcopyrite, galena, jamesonite, pyrite, sphalerite**Gangue minerals:** Barite**Geologic description:**

The Pyrola prospect is a volcanogenic massive-sulfide deposit in Triassic(?) felsic to intermediate volcanic rocks, carbonaceous siltstone, argillite, limestone and dolomite (Van Nieuwenhuyse, 1984; Berg, 1984; Newberry and others, 1997). The deposit consists of a 9-meter-thick stratiform layer of massive sulfides with barite and massive barite, interbedded with black argillite. The sulfides are mainly pyrite, sphalerite, and galena with minor chalcopyrite, jamesonite, and boulangerite. The mineralized layer is overlain by a distinctive pyrite-silica rock (halo?) about 0.5 to 6 feet thick. It is underlain by a weakly foliated sericite-quartz-carbonate unit derived at least in part from altered basalt; it contains 5-30 percent disseminated pyrite and veined pyrite. The deposit is probably similar to the Greens Creek Mine (Barnett and Miller, 2003; ARDF JU253) about 8 miles to the north, and like Greens Creek probably has gold and substantial silver values.

The Pyrola prospect was discovered in 1954 and has been drilled. It is on active claims within the Wilderness of the Admiralty Island National Monument.

Alteration:

This massive-sulfide deposit is overlain by a distinctive pyrite-silica rock (halo?) about 0.5 to 6 feet thick. It is underlain by a weakly foliated pyrite-sericite-quartz-carbonate unit derived at least in part from altered basalt.

Age of mineralization:

Probably Triassic, analogous to the Greens Creek Mine (Barnett and Miller, 2003; ARDF JU253).

Deposit model:

Volcanogenic Ag-(Au?)-Cu- Pb-Zn massive sulfide deposit (Cox and Singer, 1986; model 28a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

28a

Production Status: None

Site Status: Active

Workings/exploration:

The Pyrola prospect was discovered in 1954 and has been drilled.

Production notes:

Reserves:

None have been published but may be significant.

Additional comments:

The Pyrola prospect is on active claims within the Wilderness of the Admiralty Island National Monument.

References:

Van Nieuwenhuysse, 1984; Berg, 1984; Newberry and others, 1997; Barnett and Miller, 2003.

Primary reference: Van Nieuwenhuysse, 1984

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): AS 1-71**Site type:** Prospect**ARDF no.:** SI066**Latitude:** 57.9466**Quadrangle:** SI D-2**Longitude:** 134.5479**Location description and accuracy:**

This prospect is at an elevation of about 850 feet on or near a logging road about 0.3 mile east of the southwest corner of sec. 27, T. 45 S., R. 67 E. The prospect is MAS no. 0021140186 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Ag, Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The geology in the vicinity of this prospect is not well known. Lathram and others (1965) mapped the rocks as part of the Devonian Retreat Group which consists of schist with marble interbeds. However, more recent work at the Greens Creek Mine (Barnett and Miller, 2003; ARDF JU253) about 10 miles to the north indicates that at least some of the rocks that they mapped as Retreat Group are part of the Triassic Hyd Group that consists of felsic and intermediate volcanic rocks, limestone, slate, chert, and conglomerate. Similarly, it is likely that the rocks at the Pyrola prospect (SI065) about a mile to the north are part of the Triassic Hyd Group. The only information available about this prospect is that one or more claims were staked for copper and silver.

Alteration:**Age of mineralization:**

Triassic? (see geologic description).

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

The only information available about this prospect is that one or more claims were staked for copper and silver.

Production notes:**Reserves:**

Additional comments:

This prospect is within the Wilderness of the Admiralty Island National Monument.

References:

Latham and others, 1965; U.S. Bureau of Land Management, 2002; Barnett and Miller, 2003.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Copper Chief**Site type:** Prospect**ARDF no.:** SI067**Latitude:** 57.9401**Quadrangle:** SI D-1**Longitude:** 134.3013**Location description and accuracy:**

The Copper Chief prospect is at sea level about 2.5 miles north of the mouth of Pack Creek. The prospect is 0.7 mile northeast of the southwest corner of sec. 30, T. 45 S., R. 69 E. It is location 65 of Cobb (1972, 1978) and MAS no. 0021140077 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au, Cu**Other:****Ore minerals:** Chalcopyrite, pyrite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of the Copper Chief prospect are part of the Triassic Hyd Formation which consists of volcanic rocks, limestone, slate, chert, and conglomerate (Lathram and others, 1965). The Copper Chief prospect has been known since before 1906. Wright (1906) described it as quartz stringers with chalcopyrite, pyrite, and possibly gold in a zone 20 feet wide in quartz schist. The zone is exposed for 200 feet. The deposit was explored by a 60-foot shaft and a 20-foot crosscut prior to 1906. Race and Rose (1967) mostly cite Wright's information but indicate that the ore contains 1 to 1.7 percent copper.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rock.

Deposit model:

Quartz veinlets with copper in schist.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Inactive**Workings/exploration:**

The only workings are a 60-foot shaft and a 20-foot crosscut driven before 1906.

Production notes:**Reserves:**

Additional comments:

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Wright, 1906; Lathram and others, 1960; Lathram and others, 1965; Berg and Cobb, 1967; Race and Rose, 1967; Cobb, 1972; Cobb, 1978; U.S. Bureau of Land Management, 2002.

Primary reference: Wright, 1906

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (north of lower Pack Creek)**Site type:** Prospect**ARDF no.:** SI068**Latitude:** 57.9212**Quadrangle:** SI D-1**Longitude:** 134.2905**Location description and accuracy:**

This prospect is at an elevation of about 300 feet, about 1.2 miles north of the mouth of Pack Creek. The prospect is 0.4 mile southeast of the center of sec. 31, T. 45 S., R. 69 E. It is MAS no. 0021140182 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Triassic Hyd Formation which consists of volcanic rocks, limestone, slate, chert, and conglomerate (Lathram and others, 1965). Little is known about the prospect other than that one or more claims were staked for copper (U.S. Bureau of Land Management, 2002). The deposit may be related to the Copper Chief prospect (SI067) about a mile to the north.

Alteration:**Age of mineralization:**

Possibly Triassic based on the age of the country rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Little is known about this prospect other than that one or more claims were staked here for copper.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Latham and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Seymour Sulfide**Site type:** Prospect**ARDF no.:** SI069**Latitude:** 57.8752**Quadrangle:** SI D-1**Longitude:** 134.2939**Location description and accuracy:**

The Seymour Sulfide prospect is at sea level on the northwest shore of Windfall Harbor, 1.4 miles west-southwest of Late Point on Windfall Island. The prospect is 0.5 mile south-southeast of the center of sec. 18, T. 46 S., R. 69 E. It is MAS no. 0021140181 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of the Seymour Sulfide prospect are part of the Permian Cannery Formation which consists of graywacke, slate, phyllite, and conglomerate (Lathram and others, 1965). Little is known about this prospect other than that one or more claims were staked here for copper (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Permian or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Little is known about this prospect other than that one or more claims was staked here for copper.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Slow Boat**Site type:** Prospect**ARDF no.:** SI070**Latitude:** 57.8659**Quadrangle:** SI D-1**Longitude:** 134.2494**Location description and accuracy:**

The Slow Boat prospect is at an elevation of about 400 feet, 0.6 mile south-southwest of Staunch Point at the mouth of Windfall Harbor. The prospect is 0.2 mile west-southwest of the center of sec. 21, T. 46 S., R. 69 E. It is MAS no. 0021140179 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of the Slow Boat prospect are part of the Permian Cannery Formation which consists of graywacke, slate, phyllite, and conglomerate (Lathram and others, 1965). Little is known about this prospect other than that one or more claims were staked here for copper (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Permian or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Little is known about this prospect other than that one or more claims were staked here for copper.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Little Bear**Site type:** Prospect**ARDF no.:** SI071**Latitude:** 57.8608**Quadrangle:** SI D-1**Longitude:** 134.2699**Location description and accuracy:**

The Little Bear prospect is at sea level on the southeast shore of Windfall Harbor, about 1.4 miles southwest of Staunch Point at the mouth of the harbor. The prospect is 0.5 mile west-northwest of the southeast corner of sec. 20, T. 46 S., R. 69 E. It is MAS no. 0021140180 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of the Little Bear prospect are part of the Permian Cannery Formation which consists of graywacke, slate, phyllite, and conglomerate (Lathram and others, 1965). Little is known about this prospect other than that one or more claims were staked here for gold and copper (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Permian or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Little is known about this prospect other than that one or more claims were staked for gold and copper.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (head of Windfall Harbor)**Site type:** Prospect**ARDF no.:** SI072**Latitude:** 57.8233**Quadrangle:** SI D-1**Longitude:** 134.2939**Location description and accuracy:**

This prospect is at sea level at the head of Windfall Harbor. The prospect is 0.2 mile east of the center of sec. 6, T. 47 S., R. 69 E. It is MAS no. 0021140178 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Permian Cannery Formation which consists of graywacke, slate, phyllite, and conglomerate (Lathram and others, 1965). Little is known about this prospect other than that one or more claims were staked here for copper (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Permian or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Little is known about this prospect other than that one or more claims were staked here for copper.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (north of Winning Cove)**Site type:** Prospect**ARDF no.:** SI073**Latitude:** 57.8748**Quadrangle:** SI D-1**Longitude:** 134.1030**Location description and accuracy:**

This prospect is at an elevation of about 300 feet, about 1.8 miles north of the head of Winning cove on the east side of Seymour Canal. The prospect is on or near an unnamed, south-flowing creek, 0.2 mile west of the southeast corner of sec. 17, T. 46 S., R. 70 E. It is MAS no. 0021140183 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Jurassic and Cretaceous, Seymour Canal Formation which consists of slate and graywacke (Lathram and others, 1965). Little is known about this prospect other than that one or more claims were staked for copper (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Jurassic or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Little is known about this prospect other than that one or more claims were staked for copper.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: Lathram and others, 1965; U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Ultimo**Site type:** Prospect**ARDF no.:** SI074**Latitude:** 57.7412**Quadrangle:** SI C-7**Longitude:** 136.2921**Location description and accuracy:**

The Ultimo prospect is at an elevation of about 150 feet on southwest Hill Island. The prospect is 0.5 mile west-southwest of the northeast corner of sec. 2, T. 48 S., R. 56 E. It is MAS no. 0021140108 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as hornfelsed, Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of recrystallized basalt. The rocks are cut by many steeply-dipping, mainly northwest-striking faults. The only published information about the prospect is that it has been staked for copper (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Congress**Site type:** Prospect**ARDF no.:** SI075**Latitude:** 57.7310**Quadrangle:** SI C-7**Longitude:** 136.2817**Location description and accuracy:**

The Congress prospect is at sea level about 0.4 mile northwest of the south tip of Hill Island. The prospect is near the southeast corner of sec. 2, T. 48 S., R. 56 E. It is location P-52 of Bittenbender and others (1999), location 24 of Cobb (1972, 1978), and MAS no. 0021140027 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Cu**Other:** Zn**Ore minerals:** Chalcopyrite, pyrrhotite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as hornfelsed, Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of recrystallized basalt ('greenstone'). The formation is cut by many steeply-dipping, mainly northwest-striking faults.

Cobb (1978), citing Overbeck (1919) and Reed and Coats (1941), reports that the prospect is a sulfide-bearing lens of schistose greenstone in graywacke. The sulfides are sparse chalcopyrite and pyrrhotite that occur in small quartz bodies and on foliation surfaces. The mineralized zone is 10 to 12 feet thick and was explored by a 25-foot tunnel.

Bittenbender and others (1999), citing Still and Weir (1981), describe this prospect as a copper- and zinc-bearing volcanogenic massive sulfide deposit in greenstone. A 12-foot zone of silicified greenstone contained 0.58 percent copper and 0.086 percent zinc.

Alteration:

Greenstone is silicified.

Age of mineralization:**Deposit model:**

Volcanogenic massive-sulfide deposit?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:**

The deposit was explored by a 25-foot-long tunnel (Cobb, 1978).

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Overbeck, 1919; Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Senate**Site type:** Prospect**ARDF no.:** SI076**Latitude:** 57.7308**Quadrangle:** SI C-7**Longitude:** 136.2757**Location description and accuracy:**

The Senate prospect is at an elevation of about 100 feet, 0.3 mile north of the south tip of Hill Island. The prospect is 0.2 mile northeast of the southwest corner of sec. 1, T. 48 S., R. 56 E. It is location P-53 of Bittenbender and others (1999) and MAS no. 0021140109 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Chalcopyrite?**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as hornfelsed, Cretaceous graywacke and argillite containing sparse, lenticular beds of recrystallized basalt ('greenstone'). The formation is cut by many steeply-dipping, mainly northwest-striking faults.

Bittenbender and others (1999), citing Still and Weir (1981), describe this prospect as a copper-bearing, volcanogenic massive sulfide deposit hosted in greenstone. They do not specify the ore mineral(s), but they probably include chalcopyrite, which occurs in similar deposits nearby (for example, SI075).

Alteration:**Age of mineralization:**

If the prospect is a volcanogenic massive sulfide deposit, it probably is Cretaceous, the age of the greenstone host rock.

Deposit model:

Volcanogenic massive sulfide deposit?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:**

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Still and Weir, 1981; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (near Triplet Island)**Site type:** Prospect**ARDF no.:** SI077**Latitude:** 57.7254**Quadrangle:** SI C-7**Longitude:** 136.2265**Location description and accuracy:**

This prospect is at sea level at the south end of Triplet Island in Portlock Harbor. The prospect is in the NE1/4 sec. 7, T. 48 S., R. 57 E. It is location P-54 of Bittenbender and others (1999) and MAS no. 0021140169 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Cu, Pb, Zn**Other:****Ore minerals:** Chalcopyrite?, galena?, sphalerite**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as hornfelsed Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of recrystallized basalt ('greenstone'). The rocks are cut by numerous steeply-dipping, mainly northwest-striking faults.

Bittenbender and others (1999), citing Still and Weir (1981), describe this prospect as a volcanogenic massive sulfide deposit containing copper, lead, and zinc. A sample across a 0.1-foot lens of sphalerite-rich rock contained 35 percent zinc, 0.15 percent lead, and 0.11 percent copper. The host rock is not specified, nor are any of the sulfides identified.

Alteration:**Age of mineralization:**

If the prospect is a volcanogenic massive sulfide deposit, it probably is Cretaceous, the age of the greenstone host rock.

Deposit model:

Volcanogenic massive-sulfide deposit?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:**

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Still and Weir, 1981; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Nancy Group**Site type:** Prospect**ARDF no.:** SI078**Latitude:** 57.7399**Quadrangle:** SI C-7**Longitude:** 136.1957**Location description and accuracy:**

The Nancy Group prospect is at an elevation of about 200 feet on the peninsula west of lower Didrickson Bay in Portlock Harbor. The prospect is in the NW1/4 sec. 4, T. 48 S., R. 57 E. It is MAS no. 0021140111 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as part of the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?), metasedimentary and metavolcanic rocks. The rocks are cut by several northwest-striking, steeply-dipping faults. The only published information about the prospect is that it has been staked for lode gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Minnie**Site type:** Prospect**ARDF no.:** SI079**Latitude:** 57.7080**Quadrangle:** SI C-7**Longitude:** 136.1917**Location description and accuracy:**

The Minnie prospect is at an elevation of about 100 feet, about 0.7 mile south-southeast of triangulation station Rave at the north tip of Herbert Graves Island. The prospect is 0.2 mile west of the center of sec. 16, T. 48 S., R. 57 E. It is MAS no. 0021140117 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the vicinity of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by several steeply-dipping, north-west-striking faults. The only published information about the prospect is that a claim has been staked for an unknown commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Winther**Site type:** Prospect**ARDF no.:** SI080**Latitude:** 57.7240**Quadrangle:** SI C-7**Longitude:** 136.1468**Location description and accuracy:**

The Winther prospect is at an elevation of about 2,500 feet, 0.2 mile west of peak 2821 on Mt. Lydonia. The prospect is in the NE1/4 sec. 10, T. 48 S., R. 57 E. It is location P-57 of Bittenbender and others (1999) and MAS no. 0021140114 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as part of the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?), metasedimentary and metavolcanic rocks. The prospect area is bracketed by regional-scale, steeply-dipping, northwest-striking faults. Bittenbender and others (1999) report that 7 claims were staked in 1933, but the commodity of interest is not given. There is no record of activity since the initial staking.

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Seven claims were staked in 1933; there is no record of activity since.

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Eagle Group**Site type:** Prospect**ARDF no.:** SI081**Latitude:** 57.7142**Quadrangle:** SI C-7**Longitude:** 136.1576**Location description and accuracy:**

The Eagle Group prospect is at an elevation of about 100 feet, about 0.4 mile north-northwest of Pt. Lydonia at the mouth of Black Bay. The prospect is about at the midpoint of the south boundary of sec. 10, T. 48 S., R. 57 E. It is location P-58 of Bittenbender and others (1999) and MAS no. 0021140116 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous melange. The rocks are cut by northwest-striking, high-angle faults; these include the extension of the fault at the Hirst Mine (SI087) which controls the mineralization there. Its trace is about a mile southwest of this prospect. Bittenbender and others (1999) report that 4 claims were staked in 1935, but the commodity is unknown. There is no record of activity since the original staking.

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Bittenbender and others (1999) report that 4 claims were staked in 1935, but the commodity is unknown. There is no record of activity since the original staking.

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (shore of Black Bay)**Site type:** Prospect**ARDF no.:** SI082**Latitude:** 57.7132**Quadrangle:** SI C-7**Longitude:** 136.1355**Location description and accuracy:**

This prospect is at sea level about midway along the northwest shore of Black Bay. The prospect is 0.4 mile east-southeast of the northwest corner of sec. 14, T. 48 S., R. 57 E. It is location P-56 of Bittenbender and others (1999) and MAS no. 0021140115 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous melange. The rocks are cut by northwest-striking, high-angle faults. Bittenbender and others (1999) report that 5 claims were staked in 1920, but the commodity is unknown. There is no record of activity since the original staking.

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Bittenbender and others (1999) report that 5 claims were staked in 1920, but the commodity is unknown. There is no record of activity since the original staking.

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Rain Bow**Site type:** Prospect**ARDF no.:** SI083**Latitude:** 57.7053**Quadrangle:** SI C-7**Longitude:** 136.1174**Location description and accuracy:**

The Rain Bow prospect is at an elevation of about 1,000 feet on the northwest flank of Williams Hill, southeast of the head of Black Bay. The prospect is 0.4 mile north of the southwest corner of sec. 13, T. 48 S., R. 57 E. It is MAS no. 0021140118 (U.S. Bureau of Land Management, 2002). The location is accurate within about a mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous melange. The rocks are cut by northwest-striking, high-angle faults; these include the northwest extension of the fault at the Hirst Mine, which controls the mineralization there. Its trace is about a mile southwest of this prospect. The only published information about the prospect is that it is a lode claim staked for an unspecified commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Bauer; Radio**Site type:** Prospect**ARDF no.:** SI084**Latitude:** 57.6902**Quadrangle:** SI C-7**Longitude:** 136.1423**Location description and accuracy:**

The Bauer (Radio) prospect is a few feet above sea level, about 0.4 mile west of Fox Point at the northeast tip of Herbert Graves Island. The prospect is 0.3 mile north-northeast of the southwest corner of sec. 23, T. 48 S., R. 57 E. It is location 25 of Cobb (1972, 1978) and MAS no. 0021140074 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Arsenopyrite, gold, pyrite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite containing sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly northwest-striking faults; they include the extension of the fault at the Chichagof Mine (SI093), which controls the mineralization there and passes through this prospect.

Reed and Coats (1941) describe the Radio claims on the Bauer prospect as one or more auriferous quartz veins up to a foot thick; they are localized along a major fault and a split from it that strike northwest and dip steeply southwest. The country rock is massive, slaty graywacke with about the same strike and dip as the fault. The graywacke is intruded by a 6-foot-thick dike that locally is mineralized with pyrite and arsenopyrite. The dike and graywacke are cut by cross-joints, some of which contain quartz veinlets with pyrite and arsenopyrite. At the time of Reed and Coats' visit, the property had been explored by two tunnels, one about 270 feet long and one about 25 feet long. They do not report any assay values or production, but the extent of the workings suggests that at least some gold was recovered.

ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District. Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:

Dike is mineralized with arsenopyrite and pyrite.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

The property has been explored by two tunnels, one about 270 feet long and one about 25 feet long.

Production notes:

The extent of the workings suggests that at least some gold was recovered.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Chichagof Prosperity**Site type:** Prospect**ARDF no.:** SI085**Latitude:** 57.6875**Quadrangle:** SI C-7**Longitude:** 136.1225**Location description and accuracy:**

The Chichagof Prosperity prospect is at about sea level at the northwest foot of Doolth Mountain. The prospect is 0.2 mile west-northwest of the southeast corner of sec. 23, T. 48 S., R. 57 E. It is location P-63 of Bittenbender and others (1999), location 26 of Cobb (21972, 1978), and MAS no. 0021140024 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly northwest-striking faults. They include the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there and straddle this prospect.

Reed and Coats (1941) describe the prospect as auriferous quartz veins up to 3 feet thick in graywacke. The veins are mainly localized along major faults and splits from them that strike northwest and dip steeply southwest, about the same as the bedding in the graywacke. At the time of Reed and Coats' visit, the underground workings included a 45-foot tunnel and a crosscut about 150 feet long with a flooded winze of unknown depth. Surface workings included several pits and trenches. Reed and Coats provide no assay or production figures, but the extent of the workings suggests that some gold may have been produced. Bittenbender and others (1999), citing Still and Weir (1981), report that samples across a 0.2- to 2.8-foot-thick vein contained up to 0.695 ounce of gold per ton.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

At the time of Reed and Coats' visit, the underground workings included a 45-foot tunnel and a crosscut about 150 feet long, with a flooded winze of unknown depth. Surface workings included several pits and trenches.

Production notes:

There is no record of production, but the extent of the workings suggests that some gold may have been produced.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Basoiniuer; Bauer and Soni**Site type:** Prospect**ARDF no.:** SI086**Latitude:** 57.6803**Quadrangle:** SI C-7**Longitude:** 136.1289**Location description and accuracy:**

The Basoiniuer patented claim block stretches southeast for about 0.5 mile from sea level at the northwest foot of Doolth Mountain. The center of the claim is 0.3 mile north-northeast of the center of sec. 26, T. 47 S., R. 57 E. It is location P-62 of Bittenbender and others (1999), location 26 of Cobb (1972, 1978), and MAS no. 0021140013 (U.S. Bureau of Land Management, 2002). Cobb and Reed and Coats (1941) call this property the Bauer and Soni prospect. The location is accurate.

Commodities:**Main:** Ag, Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults; they include the fault at the Chichagof Mine (SI093), which controls the mineralization there and whose trace passes through just northeast of this prospect.

Reed and Coats (1941) describe the workings on the Bauer and Soni claims as an open-cut and 20-foot tunnel. Bittenbender and others (1999), citing Still and Weir (1981), describe the Basoiniuer prospect as an auriferous quartz vein in graywacke. Samples contained traces of gold and silver. There is no record of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined

Workings/exploration:

Reed and Coats (1941) describe the workings on the Bauer and Soni claims as an opencut and 20-foot tunnel.

Production notes:

There is no record of production.

Reserves:**Additional comments:**

The prospects are in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Hirst-Chichagof**Site type:** Mine**ARDF no.:** SI087**Latitude:** 57.6848**Quadrangle:** SI C-7**Longitude:** 136.1038**Location description and accuracy:**

The well-known Hirst-Chichagof Mine is at the head of Kimshan Cove. Its patented and unpatented claims stretch southeast from near sea level for about a mile along the northeast flank of Doolth Mountain. For this record, the site is plotted at an elevation of 100 feet, 0.4 mile north of the center of sec. 25, T. 48 S., R. 57 E. It is location P-60 of Bittenbender and others (1999), location 27 of Cobb (1972, 1978), and MAS no. 0021140003 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Ag, Au**Other:** Cu, Pb, Zn**Ore minerals:** Arsenopyrite, chalcopyrite, galena, gold, pyrite, sphalerite**Gangue minerals:** Calcite, quartz**Geologic description:**

The most productive mines and most of the significant prospects on western Chichagof Island are centered on Doolth Mountain in an approximately 4-square-mile area between the head of Klag Bay and south of Kimshan Cove (Reed and Coats, 1941; Bittenbender and others, 1999). The area is underlain by the Cretaceous Sitka Graywacke which consists of massive, thick-bedded, and slaty graywacke, locally interbedded with lenticular layers of recrystallized basalt ('greenstone') (Johnson and Karl, 1985). The strata generally strike northwest and dip steeply southwest. They are intruded by felsic and mafic dikes, but no granitic plutons are exposed in the area. All of the rocks are regionally metamorphosed to prehnite-pumpellyite grade, and some of the dikes are silicified near the orebodies (Reed and Coats, 1941).

The principal structures in the area are numerous northwest-striking, steeply-dipping faults. Two of them--the Hirst and Chichagof faults--and splays ('splits') from them, localized the principal orebodies, particularly where variations in the intersections of faults and bedding created potential openings that allowed increased fluid migration and mineralization (Bittenbender and others, 1999).

The deposits are auriferous quartz veins containing pyrite, arsenopyrite, galena, sphalerite, chalcopyrite, and native gold, most of which is free-milling. The quartz is accompanied by a little calcite, and a little gold occurs in the wallrocks of the veins. The productive veins commonly have a ribbon structure, characterized by graphitic partings, and commonly are accompanied by graphitic gouge. Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

The first claim on what was to become the Hirst-Chichagof Mine was located in 1905, and from 1922 to 1933, the mine produced 131,000 ounces of gold and 33,000 ounces of silver from more than 140,000 tons of ore (Reed and Coats, 1941; Bittenbender and others, 1999). The mine closed in 1943. From 1950 to 1954, 124 ounces of gold were recovered from a mill cleanup and from mine tailings (Still and Weir, 1981). Still and Weir report that the mine explored the Hirst Fault for about a mile along strike, and up to 2,000 feet vertically. Mining reached a depth of 1,800 feet below sea level. The workings, almost all of which are inaccessible, included an adit with four levels totaling 6,950 feet, and two shafts.

The U.S. Bureau of Mines (Still and Weir, 1981) estimated the remaining resources on the basis of examinations in 1978 and 1979 of surface and accessible underground workings. Their estimates include

30,000 tons of material with an average grade of 1.0 ounce of gold per ton; 70,000 tons with an average grade of 0.25 ounce of gold per ton; and 70,000 tons of tailings with an average grade of 0.14 ounce of gold per ton.

From 1981 to 1983, private interests explored the workings and evaluated the tailings. In 1986, other interests drove a 160-foot crosscut and established a drill station. By 1988, they had rehabilitated some underground workings and completed about 3,215 feet of core drilling to test the possible extension of the Kay oreshoot below previously developed mine levels. The work did not intersect ore. Nevertheless, they estimated the resources remaining in the ore shoot as 30,380 tons of probable, possible, and inferred ore with an average grade of 1.0 ounce per ton.

Alteration:

Dikes are silicified near orebodies.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Polymetallic veins (Cox and Singer, 1986; model 22c).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c

Production Status: Yes; medium

Site Status: Undetermined

Workings/exploration:

Still and Weir (1981) report that the Hirst-Chichagof Mine explored the Hirst Fault for about a mile along strike, and up to 2,000 feet vertically. Mining reached a depth of 1,800 feet below sea level. The workings, almost all of which are inaccessible, included an adit with four levels totaling 6,950 feet, and two shafts.

From 1981 to 1983, private interests explored the workings and evaluated the tailings. In 1986, other interests drove a 160-foot crosscut and established a drill station. By 1988, they had rehabilitated some underground workings and completed about 3,215 feet of core drilling to test the possible extension of the Kay oreshoot below previously developed mine levels. The work did not intersect ore.

Production notes:

From 1922 to 1933 the Hirst-Chichagof Mine produced 131,000 ounces of gold and 33,000 ounces of silver from more than 140,000 tons of ore (Reed and Coats, 1941; Bittenbender and others, 1999). From 1950 to 1954, 124 ounces of gold were recovered from a mill cleanup and from mine tailings (Still and Weir, 1981).

Reserves:

The U.S. Bureau of Mines (Still and Weir, 1981) estimated the remaining resources on the basis of examinations in 1978 and 1979 of surface and accessible underground workings. Their resource estimates include 30,000 tons of material with an average grade of 1.0 ounce of gold per ton; 70,000 tons with an average grade of 0.25 ounce of gold per ton; and 70,000 tons of tailings with an average grade of 0.14 ounce of gold per ton.

From 1981 to 1983, private interests explored the workings and evaluated the tailings. In 1986, other interests drove a 160-foot crosscut and established a drill station. By 1988, they had rehabilitated some underground workings and completed about 3,215 feet of core drilling to test the possible extension of the Kay oreshoot below previously developed mine levels. The work did not intersect ore. Nevertheless, they estimated the resources remaining in the Kay ore shoot as 30,380 tons of probable, possible, and inferred ore with an average grade of 1.0 ounce per ton.

Additional comments:

The entire Chichagof Mining District is in West Chichagof-Yakobi Wilderness although there are patented claim blocks within the wilderness such as those that cover this mine.

References:

Wright, 1907; Knopf, 1912; Overbeck, 1919; Buddington, 1925; Humphrey, 1936; Humphrey, 1938; Reed, 1939; Kazee, 1941; Reed and Coats, 1941; Fiedler, 1941; Thorne, 1967; Cobb, 1972; Cobb, 1978; Metz, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Dadoly, 1987; Golden Sitka Resources Inc., 1987; Northern Miner, 1988; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Marinovich; Elsinor**Site type:** Prospect**ARDF no.:** SI088**Latitude:** 57.6870**Quadrangle:** SI C-7**Longitude:** 136.0964**Location description and accuracy:**

The Marinovich prospect is at an elevation of about 250 feet just outside the northeast limit of the Hirst-Chichagof claims (SI087). The prospect is 0.2 mile west-northwest of the southeast corner of sec. 24, T. 48 S., R. 57 E. It is location 28 of Cobb (1972, 1978). The location is accurate. Reed and Coats (1941) locate the Elsinor prospect about 0.2 mile west-northwest of the Marinovich prospect.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults; they include the extension of the fault at the Hirst Mine (SI087), whose traces passes through about 0.5 mile southwest of this prospect.

Reed and Coats (1941) describe this prospect as: 1) an auriferous quartz vein up to 4 inches thick along a fault, and 2) veins up to 1 inch thick along joints in the graywacke country rock. The property was explored by a 27-foot tunnel. There are no assay data or any record of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined

Workings/exploration:

The prospect was explored by a 27-foot tunnel.

Production notes:

There are no assay data or any record of production.

Reserves:**Additional comments:**

The prospects are in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): McKallick**Site type:** Prospect**ARDF no.:** SI089**Latitude:** 57.6856**Quadrangle:** SI C-7**Longitude:** 136.0785**Location description and accuracy:**

The McKallick Lode prospect is at an elevation of about 600 feet on the northwest valley wall at the head of Chichagof Creek. The prospect is 0.5 mile east of the southwest corner of sec. 19, T. 48 S., R. 58 E. It is location P-59 of Bittenbender and others (1999), location 29 of Cobb (1972, 1978), and MAS no. 0021140063 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults; they include the fault at the Hirst Mine (SI087), which controls the mineralization there and whose trace is about a mile southwest of the prospect.

Reed and Coats (1941) report two tunnels on this prospect, one is 35 feet long and another about 55 feet long. The 35-foot tunnel explores a 5-foot-thick, auriferous quartz vein in slaty graywacke, and closely follows two faults that strike N15W and dip 55 SW. The vein continues for only about 10 feet in the tunnel. They report no mineralization in the other tunnel. Bittenbender and others (1999), citing Still and Weir (1981), report that sample of a 2.3-foot-thick quartz lens assayed up to 0.24 ounce of gold per ton. There is no record of any production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

The prospect was explored by two tunnels, one is 35 feet long and another about 55 feet long.

Production notes:

There is no record of any production.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Gloria B.**Site type:** Prospect**ARDF no.:** SI090**Latitude:** 57.6805**Quadrangle:** SI C-7**Longitude:** 136.1210**Location description and accuracy:**

The Gloria B. prospect is at an elevation of about 100 feet at the southeast end of an unnamed small lake in the NE1/4 sec. 26, T. 48 S., R. 57 E. The prospect is location 26 of Cobb (1972, 1978). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Pyrite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults; they include the extension of the fault at the Chichagof Mine (SI093), which controls the mineralization there and whose traces is just southwest of this prospect.

Reed and Coats (1941) examined several prospect pits aligned N25W for about 1,000 feet on the Gloria B. claim. The pits exposed graywacke which strikes N60W and dips 60SW, white 'chert', and a dike cut by pyrite-bearing quartz veinlets, and a small fault. There are no assay data or any records of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Several prospect pits.

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997.

Primary reference: Reed and Coats, 1941

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Hodson**Site type:** Prospect**ARDF no.:** SI091**Latitude:** 57.6785**Quadrangle:** SI C-7**Longitude:** 136.1029**Location description and accuracy:**

The Hodson prospect is at an elevation of about 1,000 feet on the north flank of Doolth Mountain, about midway between the claim boundaries of the Hirst-Chichagof (SI087) and Chichagof (SI093) mines. The prospect is 0.1 mile east-southeast of the center of sec. 25, T. 48 S., R. 57 E. It is location P-61 of Bittenbender and others (1999) and MAS no. 0021140310 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults. They include extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there and straddle this prospect.

Reed and Coats (1941) describe this prospect as an auriferous quartz vein up to 2 feet thick along a fault that strikes N50W and dips 75SW. Exploration in the late 1930s included several prospect pits over a horizontal distance of about 200 feet, and diamond drilling, the results of which were not made public.

Bittenbender and others (1999), citing Smith (1926), describe the prospect as thin, auriferous quartz veins in graywacke. Samples of the veins contained up to 0.33 ounce of gold per ton. The prospect was explored by a 235-foot adit. There is no record of production, but some gold may have been produced.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

Reed and Coats (1941) report that exploration in the late 1930s included several prospect pits over a horizontal distance of about 200 feet, and diamond drilling, the results of which were not made public. Bittenbender and others (1999) report a 235-foot adit.

Production notes:

There is no record of production, but the extent of the workings suggests that some gold may have been produced.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Smith, 1926; Reed and Coats, 1941; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Tillson; Kay; Bahrt**Site type:** Prospects**ARDF no.:** SI092**Latitude:** 57.6734**Quadrangle:** SI C-7**Longitude:** 136.0957**Location description and accuracy:**

The Tillson, Kay, and Bahrt prospects vary in elevation from about 500 feet to 1,500 feet, in a roughly elliptical, east-trending area about 0.2 mile long and 0.2 mile wide, on the east flank of Doolth Mountain. For this record, the site is plotted at the center of the area, about 0.2 mile northwest of the southeast corner of sec. 25, T. 48 S., R. 57 E. The Tillson prospect is location 27 of Cobb (1972, 1978). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold, pyrite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults; these include the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there and straddle this prospect.

Reed and Coats (1941) report that the claims on the Tillson prospect were originally staked in 1912 and acquired by Tillson in 1915. The principal working is a 95-foot tunnel that follows two faults about 6 feet apart that strike N47W and dip 50SW. The tunnel exposed an auriferous quartz lens about 1.5 feet thick in one fault, and some quartz in the other. Claims on the Kay prospect were prospected by several pits that exposed quartz veins up to 2.5 feet thick in graywacke. The Bahrt prospects were explored around 1927 by pits and by approximately 40- and 90-foot tunnels. The workings exposed northwest-striking, generally steeply-dipping faults that contain up to 1.5 feet of quartz with considerable pyrite locally. There is no record of production, but the extent of the workings suggests some gold may have been produced.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

The principal working on the Tillson claim is a 95-foot tunnel; the Kay prospect was explored by several pits. The Bahrt prospects were explored by pits and by two tunnels, 40 foot and 90 feet long.

Production notes:

There is no record of production, but the extent of the workings suggests that some gold may have been produced.

Reserves:

Additional comments:

The prospects are in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997.

Primary reference: Reed and Coats, 1941

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Chichagof; Chichagof**Site type:** Mine**ARDF no.:** SI093**Latitude:** 57.6631**Quadrangle:** SI C-7**Longitude:** 136.0976**Location description and accuracy:**

The patented claims of the famous Chichagof Mine extend from sea level at the west head of Klag Bay, northwest across Doolth Mountain, to an elevation of about 150 feet on the west flank of the mountain. At their widest, the claims cover most of the southeast half of the mountain. For this record, the site is at plotted at an adit symbol among the ruins of the town of Chichagof, in the NE1/4SE1/4 sec. 36, T. 48 S., R. 57 E. The mine is location P-75 of Bittenbender and others (1999), location 33 of Cobb (1972, 1978), and MAS no. 0021140023 (U.S. Bureau of Land Management, 2002). The location is accurate. Reed and Coats (1941) show the locations of dozens of early claims now covered by the Chichagof patents.

Commodities:**Main:** Ag, Au**Other:** Cu, Pb, Zn**Ore minerals:** Arsenopyrite, chalcopyrite, galena, gold, pyrite, sphalerite**Gangue minerals:** Calcite, quartz**Geologic description:**

The most productive mines and most of the significant prospects on western Chichagof Island are in the approximately 4-square-mile area centered on Doolth Mountain that extends from Klag Bay to south of Kimshan Cove (Reed and Coats, 1941; Bittenbender and others, 1999). The rocks in the area are Cretaceous Sitka Graywacke that consists of massive, thick-bedded, and slaty graywacke, locally interbedded with lenticular layers of recrystallized basalt ('greenstone') (Johnson and Karl, 1985). The strata generally strike northwest and dip steeply southwest. They are intruded by felsic and mafic dikes, but no granitic plutons are exposed in the area. All of the rocks are regionally metamorphosed to prehnite-pumpellyite grade, and some of the dikes are silicified near the orebodies (Reed and Coats, 1941).

The principal structures in the area are numerous northwest-striking, steeply-dipping faults. Two of them--the Hirst and Chichagof faults--along with splays ('splits') from them, localized the principal orebodies, particularly where variations at the intersections of faults and the bedding created potential openings that allowed increased fluid migration and mineralization (Bittenbender and others, 1999).

The deposits are auriferous quartz veins containing pyrite, arsenopyrite, galena, sphalerite, chalcopyrite, and native gold, most of which is free-milling. The quartz is accompanied by a little calcite, and a little gold occurs in the wallrocks of the veins. The productive veins feature ribbon structure, characterized by graphitic partings, and the veins commonly are accompanied by graphitic gouge. Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

The Chichagof Mine opened in 1905, and from 1906 to 1942 it produced 660,000 ounces of gold and 195,000 ounces of silver from more than 600,000 tons of ore (Reed and Coats, 1941; Still and Weir, 1981; Bittenbender and others, 1999). The mine closed in 1942, but small amounts of tailings were reworked from 1942 to 1973. The mine and adjacent area are covered by 29 patented claims. In 1978 and 1979, the U.S. Bureau of Mines examined the surface and accessible underground workings (Still and Weir, 1981). They describe the ore zones as irregular bodies whose long dimension plunges south and whose short dimension is parallel to their northwest strike. The ore zones are up to 15 feet wide, 1,000 feet in strike

length, and 1,800 feet high. One 14-foot stope averaged 6 ounces of gold per ton, but the average ore tenor for the life of the mine was 1.0 ounce of gold per ton. Mining reached a depth of 2,700 feet below sea level. The underground workings extended along the Chichagof Fault for 4,800 feet in a horizontal direction and 4,300 feet vertically, and twenty-three percent of the workings were mined. The workings, almost all of which are inaccessible, included an adit with 5 levels totaling 9,950 feet, and 6 shafts to a depth of 2,750 feet below sea level.

The U.S. Bureau of Mines estimated the resources to be 76,600 tons of material with an average grade of 0.4 ounce of gold per ton; 463,000 tons with an average grade of 0.30 ounce of gold and 0.09 ounce of silver per ton; and 456,000 tons of tailings with an average grade of 0.11 ounce of gold and 0.03 ounce of silver per ton (Still and Weir, 1981).

From 1981-1988, private interests planning to rehabilitate the mine. They drove about 2,000 feet of underground drift, did 2,500 feet of diamond drilling, and carried out environmental studies and metallurgical tests. In 1988, however, a fire destroyed the project's camp and operations never resumed.

Alteration:

Dikes are silicified near orebodies.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Yes; medium

Site Status: Undetermined

Workings/exploration:

The underground workings extended along the Chichagof Fault for 4,800 feet in a horizontal direction and 4,300 feet vertically. The workings, almost all of which are inaccessible, included an adit with 5 levels totaling 9,950 feet, and 6 shafts to a depth of 2,750 feet below sea level. From 1981 to 1988, private interests planning to rehabilitate the mine. They drove about 2,000 feet of underground drift, did 2,500 feet of diamond drilling, and carried out environmental studies and metallurgical tests. In 1988, however, a fire destroyed the project's camp and operations never resumed.

Production notes:

The Chichagof Mine opened in 1905, and from 1906 to 1942 it produced 660,000 ounces of gold and 195,000 ounces of silver from more than 600,000 tons of ore (Reed and Coats, 1941; Still and Weir, 1981; Bittenbender and others, 1999). The mine closed in 1942, but small amounts of tailings were reworked from 1942 to 1973.

Reserves:

The U.S. Bureau of Mines estimated the resources to be 76,600 tons of material with an average grade of 0.4 ounce of gold per ton; 463,000 tons with an average grade of 0.30 ounce of gold and 0.09 ounce of silver per ton; and 456,000 tons of tailings with an average grade of 0.11 ounce of gold and 0.03 ounce of silver per ton (Still and Weir, 1981).

Additional comments:

The entire Chichagof Mining District is in West Chichagof-Yakobi Wilderness, although there are patented claim blocks within the wilderness such as those that cover this mine.

References:

Wright, 1907; Knopf, 1912; Overbeck, 1919; Buddington, 1925; Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Flora; Lillian and Princella; McKallick Chichagof Mine**Site type:** Prospects**ARDF no.:** SI094**Latitude:** 57.6633**Quadrangle:** SI C-7**Longitude:** 136.1085**Location description and accuracy:**

The Flora patented claim and the Lillian and Princella prospect are in a group of 16 claims owned by McKallick Chichagof Mines before WWII. The claims extended from Klag Bay to Ogden Passage, between the claims of the Chichagof Mining Company (SI093) on the north and those of the Alaska Chichagof Mining Company (SI096) on the south (Reed and Coats, 1941). For this record, the site is plotted at the center of the Flora patented claim, about 0.2 mile southwest of the center of sec. 36, T. 48 S., R. 57 E. It is locations P-73 and P-74 of Bittenbender and others (1999), location 33 of Cobb (1972, 1978), and MAS no. 0021140034 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Galena, gold, pyrite**Gangue minerals:** Calcite, quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of these prospects as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly northwest-striking faults; they include the extension of the the fault at the Chichagof (SI093) that controls the mineralization there and whose traces is about 0.5 mile northeast of the these prospects.

Reed and Coats (1941) report that the Flora claim was surrounded by ground claimed at that time by McKallick-Chichagof Mines, Inc. A 90-foot tunnel driven N22W along a bedding-plane fault in shaley graywacke explored several gold-quartz veinlets that merge into a quartz-calcite vein up to a foot thick. Bittenbender and others (1999), citing Still and Weir (1981), report that samples of a thin quartz vein on the Flora claim contained up to 0.10 ounce of gold per ton. Surface samples of quartz veins in a fault on the McKallick Chichagof Mines prospect contained up to 0.09 ounce of gold per ton; and samples of veins in underground workings assayed up to 0.2 ounce of gold per ton in a drift, and 0.36 ounce of gold per ton in a winze.

Reed and Coats (1941) describe a trench and several pits on the Lillian and Princella claims that explore a quartz vein up to a foot thick that is in a joint in massive and shaley graywacke that strikes N35W and dips 75SW. The vein trends N42E and dips 70NW, splits locally, and in places contains considerable pyrite and galena. There is no record of production for any of these properties, but the extent of the workings suggests that some gold may have been produced.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eo-

cene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

A 90-foot tunnel was driven on the Flora claim; underground workings on the McKallick Chichagof Mines property included a drift and winze; and there were a trench and several pits on the Lillian and Princella claims.

Production notes:

There is no record of production for any of these properties, but the extent of the workings suggests that some gold may have been produced.

Reserves:**Additional comments:**

The prospects are in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): OB**Site type:** Prospect**ARDF no.:** SI095**Latitude:** 57.6603**Quadrangle:** SI C-7**Longitude:** 136.0964**Location description and accuracy:**

The OB prospect is at sea level on Klag Bay, apparently on or just inside the southwest boundary of the patented claims of the Chichagof Mine (SI093). According to Bittenbender and others (1999, fig. 6), the OB prospect includes both patented and unpatented claims. For this record, the site is plotted 0.4 mile southeast of the center of sec. 36, T. 48 S., R. 57 E. It is location P-72 of Bittenbender and others (1999) and MAS no. 0021140313 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite containing sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly northwest-striking faults. These include the extension of the fault at the Hirst Mine (SI087), which controls the mineralization there and transects the area of this prospect.

Bittenbender and others (1999), citing Still and Weir (1981), describe the prospect as an auriferous quartz vein up to 4 feet thick in graywacke. Samples of the vein contained up to 0.2 ounce of gold per ton. Workings include a 200-foot adit with a winze, and several trenches. There is no record of production, but the extent of the workings suggests some gold may have been produced.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

Workings include a 200-foot adit with a winze, and several trenches.

Production notes:

There is no record of production, but the extent of the workings suggests that some gold may have been produced.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Alaska Chichagof**Site type:** Mine**ARDF no.:** SI096**Latitude:** 57.6569**Quadrangle:** SI C-7**Longitude:** 136.1023**Location description and accuracy:**

The Alaska Chichagof Mine is at an elevation of about 20 feet on the west side of Klag Bay, about 0.5 mile south of the ruins of the town of Chichagof. Figure 6 of Bittenbender and others (1999) shows the mine at the northwest corner of a patented block that Reed and Coats (1941, pl. 14) label a mill site. Bittenbender and others (fig. 6) also show an Alaska Chichagof adit at an elevation of 500 feet about 0.5 mile northwest of the mine. For this record, the site is plotted on the south boundary of sec. 36, 0.2 mile west of Klag Bay, in T. 48 S., R. 57 E. It is location P-71 of Bittenbender and others (1999), location 32 of Cobb (1972, 1978), and MAS no. 0021140005 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Ag, Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of the Alaska Chichagof Mine as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly northwest-striking faults. They include the extension of the fault at the , Chichagof Mine (SI-93), which controls the mineralization there and whose traces is about a mile northeast of this mine.

Reed and Coats (1941) describe the principal country rock at the Alaska Chichagof Mine as slaty graywacke that strikes northwest and dips steeply southwest. The graywacke is cut by auriferous quartz-bearing, north- to northwest-striking, steeply-dipping faults and splits from them, and by east-trending dikes. One of the the intersections of a dike with a fault apparently localizes an oreshoot. The quartz in the oreshoot is up to about 5 feet thick and the oreshoot was mined over a stope length of 10 to 35 feet, from a point 142 feet down the shaft to a point within 15 feet of the surface. Reed and Coats report a total of about 675 feet of tunnel, drifts, an inclined shaft, and a lower level; and that 302 tons of ore were stoped in 1936.

Bittenbender and others (1999), mainly citing Still and Weir (1981), report that the Alaska Chichagof deposit was discovered in 1928 and developed by an adit, 2 levels, a shaft, and stopes. Bittenbender and others (1999) state that 660 ounces of gold was produced in 1936 from 660 tons of ore, which reflects Still and Weir's (1981) report that the ore grade was nearly one ounce of gold per ton. Still and Weir's samples contained up to 36 parts per million (ppm) gold and 150 ppm silver. In the early 1980s, private interests attempted to reopen the workings; the results of that work have not been made public.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Yes; small

Site Status: Undetermined

Workings/exploration:

Reed and Coats (1941) report a total of about 675 feet of underground workings, including a tunnel, drifts, inclined shaft, and a lower level. Bittenbender and others report that the Alaska Chichagof deposit was discovered in 1928 and developed by an adit, 2 levels, a shaft, and stopes.

Production notes:

Reed and Coats report that 302 tons of ore were stoped in 1936. Bittenbender and others (1999) state that 660 ounces of gold was produced in 1936 from 660 tons of ore, which reflects Still and Weir's (1981) report that the ore grade was nearly one ounce of gold per ton. In the early 1980s, private interests attempted to reopen the workings; the results of that work have not been made public.

Reserves:**Additional comments:**

The mine is in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Jumbo; Gold Reef No. 1; Minnesota; Duluth**Site type:** Mine**ARDF no.:** SI097**Latitude:** 57.6539**Quadrangle:** SI C-7**Longitude:** 136.1053**Location description and accuracy:**

The Jumbo Mine is a few feet above sea level on the west shore of Klag Bay, about a mile from the ruins of the town of Chichagof. The mine is 0.4 mile northeast of the center of sec. 4, T. 49 S., R. 58 E. It is location P-70 of Bittenbender and others (1999), location 32 of Cobb (1972, 1978), and MAS no. 0021140049 (U.S. Bureau of Land Management, 2002). The location is accurate.

Bittenbender and others (fig. 6) show shafts 0.4 mile and 0.6 mile northwest of this site that are probably on the Gold Reef or Minnesota claims described by Reed and Coats (1941). Reed and Coats list the Jumbo, Duluth, Minnesota, and Gold Reef No. 1 claims under the heading 'Smith prospects.'

Commodities:**Main:** Au**Other:** Pb, Zn**Ore minerals:** Galena, gold, pyrite, sphalerite**Gangue minerals:** Calcite, quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of these properties as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly northwest-striking faults. They include the extension of the fault at the , Chichagof Mine (SI093) that controls the mineralization there and whose traces is about a mile northeast of this mine.

Reed and Coats (1941) list the Jumbo, Duluth, Minnesota, and Gold Reef No. 1 claims under the heading 'Smith prospects.' All of the claims were staked between 1909-1912. Various early workings on the claims explored northwest-striking, steeply-dipping, fault-controlled, mineralized quartz veins up to 2 feet thick in locally slaty graywacke. The veins contain galena, sphalerite, pyrite, and free gold, and some of the district's best specimens of free gold came from the Jumbo deposit.

Bittenbender and others (1999), citing Overbeck (1919), Reed and Coats (1941), and Still and Weir (1981), report that the Jumbo deposit was discovered in 1909, when 1,450 ounces of gold were mined from a high-grade pocket in the intertidal zone. Some of the richest ore in the district was from this mine. From 1909 to 1931, workings included a 400-foot shaft, 1,580 feet of drift off the shaft, and numerous pits and trenches. A U.S. Bureau of Mines examination in 1978 and 1978 (Still and Weir, 1981) revealed quartz along a fault zone that extends for 3,000 feet in graywacke. Workings visible at that time included 3 flooded shafts and a 48-foot drift. They collected 18 surface samples along the vein that contained up to 0.15 ounce of gold per ton. Incomplete company maps and records of underground mining prevented an estimate of resources.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Polymetallic vein (Cox and Singer, 1986; model 22c).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c

Production Status: Yes; medium

Site Status: Undetermined

Workings/exploration:

From 1909 to 1931, workings included a 400-foot shaft, 1,580 feet of drift off the shaft, and numerous pits and trenches. Workings visible during a US Bureau of Mines examination in 1978 and 1978 were 3 flooded shafts and a 48-foot drift.

Production notes:

The Jumbo Mine produced 1,450 ounces of gold in 1909 from a high-grade pocket in the intertidal zone. Significant amounts of gold probably were recovered in later years, but there are no other published records of production.

Reserves:

The US Bureau of Mines sampled extensively in 1978 and 1979, but incomplete company maps and records of underground mining prevented an estimate of resources.

Additional comments:

The area is in West Chichagof-Yakobi Wilderness.

References:

Overbeck, 1919; Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Young**Site type:** Prospect**ARDF no.:** SI098**Latitude:** 57.6633**Quadrangle:** SI C-7**Longitude:** 136.0940**Location description and accuracy:**

The location of this placer prospect is only known approximately to be at about sea level on the west side of Klag Bay near the ruins of the town of Chichagof. For this record, the prospect is plotted at the dock of the townsite in the SE1/4 sec. 36, T. 48 S., R. 57 E. It is MAS no. 0021140124 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults. They include the extension of the fault at the Chichagof Mine (SI093) which passes through this prospect. The only published information about this prospect is that it has been staked for placer gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Quaternary.

Deposit model:

Au placer (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (northeast head of Klag Bay)**Site type:** Prospect**ARDF no.:** SI099**Latitude:** 57.6637**Quadrangle:** SI C-7**Longitude:** 136.0838**Location description and accuracy:**

This prospect is at sea level at the northeast head of Klag Bay. The prospect is 0.2 mile west-southwest of the center of sec. 31, T. 48 S., R. 58 E. It is location P-77 of Bittenbender and others (1999) and MAS no. 0021140302 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold, unspecified sulfide(s)**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults. These include the extension of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there and straddle this area.

Bittenbender and others (1999), citing Still and Weir (1981), describe the prospect as an auriferous quartz vein in graywacke. A grab sample of a sulfide-bearing dike contained 0.52 ounce of gold per ton. The sulfide(s) is not identified. Workings include a 50-foot adit and a trench. There is no record of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein? (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Workings include a 50-foot adit and a trench.

Production notes:

There is no record of production.

Reserves:**Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Helen Chichagof; Creek Group**Site type:** Prospect**ARDF no.:** SI100**Latitude:** 57.6710**Quadrangle:** SI C-7**Longitude:** 136.0719**Location description and accuracy:**

The Helen Chichagof prospect is at an elevation of about 80 feet on an unnamed east tributary to lower Chichagof Creek. The prospect is 0.6 mile north-northeast of the center of sec. 31, T. 48 S., R. 58 E. It is location P-76 of Bittenbender and others (1999) and MAS no. 0021140029 (U.S. Bureau of Land Management, 2002). The prospect is called the Creek Group in the Bureau of Land Management report. The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults. These include the extension of the faults at the Hirst Mine (SI087) which controls the mineralization there and passes through this prospect area.

Bittenbender and others (1999), citing Still and Weir (1981), describe the prospect as an auriferous quartz vein in graywacke. Samples of the vein contained up to 0.2 ounce of gold per ton. Workings include 4 ad-its, 10 to 20 feet long. There is no record of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: Undetermined.**Site Status:** Undetermined

Workings/exploration:

Workings include 4 adits, 10 to 20 feet long.

Production notes:

There is no record of production, but the assay data and the extent of the workings suggest recovery of at least some gold.

Reserves:**Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Chichagof Consolidated**Site type:** Prospect**ARDF no.:** SI101**Latitude:** 57.6642**Quadrangle:** SI C-7**Longitude:** 136.0708**Location description and accuracy:**

The Chichagof Consolidated prospect is at an elevation of about 400 feet, about 0.3 mile east of the center of sec. 31, T. 48 S., R. 58 E. The prospect is MAS no. 0021140036 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults. They include the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there and straddle this prospect area. The only published information about this prospect is that it has been staked for lode gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Apparently only surface sampling.

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Handy-Andy; Chichagof Extension**Site type:** Prospects**ARDF no.:** SI102**Latitude:** 57.6580**Quadrangle:** SI C-7**Longitude:** 136.0896**Location description and accuracy:**

The Handy and Andy patented claims extend southeast for about 0.5 mile from the east shore of upper Klag Bay. In part, the claims overlap the Chichagof Extension claims (Reed and Coats, 1941, pl. 14). For this record, the site is plotted at sea level at the northwest boundary of the patented ground in the SW1/4 sec. 31, T. 48 S., R. 58 E. It is locations P-78 and P-79 of Bittenbender and others (1999), locations 34 and 35 of Cobb (1972, 1978), and MAS nos. 0021140043 and 0021140301 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of these prospects as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly northwest-striking faults. They include the extensions of the fault at the Chichagof Mine (C7-19) which controls the mineralization there and crosses these prospects.

Reed and Coats (1941) report that the Andy claim is explored by a 57-foot tunnel driven along a small fault. A tunnel approximately 80 feet long and a winze on the Handy claim follows a fault that strikes N60W and dips 60SW in massive graywacke. Workings on the Chichagof Extension prospect include pits and open cuts that explore quartz veins up to 3 feet thick that strike N8-29W and dip steeply west to vertical. The country rock is slaty graywacke that strikes N56W and dips 70SW.

Bittenbender and others (1999), citing Still and Weir (1981), report that the U.S. Bureau of Mines sampled mineralized quartz veins in graywacke on the Handy prospect; the samples contained up to 0.12 ounce of gold per ton. The property was diamond-drilled between 1945 and 1953, but the results of that work have not been made public. There is no record of production from these prospects.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

The Andy claim was explored before WW II by a 57-foot tunnel, and the Handy claim by a tunnel approximately 80 feet long and a winze. Workings on the Chichagof Extension prospect included pits and open cuts. The Handy property was diamond-drilled between 1945 and 1953, but the results of that work have not been made public.

Production notes:

There is no record of production from these prospects, but the assay data and the extent of the workings suggests that at least some gold was recovered.

Reserves:**Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Overbeck, 1919; Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978; Bittenbender and others, 1999**Reporter(s):** H.C. Berg (U.S. Geological Survey)**Last report date:** 10/16/2004

Site name(s): Hill and Berkland**Site type:** Prospect**ARDF no.:** SI103**Latitude:** 57.6548**Quadrangle:** SI C-7**Longitude:** 136.0889**Location description and accuracy:**

The Hill and Berkland prospect is at sea level on the east side of upper Klag Bay. The prospect is 0.4 mile north-northwest of the center of sec. 3, T. 49 S., R. 58 E. It is location P-80 of Bittenbender and others (1999), location 35 of Cobb (1972, 1978), and MAS no. 0021140045 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults. These include the extension of the faults at the Chichagof Mine (SI093), which controls the mineralization there and whose trace is about 0.5 mile northeast of this prospect.

Reed and Coats (1941) describe a 50-foot tunnel along a fault in argillaceous graywacke that strikes N58W and dips 62SW. In the tunnel, the fault strikes N45W and dips 63NE; it intersects another fault that strikes N20W and dips 65NE. Each of the faults contains quartz up to 6 inches thick. A joint near the portal of the tunnel also carries a little quartz. There is no record of production from this prospect.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined

Workings/exploration:

The prospect was explored before WW II by a 50-foot tunnel.

Production notes:

There is no record of production from this prospect.

Reserves:**Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Woll; Lucky Shot Group**Site type:** Prospects**ARDF no.:** SI104**Latitude:** 57.6419**Quadrangle:** SI C-7**Longitude:** 136.0555**Location description and accuracy:**

The nine unpatented claims of the Woll prospects constitute the Lucky Shot Group on the west side of Lake Anna (Reed and Coats, 1941). This site consists of two prospects about 1,000 feet apart on the north-west shore of the lake, west-northwest of the channel to Sister Lake. A third prospect, about a mile to the south, is described in ARDF record SI105. For this record, the site is plotted at sea level about 0.6 mile northeast of the center of section 11, T. 49 S., R. 58 E. It is location P-82 of Bittenbender and others (1999), location 36 of Cobb (1972, 1978), and MAS no. 0021140058 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:** Pb, Zn**Ore minerals:** Arsenopyrite, galena, gold, pyrrhotite, sphalerite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults. These include the extensions of the fault at the Chichagof Mine (SI093) which controls the mineralization there and crosses this prospect.

Reed and Coats (1941) describe the workings on this prospect as a 48-foot tunnel with 10- and 15-foot drifts and a 14-foot winze that explore fault-controlled, auriferous quartz veins in graywacke. The graywacke strikes N45W and dips 72SW; the fault strikes N3-17W and dips 41SW to 51NW. The fault contains up to 3 inches of gouge, up to 12 inches of banded quartz, and a quartz lens up to 2 feet thick; irregular quartz veinlets cut the graywacke footwall of the quartz lens. The quartz contains fragments of silicified and sericitized graywacke, and locally considerable galena and sphalerite. A nearby vuggy quartz vein up to 6 inches thick contains pyrrhotite and arsenopyrite.

Bittenbender and others (1999), citing Still and Weir (1981), report that U.S. Bureau of Mines samples of graywacke-hosted, mineralized quartz at this prospect contained up to 0.51 ounce of gold per ton. Workings include 3 adits and several trenches. There is no record of production, but the assay data and the extent of the workings suggests that some gold may have been produced.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:

Fragments of graywacke in the quartz veins are silicified and sericitized.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eo-

cene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Polymetallic vein (Cox and Singer, 1986; model 22c).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

Reed and Coats describe the workings on this prospect as a 48-foot tunnel with 10- and 15-foot drifts and a 14-foot winze. Bittenbender and others report 3 adits and several trenches.

Production notes:

There is no record of production, but the assay data and the extent of the workings suggests some gold may have been produced.

Reserves:**Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Roehm, 1936 (Woll); Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Somehow; Woll; Lucky Shot Group**Site type:** Prospect**ARDF no.:** SI105**Latitude:** 57.6296**Quadrangle:** SI C-7**Longitude:** 136.0647**Location description and accuracy:**

This prospect is at sea level on the northwest shore of Lake Anna about 0.6 mile from the outlet of the lake. Reed and Coats (1941) describe it as the southernmost Woll prospect on the Lucky Shot Group; the U.S. Bureau of Land Management (2002) calls it the Somehow prospect. The prospect is 0.4 mile south of the center of sec. 11, T.49 S., R. 58 E. It is location 40 of Cobb (1972, 1978) and MAS no. 0021140121 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Arsenopyrite, gold, pyrite**Gangue minerals:** Calcite, quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults; they include the extension of the fault at the Chichagof Mine (SI093), whose trace is about a mile northeast of the prospect.

Reed and Coats (1941) describe this prospect as a 12-foot tunnel driven northwest along a fault that follows the hanging wall of a partly silicified dike about 10 feet thick. The country rock is chiefly massive graywacke that strikes about N35W and dips 65SW. Arsenopyrite and pyrite, with quartz and calcite are in the dike, mainly near its hanging wall, and some sulfides with quartz are in the graywacke of the hanging wall. Reed and Coats (1941) report post-mineralization faulting, and that much of the mineralization appears to be controlled by joints in the dike. There are no assay data or any records of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:

Dike is partly silicified.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

Workings include a 12-foot tunnel.

Production notes:

There are no assay data or any records of production.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Roehm, 1936 (Woll); Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Anderson**Site type:** Prospects**ARDF no.:** SI106**Latitude:** 57.6342**Quadrangle:** SI C-7**Longitude:** 136.0210**Location description and accuracy:**

The Anderson prospects are just above sea level on the north shore of Sister Lake at the mouth of the passage leading to Lake Anna. The prospects are 0.4 mile east of the center of sec. 12, T. 49 S., R. 58 E. They are location P-83 of Bittenbender and others (1999), location 37 of Cobb (1972, 1978), and MAS no. 0021140007 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Calcite, quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of these prospects as Cretaceous melange cut by numerous steeply-dipping, mainly northwest-striking faults. Reed and Coats (1941) note that one of the prospects lies on a strong fault that on aerial photos appears to be the coalesced extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines which control the mineralization there. Bittenbender and others (1999) report that the prospects are on strike with the Chichagof Fault; and Johnson and Karl's (1985) map indicates that they are on the projected trace of the Hirst Fault.

Reed and Coats (1941) describe fault-controlled quartz veins in graywacke and some interbedded greenstone at these prospects. The country rocks strike N45-50W and dip 65-80SW, and the faults strike N12-25E and dip 72SW-88SE. The faults contain up to 2 feet of gouge and as much as 2 feet of vein quartz and minor calcite. Graphitic graywacke fragments in the quartz are silicified and sericitized. Workings include a 36-foot tunnel and one or more open cuts up to 40 feet long. Bittenbender and others (1999), citing Still and Weir (1981), report sample values up to 1.5 parts per million gold. There is no record of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:

Graphitic graywacke fragments in the quartz are silicified and sericitized.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

Workings include a 36-foot tunnel and one or more open cuts up to 40 feet long.

Production notes:

There is no record of production.

Reserves:

Additional comments:

The prospects are in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Gold Pan**Site type:** Prospect**ARDF no.:** SI107**Latitude:** 57.6401**Quadrangle:** SI C-7**Longitude:** 136.0119**Location description and accuracy:**

The Gold Pan prospect is at sea level at the northernmost part of Sister Lake. The prospect is 0.4 mile northwest of the center of sec. 7, T. 49 S., R. 59 E. It is MAS no. 0021140122 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl map the rocks in the area of this prospect as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The rocks are cut by numerous steeply-dipping, mainly northwest-striking faults. They include the extension of the fault at the Hirst Mine (SI087) which controls the mineralization there and whose trace is about a mile southwest of this prospect. The only published information about this prospect is that it has been staked for lode gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Hanlon**Site type:** Prospect**ARDF no.:** SI108**Latitude:** 57.6633**Quadrangle:** SI C-7**Longitude:** 136.1680**Location description and accuracy:**

The Hanlon prospect is at sea level on the west shore of Ogden Passage, about 0.6 mile north of Drip Point. The prospect is 0.4 mile west of the center of sec. 34, T. 48 S., R. 57 E. It is location P-65 of Bittenbender and others (1999), location 30 of Cobb (1972, 1978), and MAS no. 0021140044 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Arsenopyrite, gold, pyrite**Gangue minerals:** Calcite, quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults.

Reed and Coats (1941) report that this prospect, staked in 1933, was explored before WW II by a 25-foot open cut and 50-foot trench. The country rock is graywacke cut by a fault that strikes N40W and dips 80SW. The fault contains up to 5 inches of quartz with pyrite, arsenopyrite, and a little calcite. The arsenopyrite occurs mainly as a replacement in graywacke inclusions in the quartz. Bittenbender and others (1999), citing Still and Weir (1981), report that samples of the mineralization contained up to 0.01 ounce of gold per ton. There is no record of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:

Graywacke inclusions in the quartz are partly replaced by arsenopyrite.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

The prospect was explored before WW II by a 25-foot open cut and a 50-foot trench.

Production notes:

There is no record of production.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): American Gold Company; Golden Slipper**Site type:** Prospect**ARDF no.:** SI109**Latitude:** 57.6496**Quadrangle:** SI C-7**Longitude:** 136.1172**Location description and accuracy:**

The American Gold Company's prospect is at an elevation of about 500 feet on the south ridge of Doolith Mountain, about 1.6 mile from the peak. The prospect is 0.2 mile west of the center of sec. 4, T. 49 S., R. 58 E. It is location P-69 of Bittenbender and others (1999), location 31 of Cobb (1972, 1978), and MAS no. 0021140006 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults.

Reed and Coats (1941) describe this prospect as quartz veins along faults in slaty graywacke; the graywacke is intruded by a 5-foot-thick, partly silicified and sericitized dike. The graywacke strikes N35-55W and dips about 72SW. The faults strike N40-50W, dip 70-77SW, and offset the dike. Mineralization consists of gold-bearing quartz in the faults, and gold-bearing quartz veinlets that fill joints in the graywacke. Workings along two of the faults include an open cut and a tunnel with about 75 feet of crosscuts and 110 feet of drifts on two faults.

Bittenbender and others (1999), citing Still and Weir (1981), report that samples of narrow quartz veins contained up to 0.18 ounce of gold per ton, and a selected sample contained 2.42 ounces of gold per ton. Workings include a 220-foot adit with a winze, and a pit. There is no record of production, but the assay data and the extent of the workings suggest that some gold may have been produced.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:

Dike is partly silicified and sericitized.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

Reed and Coats (1941) report an open cut and a tunnel with about 75 feet of crosscuts and 110 feet of drifts on two faults. Bittenbender and others (1999) report a 220-foot adit with a winze, and a pit.

Production notes:

There is no record of production, but the assay data and the extent of the workings suggest that some gold may have been produced.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): McKallick**Site type:** Prospect**ARDF no.:** SI110**Latitude:** 57.6391**Quadrangle:** SI C-7**Longitude:** 136.1457**Location description and accuracy:**

The McKallick placer prospect is at sea level on the east side of Odgen Passage, about 0.5 mile southeast of an islet named Frog Peak. The prospect, which is on patented ground, is 0.4 mile northwest of the center of sec. 8, T. 49 S., R. 58 E. It is location P-66 of Bittenbender and others (1999), location 72 of Cobb (1972, 1978), and MAS no. 0021140064 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold, ilmenite, magnetite, pyrite**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults.

Reed and Coats (1941) report that about 8 feet of angular graywacke gravel at this placer prospect has been explored for length of about 50 feet and a width of about 20 feet, to a depth of up to 8 feet. The bedrock is graywacke. The auriferous gravel apparently is younger than the morainal material at the prospect, and possibly younger than the Holocene ash from Mt. Edgumbe. Reed and Coats collected panned concentrates that contained gold, mostly enclosed in or attached to quartz, with pyrite, ilmenite, and magnetite. They concluded that the placer is eluvial from a nearby lode source concealed by vegetation. Bittenbender and others (1999), citing Still and Weir (1981), report that a pan concentrate of the gravel assayed 0.11 ounce of gold per ton. There is no record of any production, but a little gold was probably recovered.

Alteration:**Age of mineralization:**

Holocene?

Deposit model:

Eluvial placer gold (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: Undetermined.**Site Status:** Undetermined

Workings/exploration:

Surface sampling and trenching.

Production notes:

There is no record of any production, but a little gold may have been produced.

Reserves:**Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Cold Storage**Site type:** Prospect**ARDF no.:** SI111**Latitude:** 57.6275**Quadrangle:** SI C-7**Longitude:** 136.1040**Location description and accuracy:**

The Cold Storage prospect is at sea level on the west side of Klag Bay, due west of the northwest tip of Klag Island. The prospect is 0.6 mile north-northeast of the center of sec. 16, T. 49 S., R. 58 E. It is MAS no. 0021140120 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults. The only published information about this prospect is that it has been staked for lode gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (outlet of Lake Anna)**Site type:** Prospect**ARDF no.:** SI112**Latitude:** 57.6246**Quadrangle:** SI C-7**Longitude:** 136.0781**Location description and accuracy:**

This prospect is at sea level on the north side of the passage between Lake Anna and Klag bay. The prospect is 0.4 mile southwest of the northeast corner of sec. 15, T. 49 S., R. 58 E. It is location P-81 of Bittenbender and others (1999), location 40 of Cobb (1972, 1978), and MAS no. 0021140053 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults.

Bittenbender and others (1999), citing Overstreet (1967) and Still and Weir (1981), describe this prospect as a thin quartz vein in graywacke. Samples of the vein contained up to 0.005 ounce of gold per ton. The vein has been explored by an 80-foot adit. There is no record of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

The vein was explored by an 80-foot adit.

Production notes:

There is no record of production.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Overstreet, 1967; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Baney**Site type:** Prospect**ARDF no.:** SI113**Latitude:** 57.6206**Quadrangle:** SI C-7**Longitude:** 136.1104**Location description and accuracy:**

The Baney prospect is at an elevation of about 50 feet, north of Elbow Passage and west of Klag Island. The prospect is 0.1 mile southeast of the center of sec. 16, T. 49 S., R. 58 E. It is location P-67 of Bittenbender and others (1999), location 38 of Cobb (1972, 1978), and MAS no. 0021140011 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.2 mile.

Commodities:**Main:** Au**Other:** W**Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults.

Reed and Coats (1941) describe the workings on this prospect as a 20-foot-deep shaft which was flooded in 1938, and numerous open cuts, pits, and trenches. The country rock is slaty graywacke that strikes about N65W and dips about 70SW. The prospect consists of quartz veinlets in the footwall of a fault that strikes N55W and dips 50-75SW. The veinlets strike NE, dip steeply NW, and possibly occupy joints in the graywacke. One veinlet about 14 inches thick contains about 0.5 ounce of gold per ton. The prospecting also has exposed a silicified dike(?) that, along with adjacent graywacke, is cut by small veinlets of quartz that generally trend about N45E and dip 80NW.

Bittenbender and others (1999), citing Nelson (1931) and Still and Weir (1981), describe an auriferous quartz vein 0.2-3 feet thick exposed for a length of at least 300 feet. A selected sample of this material assayed 2.76 ounces of gold per ton and 0.32 percent tungsten. There is no record of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:

Dike(?) is silicified.

Age of mineralization:

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

Reed and Coats (1941) describe developments on this prospect as a 20-foot-deep shaft which was flooded in 1938, and numerous open cuts, pits, and trenches.

Production notes:

There is no record of production, but the assay data and the extent of the workings suggest that at least some gold was recovered.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Nelson, 1931; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Hanson and Bolshan (Elbow Passage)**Site type:** Prospect**ARDF no.:** SI114**Latitude:** 57.6138**Quadrangle:** SI C-7**Longitude:** 136.0836**Location description and accuracy:**

The Hanson and Bolshan prospect is at sea level on the east side of Elbow Passage, about 0.5 mile south of the entrance to Lake Anna. The prospect is at the midpoint of the south boundary of sec. 15, T. 49 S., R. 58 E. It is location P-68 of Bittenbender and others (1999), location 39 of Cobb (1972, 1978), and MAS nos. 0021140031 and 0021140311 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold, pyrite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults.

Reed and Coats (1941) report a 29-foot shaft and several pits at this prospect. The country rock is distinctly jointed, slaty graywacke that strikes about N57W and dips 70SW; the principal joint set strikes N40E and dips about 80NW. The shaft follows a fault that strikes N48W and dips 84SW. Quartz veinlets up to an inch thick fill joints in the hanging wall and are truncated by the fault. The bottom few feet of the shaft exposed up to a foot of pyrite-bearing ribbon quartz. The surface pits exposed other faults that may correlate with the one in the shaft. A few hundred feet from the shaft a 6- to 12-inch quartz vein in a N40E 70NW joint reportedly contained significant, but unspecified, gold values.

Bittenbender and others (1999), citing Smith (1926), report that samples from dumps at this prospect contained up to 0.915 ounce of gold per ton. There is no record of production.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997). ARDF record SI087 provides an overview of the geology of auriferous quartz veins in the Chichagof Mining District.

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.

Site Status: Undetermined

Workings/exploration:

Reed and Coats (1941) report a 29-foot shaft and several pits at this prospect.

Production notes:

There is no record of production.

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Smith, 1926; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Checkerboard**Site type:** Prospect**ARDF no.:** SI115**Latitude:** 57.6041**Quadrangle:** SI C-7**Longitude:** 136.0100**Location description and accuracy:**

The Checkerboard prospect is at an elevation of about 300 feet, about a mile south-southwest of the 1,726-foot peak of Flat Top Mountain. The prospect is 0.4 mile northeast of the southwest corner of sec. 19, T. 49 S., R. 59 E. It is MAS no. 0021140067 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke and argillite interbedded with sparse, lenticular beds of basalt. The rocks are cut by numerous high-angle, mainly north-west-striking faults; these include the extensions of the faults at the Chichagof Mine (SI093) which controls the mineralization there and whose trace is just northeast of this prospect. The only published information about this prospect is that it has been staked for lode gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (near Flat Top Mountain)**Site type:** Occurrence**ARDF no.:** SI116**Latitude:** 57.6253**Quadrangle:** SI C-6**Longitude:** 135.9979**Location description and accuracy:**

The location of this occurrence is only known to be approximately near sea level on the southwest shore of Sister Lake at the north foot of Flat Top Mountain. For this record, the site is plotted 0.1 mile east of the west edge of the C-6 quadrangle, in sec. 18, T. 49 S., R. 59 E. It is location P-84 of Bittenbender and others (1999).

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this occurrence as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The rocks are cut by numerous steeply-dipping, northwest-striking faults. The southeastern extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there, are about a mile southwest of this occurrence. Bittenbender and others (1999), citing Still and Weir (1981), report that the prospect is a quartz vein in graywacke. A sample of quartz float contained 2 parts per million gold.

Alteration:**Age of mineralization:****Deposit model:**

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: None**Site Status:** Undetermined**Workings/exploration:**

A sample of quartz float contained 2 parts per million gold.

Production notes:**Reserves:**

Additional comments:

The occurrence is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; Still and Weir, 1981; Bittenbender and others, 1999.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (upper Flat Top Mountain)**Site type:** Occurrence**ARDF no.:** SI117**Latitude:** 57.6162**Quadrangle:** SI C-6**Longitude:** 135.9859**Location description and accuracy:**

The location of this occurrence is only known approximately to be at an elevation of about 1,500 feet on Flat Top Mountain. For this record, the site is plotted 0.4 mile southwest of the center of sec. 17, T. 49 S., R. 59 E. It is location P-85 of Bittenbender and others (1999).

Commodities:**Main:** Ag**Other:** As**Ore minerals:****Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this occurrence as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The rocks are cut by numerous steeply-dipping, northwest-striking faults. They include the the southeastern extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there. Bittenbender and others (1999), citing Still and Weir (1981), report that the occurrence is a quartz vein in graywacke. A sample of quartz float contained 2 parts per million (ppm) silver and 200 ppm arsenic.

Alteration:**Age of mineralization:****Deposit model:**

Low-sulfide quartz vein.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:****Additional comments:**

The occurrence is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; Still and Weir, 1981; Bittenbender and others, 1999.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Levutar**Site type:** Prospect**ARDF no.:** SI118**Latitude:** 57.6620**Quadrangle:** SI C-6**Longitude:** 135.9094**Location description and accuracy:**

The Levutar prospect is at an elevation of about 1,450 feet, about 1.6 miles northeast of Pinnacle Peak. The prospect is 0.3 mile southeast of the center of sec. 31, T. 48 S., R. 59 E. It is MAS no. 0021140123 (U.S. Bureau of Land Management, 2002). The location is probably accurate within about a mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Triassic(?) greenstone and marble; a stock of Tertiary(?) granodiorite intrudes the greenstone. The rocks are cut by steeply-dipping, northwest-striking faults, including the regional-scale Border Ranges Fault, whose trace is about a mile southwest of the prospect. The only published information about this prospect is that it has been staked for an unspecified commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:****References:**

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (northeast of Ford Arm)**Site type:** Occurrence**ARDF no.:** SI119**Latitude:** 57.6217**Quadrangle:** SI C-6**Longitude:** 135.8660**Location description and accuracy:**

This occurrence is at an elevation of about 1,500 feet northeast of Ford Arm, about midway between lakes 920 and 423. The occurrence is about 0.2 mile north-northeast of the center of sec. 13, T. 49 S., R. 59 E. It is location 41 of Cobb (1972, 1978). The location probably is accurate within 0.2 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Chalcopyrite, pyrite, secondary copper minerals**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this occurrence as Triassic(?) greenstone that is intruded by a stock of Cretaceous or Jurassic gabbro and by a northwest-striking, linear sill(s) of Cretaceous (?) diorite. The rocks are cut by steeply-dipping, mainly northwest-striking faults, including the regional-scale Border Ranges Fault, whose trace is about 0.5 mile southwest of the occurrence. The fault apparently is intruded by the sill(s).

Cobb (1972, 1978), citing Loney and others (1963), describes this occurrence as chalcopyrite, pyrite, and secondary copper minerals in amygdaloidal basalt. The primary sulfides probably are about the same age as the Triassic(?) greenstone host rock.

Alteration:**Age of mineralization:**

The primary copper mineralization probably is Triassic(?), the age of the greenstone host rock.

Deposit model:

Basaltic copper (Cox and Singer, 1986; model 23).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

23

Production Status: None**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:**

Additional comments:

References:

Loney and others, 1963; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985.

Primary reference: Loney and others, 1963; Cobb, 1978

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (northeast of Ford Arm)**Site type:** Occurrence**ARDF no.:** SI120**Latitude:** 57.5974**Quadrangle:** SI C-6**Longitude:** 135.8634**Location description and accuracy:**

The location of this occurrence is only known approximately to be at an elevation of about 950 feet, midway between lakes 43 and 423, northeast of Ford Arm. For this record, the site is plotted 0.5 mile northeast of the center of sec. 25, T. 49 S., R. 59 E. It is location P-87 of Bittenbender and others (1999) and MAS no. 0021140128 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Ag, Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this occurrence as Cretaceous(?) phyllite and Cretaceous greenstone. The rocks are cut by steeply-dipping, mainly northwest-striking faults, including the regional-scale Border Ranges Fault whose trace is about 0.5 mile northeast of the occurrence.

Bittenbender and others (1999), citing Kimball (1982), describe the occurrence as a disseminated sulfide deposit in chlorite schist, hornfels, chert, and greenstone. Samples contained up to 300 parts per million (ppm) copper and 0.5 ppm silver.

Alteration:**Age of mineralization:****Deposit model:**

Disseminated sulfide deposit.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:****Additional comments:**

This prospect is only known approximately and it may be in the West Chichagof-Yakobi Wilderness.

References:

Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (northwest of Elf Cove)**Site type:** Prospect**ARDF no.:** SI121**Latitude:** 57.5946**Quadrangle:** SI C-6**Longitude:** 135.9615**Location description and accuracy:**

This prospect is at an elevation of about 500 feet, about 0.4 mile northwest of Elf Cove. The prospect is 0.4 mile south-southeast of the northwest corner of sec. 28, T. 49 S., R. 59 E. It is MAS no. 0021140219 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous melange and as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The rocks are cut by numerous steeply-dipping, mainly northwest-striking faults; these include the southeast extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines which control the mineralization there. The only published information about this prospect is that it has been staked for an unspecified commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Chichagof Star**Site type:** Prospect**ARDF no.:** SI122**Latitude:** 57.5934**Quadrangle:** SI C-6**Longitude:** 135.9515**Location description and accuracy:**

The Chichagof Star prospect is at an elevation of about 100 feet on an unnamed creek that enters Ford Arm just northeast of Elf Cove. The prospect is about 0.7 mile southeast of the northwest corner of sec. 28, T. 49 S., R. 59 E. It is location P-86 of Bittenbender and others, (1999) and MAS no. 0021140046 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous melange and as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The rocks are cut by numerous steeply-dipping, mainly northwest-striking faults; these include the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there.

Bittenbender and others (1999), citing Still and Weir (1981), describe the prospect as an auriferous quartz vein in graywacke. Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:**

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Mayme Group**Site type:** Prospect(?)**ARDF no.:** SI123**Latitude:** 57.5947**Quadrangle:** SI C-6**Longitude:** 135.9241**Location description and accuracy:**

This prospect (?) is at an elevation of about 950 feet, about 1.2 miles east-northwest of Elf Cove in Ford Arm. The prospect is 0.2 mile north-northeast of the center of sec. 27, T. 49 S., R. 59 E. It is MAS no. 0021140126 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous greenstone and melange. The rocks are cut by steeply-dipping, mainly northwest-striking faults. These include: 1) the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines which control the mineralization there and are about a mile to the southwest, and 2) the regional-scale Border Ranges Fault that passes through about 2 miles to the northeast. The only published information about the prospect is that it has been staked for an unspecified commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in west Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Grant**Site type:** Prospect**ARDF no.:** SI124**Latitude:** 57.5873**Quadrangle:** SI C-6**Longitude:** 135.9851**Location description and accuracy:**

The Grant prospect is at an elevation of about 500 feet just northwest of an unnamed lake near the east end of Takeetna Peninsula. The prospect is 0.3 mile southwest of the center of sec. 29, T. 49 S., R. 59 E. It is MAS no. 0021140176 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke. The rocks are cut by numerous steeply-dipping, mainly northwest-striking faults; they include the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines which control the mineralization there. The only published information about the prospect is that it has been staked for an unspecified commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Ready Bullion**Site type:** Prospect**ARDF no.:** SI125**Latitude:** 57.5779**Quadrangle:** SI C-6**Longitude:** 135.9540**Location description and accuracy:**

The Ready Bullion prospect is at sea level about 0.2 mile northwest of Channel Island in Ford Arm. The prospect is 0.6 mile southeast of the northwest corner of sec. 33, T. 49 S., R. 59 E. It is MAS no. 0021140127 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke. The rocks are cut by numerous steeply-dipping, mainly northwest-striking faults. These include the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there. The only published information about the prospect is that it has been staked for lode gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): El Dorado**Site type:** Occurrence**ARDF no.:** SI126**Latitude:** 57.5626**Quadrangle:** SI C-6**Longitude:** 135.9177**Location description and accuracy:**

The El Dorado placer occurrence is at sea level at the head of the southeast bay of Ford Arm. The prospect is 0.3 mile east of the center of sec. 3, T. 50 S., R. 59 E. It is location P-89 of Bittenbender and others (1999) and MAS no. 0021140193 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this placer prospect as Cretaceous graywacke, melange, and greenstone. The rocks are cut by numerous steeply-dipping, mainly northwest-striking faults; these include the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there. Bittenbender and others (1999), citing Still and Weir (1981), report that 17 panned-concentrate and stream-sediment samples contained up to 0.9 parts per million gold.

Alteration:**Age of mineralization:**

Quaternary.

Deposit model:

Placer gold (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:**

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Still and Weir, 1981; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Falcon Arm**Site type:** Prospect**ARDF no.:** SI127**Latitude:** 57.5521**Quadrangle:** SI C-6**Longitude:** 135.9281**Location description and accuracy:**

The Falcon Arm prospect is at an elevation of about 180 feet on the valley wall east of the head of Falcon Arm. The prospect is 0.4 mile north-northwest of the center of sec. 10, T. 50 S., R. 59 E. It is location P-90 of Bittenbender and others (1999), location 42 of Cobb (1972, 1978), and MAS no. 0021140033 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Cretaceous graywacke. The rocks are cut by numerous steeply-dipping, mainly northwest-striking faults. They include the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines, which control the mineralization there and whose traces are about a mile northeast of this prospect.

Reed and Coats (1941) describe the prospect as fault-controlled, auriferous quartz veins up to 4 inches thick in graywacke. The graywacke is cut by numerous, 1- to 3-foot-thick dikes of light-colored, fine-grained, intrusive rock. The graywacke strikes about N50W and dips about 70SW; the principal faults and splits from them strike N35W-N30E and dip steeply west. Some of the dikes are similar in attitude to some of the faults. The principal set of joints strikes N45E and is nearly vertical. Workings include a 2,260-foot crosscut and a 750-foot drift off the crosscut.

Bittenbender and others (1999), citing Overbeck (1919) and Still and Weir (1981), report that the Falcon Arm prospect was staked in 1916 on fault-controlled, auriferous quartz veins in mafic dikes and graywacke. Workings consist of 4 adits totaling 3,130 feet, and a pit. The most significant mineralized rock is quartz rubblecrop; blocks of it up to 1.2 feet thick assayed 0.5 ounce to 2.15 ounces of gold per ton. A sample from the upper workings contained 2.16 ounces of gold per ton. There are no published records of production but the assay values and the extent of the workings indicate that some gold may have been produced.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz veins (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Reed and Coats (1941) report a 2,260-foot crosscut and a 750-foot drift off the crosscut. Bittenbender and others (1999) report that the Falcon Arm prospect was staked in 1916 and developed by 4 adits totaling 3,130 feet and a pit.

Production notes:

There are no published records of production but the assay values and the extent of the workings indicate that some gold may have been produced.

Reserves:**Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Overbeck, 1919; Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941; Bittenbender and others, 1999**Reporter(s):** H.C. Berg (U.S. Geological Survey)**Last report date:** 10/16/2004

Site name(s): Unnamed (between Waterfall Cove and Fick Cove)**Site type:** Occurrence**ARDF no.:** SI128**Latitude:** 57.5750**Quadrangle:** SI C-6**Longitude:** 135.7881**Location description and accuracy:**

The location of this occurrence is only known approximately to be about midway between Waterfall Cove in Slocum Arm and Fick Cove in the South Arm of Hoonah Sound. For this record, the site is plotted 0.2 mile southeast of the center of sec. 33, T. 49 S., R. 60 E. The location of this occurrence may be several miles or more from the coordinates given here. It is location P-88 of Bittenbender and others (1999) and MAS no. 0021140306 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Cu, Zn**Other:****Ore minerals:** Pyrite, pyrrhotite**Gangue minerals:****Geologic description:**

Johnson and Karl (1975) map the rocks in the area of this occurrence as Triassic(?) greenstone intruded by northwest-trending, elongate stocks of Cretaceous or Jurassic gabbro and tonalite. The rocks are cut by steeply-dipping, mainly northwest-striking faults; these include the regional-scale Border Ranges Fault whose trace is about a mile southwest of this occurrence.

Bittenbender and others (1999), citing Kimball (1982), describe the occurrence as a disseminated sulfide deposit in schist and gneiss, near the contact between Triassic(?) greenstone and marble. Samples of pyrite- and pyrrhotite-bearing schist and gneiss assayed up to 360 parts per million (ppm) copper and 1,600 ppm zinc.

Alteration:**Age of mineralization:****Deposit model:**

Disseminated sulfide deposit.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Only limited surface sampling.

Production notes:

Reserves:

Additional comments:

References:

Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (east of Waterfall Lake)**Site type:** Occurrence**ARDF no.:** SI129**Latitude:** 57.5325**Quadrangle:** SI C-6**Longitude:** 135.8158**Location description and accuracy:**

This occurrence is at an elevation of about 1,000 feet, about 1.8 miles east of the outlet of Waterfall Lake. The occurrence is 0.2 mile southeast of the center of sec. 17, T. 50 S., R. 60 E. It is location 43 of Cobb (1972, 1978). The location probably is accurate within 0.2 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Malachite?**Gangue minerals:** Epidote, quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this occurrence as Triassic(?) greenstone that is intruded by a northwest-striking, linear sill(s) of Cretaceous(?) diorite. The rocks are cut by steeply-dipping, mainly northwest-striking faults; these include the regional-scale Border Ranges Fault whose trace is just southwest of the occurrence. The fault apparently is intruded by the sill(s).

Cobb (1972, 1978), citing Loney and others (1963), describes the occurrence as secondary copper minerals in quartz and epidote amygdules in greenstone. Triassic(?) greenstone elsewhere on northwest Chichagof Island generally contains primary copper minerals that are about the same age as the greenstone host rock (see, for example, SI035 and SI036).

Alteration:**Age of mineralization:**

Triassic(?) greenstone elsewhere on northwest Chichagof Island generally contains primary copper minerals that are about the same age as the greenstone host rock.

Deposit model:

Basaltic copper (Cox and Singer, 1986; model 23).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

23

Production Status: None**Site Status:** Undetermined**Workings/exploration:****Production notes:**

Reserves:

Additional comments:

The occurrence is in West Chichagof-Yakobi Wilderness.

References:

Loney and others, 1963; Cobb, 1972; Cobb, 1978; Johnson and Karl, 1985.

Primary reference: Loney and others, 1963; Cobb, 1978

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Ram**Site type:** Prospect**ARDF no.:** SI130**Latitude:** 57.5297**Quadrangle:** SI C-6**Longitude:** 135.8090**Location description and accuracy:**

The Ram prospect is at an elevation of about 1,950 feet, about 2 miles east of Waterfall Lake. The prospect is 0.5 mile southeast of the center of sec. 17, T. 50 S., R. 60 E. It is location P-92 of Bittenbender and others (1999) and MAS no. 0021140129 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this occurrence as Triassic(?) greenstone intruded by a northwest-striking, linear sill(s) of Cretaceous(?) diorite. The rocks are cut by steeply-dipping, mainly northwest-striking faults; these include the regional-scale Border Ranges Fault whose trace is just southwest of the occurrence. The fault apparently is intruded by the sill(s).

Bittenbender and others (1999), mainly citing Kimball (1982), describe the prospect as a disseminated sulfide deposit in gneissic metavolcanic rocks. Samples contained up to 190 parts per million copper.

Alteration:**Age of mineralization:****Deposit model:**

Disseminated sulfide deposit.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Only limited surface sampling.

Production notes:**Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (southwest of Ushk Bay)**Site type:** Occurrence**ARDF no.:** SI131**Latitude:** 57.5265**Quadrangle:** SI C-6**Longitude:** 135.7479**Location description and accuracy:**

The location of this occurrence is only known approximately to be at an elevation of about 1,000 feet, about 3 miles southwest of the head of Ushk Bay. For this record, the site is plotted 0.6 mile northwest of the center of sec. 23, T. 50 S., R. 60 E. It is location P-93 of Bittenbender and others (1999) and MAS no. 0021140130 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Ag, Cu, Mo**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this occurrence as Mesozoic or Paleozoic, amphibolite, gneiss, schist, and marble, and as undivided siliceous metasedimentary and metavolcanic rocks. The rocks are cut by high-angle, mainly northwest-striking faults.

Bittenbender and others (1999), mainly citing Kimball (1982), describe the occurrence as a disseminated sulfide deposit in Triassic(?) greenstone and amphibolite. Samples contained up to 220 parts per million (ppm) copper, 0.7 ppm silver, and 100 ppm molybdenum.

Alteration:**Age of mineralization:****Deposit model:**

Disseminated sulfide deposit.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Only limited surface sampling.

Production notes:**Reserves:****Additional comments:**

References:

Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Ushk Bay North**Site type:** Prospect**ARDF no.:** SI132**Latitude:** 57.5800**Quadrangle:** SI C-5**Longitude:** 135.6255**Location description and accuracy:**

This placer prospect is at an elevation of about 100 feet on an unnamed creek that enters Ushk Bay about 1.8 miles north-northwest of Ushk Point. The prospect is 0.3 mile north-northeast of the center of sec. 33, T. 49 S., R. 61 E. It is MAS no. 0021140220 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about a mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this placer prospect as Mesozoic or Paleozoic amphibolite, gneiss, schist, and marble, intruded by a stock of Cretaceous or Jurassic diorite. The site is on a high-angle fault that strikes north; other high-angle faults in the area strike northwest. The only published information about the prospect is that it has been staked for placer gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Quaternary.

Deposit model:

Au placer (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Montana Bonanza**Site type:** Prospect**ARDF no.:** SI133**Latitude:** 57.5873**Quadrangle:** SI C-4**Longitude:** 135.3255**Location description and accuracy:**

The Montana Bonanza prospect is at an elevation of about 250 feet on the west valley wall of an unnamed creek that enters Peril Strait opposite Peschani Point. The prospect is 0.3 mile north-northwest of the southeast corner of sec. 29, T. 49 S., R. 63 E. It is MAS no. 0021140104 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of a Cretaceous batholith that consists mainly of biotite-hornblende tonalite and hornblende tonalite (Loney and others, 1975). The only information about this prospect is that one or more claims were staked for an unstated commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Cretaceous or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

The only information about this prospect is that one or more claims were staked for an unstated commodity.

Production notes:**Reserves:****Additional comments:**

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (southwest of Kadashan Bay)**Site type:** Prospect**ARDF no.:** SI134**Latitude:** 57.6969**Quadrangle:** SI C-4**Longitude:** 135.1554**Location description and accuracy:**

This prospect is at an elevation of about 1,000 feet, about 2.4 miles east-southeast of the head of Kadashan Bay in Tenakee Inlet. The prospect is 0.3 mile northeast of the center of sec. 23, T. 48 S., R. 63 E. It is MAS no. 0021140214 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect consist of a large Silurian intrusion of biotite syenite and hornblende syenite. The syenite is in contact with Paleozoic hornfels, schist, and amphibolite that probably represent a thermal aureole of the intrusive (Loney and others, 1975). The prospect is at or near the contact. The only information about this prospect is that one or more claims were staked here by Resource Associates of Alaska (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Paleozoic or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

The only information about this prospect is that one or more claims were staked here by Resource Associates of Alaska.

Production notes:**Reserves:****Additional comments:**

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Redone**Site type:** Prospect**ARDF no.:** SI135**Latitude:** 57.6822**Quadrangle:** SI C-4**Longitude:** 135.0328**Location description and accuracy:**

The Redone prospect is at an elevation of about 2,000 feet, about 1.5 miles north-northwest of the outlet of Kook Lake. The prospect is 0.4 mile northwest of the center of sec. 27, T. 48 S., R. 64 E. It is location P-29 of Bittenbender and others, (1999) and MAS no. 0021140212 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of a unit of Paleozoic hornfels, schist, and amphibolite that probably is the thermal aureole of a nearby Silurian intrusion consists of biotite syenite and hornblende syenite (Loney and others, 1975). The only information about this prospect is that one or more claims were staked for copper in 1976 (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Possibly related to the Silurian intrusion nearby.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

The only information about this prospect is that one or more claims were staked for copper in 1976.

Production notes:**Reserves:****Additional comments:****References:**

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Bicentennial**Site type:** Prospect**ARDF no.:** SI136**Latitude:** 57.6731**Quadrangle:** SI C-4**Longitude:** 135.0369**Location description and accuracy:**

The Bicentennial prospect is at an elevation of about 400 feet, about 1.2 miles northwest of the outlet of Kook Lake. The prospect is 0.55 mile southwest of the center of sec. 27, T. 48 S., R. 64 E. It is MAS no. 0021140194 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The Bicentennial prospect is near the contact between Paleozoic hornfels, schist, and amphibolite and a Silurian intrusion that consists of biotite syenite and hornblende syenite (Loney and others, 1975). The Paleozoic rocks probably represent the thermal aureole of the intrusive. The only information about this prospect is that one or more claims were staked here (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Paleozoic or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

The only information about this prospect is that one or more claims were staked here.

Production notes:**Reserves:****Additional comments:****References:**

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (between Basket Bay and Kook Lake)**Site type:** Prospect**ARDF no.:** SI137**Latitude:** 57.6697**Quadrangle:** SI C-3**Longitude:** 134.9442**Location description and accuracy:**

This prospect is at an elevation of about 300 feet, about midway between Basket Bay and Kook Lake. The prospect is 0.6 mile east-southeast of the northwest corner of sec. 31, T. 48 S., R. 65 E. It is MAS no. 0021140216 (U.S. Bureau of Land Management, 2002). The location probably is accurate within a mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Silurian and/or Devonian, Kennel Creek Limestone which consists of limestone with minor dolomite, limestone breccia, shale and siltstone (Loney and others, 1975). The only information about this prospect is that a claim was staked here for an unstated commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Silurian or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

The only information about this prospect is that a claim was staked for an unstated commodity.

Production notes:**Reserves:****Additional comments:****References:**

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (west of Basket Lake)**Site type:** Prospect**ARDF no.:** SI138**Latitude:** 57.6232**Quadrangle:** SI C-3**Longitude:** 134.9952**Location description and accuracy:**

This prospect is at the top of hill 2249, about 2.7 miles west-southwest of the head of Basket Lake. The prospect is 0.2 mile northwest of the center of sec. 16, T. 49 S., R. 65 E. It is location P-30 of Bittenbender and others (1999) and MAS no. 0021140213 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** U**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

This prospect is within a large body of Silurian intrusive rocks that consist mainly of sodalite syenite and biotite-nephaline syenite (Loney and others, 1975). The only information about this prospect is that one or more claims were staked here for uranium in 1977 by Mapco, Inc. (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Silurian or younger based on the age of the syenite, host rocks.

Deposit model:

U deposit associated with or in syenite.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Inactive**Workings/exploration:**

The only information about this prospect is that one or more claims were staked for uranium in 1977 by Mapco, Inc.

Production notes:**Reserves:****Additional comments:**

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (northwest of Sikady Lake)**Site type:** Occurrence**ARDF no.:** SI139**Latitude:** 57.7353**Quadrangle:** SI C-2**Longitude:** 134.3558**Location description and accuracy:**

This occurrence is at an elevation of about 1,000 feet, about 0.9 mile north-northwest of upper Sikady Lake. The occurrence is 0.2 mile south-southwest of the center of sec. 2, T. 48 S., R. 68 E. It is location 69 of Cobb (1972, 1978) and MAS no. 0021140202 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.2 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Chalcopyrite, pyrrhotite**Gangue minerals:****Geologic description:**

This occurrence is in an undifferentiated unit of Paleozoic and Mesozoic, low-grade metamorphic rocks (Latham and others, 1965). The occurrence was first reported by Race and Rose (1967). It consists of fine-grained schist that contains moderate amounts of disseminated pyrrhotite. Several zones within the schist contain an estimated 0.1 percent copper as chalcopyrite.

Alteration:**Age of mineralization:**

Paleozoic or younger.

Deposit model:

Copper in schist.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Apparently only surface examination by government agencies.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to

mineral exploration and development.

References:

Latham and others, 1965; Race and Rose, 1967; Cobb, 1972; Cobb, 1978; U.S. Bureau of Land Management, 2002.

Primary reference: Race and Rose, 1967

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (southwest end of Hasselborg Lake)**Site type:** Occurrence**ARDF no.:** SI140**Latitude:** 57.6615**Quadrangle:** SI C-1**Longitude:** 134.2469**Location description and accuracy:**

This occurrence is on the southwest shore of Hasselborg Lake 0.2 mile east of the gaging station at the mouth of Hasselborg Creek. The occurrence is on the north boundary of sec. 6, T. 49 S., R. 70 E. It is location 67 of Cobb (1972, 1978) and MAS no. 0021140177 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:****Other:****Ore minerals:** Chalcopyrite, pyrite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of this prospect are part of a unit of Mesozoic and Paleozoic, undifferentiated metamorphic rocks (Lathram and others, 1965). Race and Rose (1967) describe a vein of massive pyrite and chalcopyrite with a little quartz, in sheared and fractured chert. The vein is about a foot thick, strikes N40W, and dips 23NE. A sample contained 2 percent copper, 0.04 ounce of gold per ton, 0.66 ounce of silver per ton, and no lead, zinc, or nickel. The vein had been cleared off but they found no evidence of a claim.

Alteration:**Age of mineralization:**

Paleozoic or younger.

Deposit model:

Vein of pyrite and chalcopyrite.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Inactive**Workings/exploration:**

The vein here had been cleared off but there was no evidence (in 1965) that a claim had been staked.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Latham and others, 1965; Race and Rose, 1967; Cobb, 1972; Cobb, 1978; U.S. Bureau of Land Management, 2002.

Primary reference: Race and Rose, 1967

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Ebba**Site type:** Prospect**ARDF no.:** SI141**Latitude:** 57.6638**Quadrangle:** SI C-1**Longitude:** 134.2263**Location description and accuracy:**

The Ebba prospect is at an elevation of about 300 feet at the southeast end of Hasselborg Lake. The prospect is 0.5 mile southwest of the center of sec. 34, T. 48 S., R. 69 E. It is location 68 of Cobb (1972, 1978) and MAS no. 0021140030 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Ag, Au, Cu, Ni**Other:****Ore minerals:** Chalcopyrite, pyrrhotite**Gangue minerals:****Geologic description:**

The rocks in the vicinity of the Ebba prospect are part of a unit of Mesozoic and Paleozoic, undifferentiated metamorphic rocks (Lathram and others, 1965). Race and Rose (1967) describe the prospect here as highly chloritized gabbro that is partially replaced by pyrrhotite, chalcopyrite, and possibly other sulfides. The deposit was discovered in 1959 and a claim was staked on it. A sample of the gabbro contained 0.03 percent copper, 0.15 percent nickel, 0.02 ounce of gold per ton, and 1.13 ounce of silver per ton. Unmineralized gabbro occurs nearby and the gabbro is bordered by schist, chert, and black phyllite a few hundred feet away.

Alteration:

The mineralized gabbro is highly chloritized.

Age of mineralization:**Deposit model:**

Gabbro with chalcopyrite and pyrrhotite.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Inactive**Workings/exploration:**

The deposit was discovered and claimed in 1959; there is no indication of any substantial exploration work on it.

Production notes:

Reserves:

Additional comments:

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Latham and others, 1965; Race and Rose, 1967; Cobb, 1972; Cobb, 1978; U.S. Bureau of Land Management, 2002.

Primary reference: Race and Rose, 1967

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Petunia**Site type:** Prospect**ARDF no.:** SI142**Latitude:** 57.5506**Quadrangle:** SI C-1**Longitude:** 134.1912**Location description and accuracy:**

The Petunia prospect is at an elevation of about 1,000 feet, about 2.9 miles east of the south end of Jim's Lake. The prospect is 0.2 mile south of the center of sec. 9, T. 50 S., R. 70 E. It is MAS no. 0021140196 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

This prospect is at or near the contact between a unit of undifferentiated Permian and Triassic, volcanic rocks, argillite, and chert and an undifferentiated unit of Paleozoic and Mesozoic metamorphic rocks (Lathram and others, 1965). The only information available about this prospect is that a claim was staked by WGM Inc. for an unspecified commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Paleozoic or younger.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

The only information available for this prospect is that a claim was staked on it.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Patty**Site type:** Prospect**ARDF no.:** SI143**Latitude:** 57.5608**Quadrangle:** SI C-1**Longitude:** 134.0465**Location description and accuracy:**

The Patty prospect is at an elevation of about 2,500 feet, about midway between Pleasant Lake and the head of Gambier Bay. The prospect is 0.6 mile southeast of the center of sec. 5, T. 50 S., R. 71 E. It is MAS no. 0021140197 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Ag, Au, Pb, Zn**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

This prospect is in narrow outlier of marble of the Devonian, Gambier Bay Formation which is almost surrounded by an undifferentiated unit of Permian and Triassic volcanic rocks, argillite, and chert (Lathram and others, 1965). The only information available for this prospect is that at least one claim was staked here for gold, silver, lead, and zinc by WGM, Inc.

Alteration:**Age of mineralization:**

Devonian or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

The only information that is available is that at least one claim was staked here in 1976.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Cook; Coronado**Site type:** Prospect**ARDF no.:** SI144**Latitude:** 57.5204**Quadrangle:** SI C-1**Longitude:** 134.0733**Location description and accuracy:**

The Coronado (U.S. Bureau of Land Management, 2002) or Cook (Cobb, 1972, 1978) prospect is at an elevation of about 1,100 feet, 0.5 mile northeast of the north head of Gambier Bay. The prospect is 0.4 mile southeast of the center of sec. 19, T. 50 S., R. 71 E. It is location 70 of Cobb (1972, 1978) and MAS no. 0021140175 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au, Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

This prospect is in marble of the Gambier Bay Formation (Lathram and others, 1965). There are several references to this prospect but all refer back to Wright (1906) as the source of their information. Wright had little information on the Cook prospect other than that a claim was located on a gold- and silver-bearing 'ledge' (vein?) and that no work had been done on it as of 1904.

Alteration:**Age of mineralization:**

Devonian or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

A claim was staked before 1904.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness of the Admiralty Island National Monument and is closed to mineral exploration and development.

References:

Wright and Wright, 1905; Wright, 1906; Lathram and others, 1960; Herbert and Race, 1964; Herbert and Race, 1965; Lathram and others, 1965; Berg and Cobb, 1967; Race and Rose, 1967; Cobb, 1972; Cobb, 1978; U.S. Bureau of Land Management, 2002.

Primary reference: Wright, 1906

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Cobol (Slocum Arm)**Site type:** Mine**ARDF no.:** SI145**Latitude:** 57.4930**Quadrangle:** SI B-6**Longitude:** 135.8680**Location description and accuracy:**

The Cobol Mine in Slocum Arm is at an elevation of about 550 feet, about 0.5 mile north of the ruins of the town of Cobol. The mine is at an adit symbol on the USGS B-6 topographic map (1996), 0.2 mile north-northeast of the center of sec. 36, T. 50 S., R. 59 E. It is location P-91 of Bittenbender and others (1999), location 44 of Cobb (1972, 1978), and MAS no. 0021140026 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:** Pb**Ore minerals:** Galena, gold, pyrite**Gangue minerals:** Quartz**Geologic description:**

Johnson and Karl (1985) map the rocks in the area of the Cobol Mine as Cretaceous melange and greenstone, and as the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?), metasedimentary and metavolcanic rocks. The rocks are cut by numerous high-angle, northwest-striking faults. They include a regional fault along Slocum Arm, and others that may be the extensions of the faults at the Hirst (SI087) and Chichagof (SI093) mines that control the mineralization there. There also is at least one steeply-dipping fault that strikes about north.

Reed and Coats (1941) describe the deposit as an auriferous, fault-controlled quartz vein. The fault strikes about N5E and dips nearly vertically; it cuts graywacke that strikes about N25W and dips about 75SW. A light-colored dike apparently intruded along the fault is offset by subsequent movement on the fault. The vein is up to about a foot thick and consists of gouge and milky quartz, locally with ribbon structure. The veins contain sparse pyrite, galena, and gold; gold also occurs in fractures in the dike rock. Post-ore fault movement is marked by smeared pyrite and gold along fault surfaces. Workings include a lower tunnel about 1,330 feet long and an upper tunnel about 540 feet long.

Bittenbender and others (1999), citing Stewart (1931) and Kimball (1982), report production of 100 ounces of gold from a mineralized fault zone, 57 feet long and 3 feet wide, that averaged 0.28 ounce of gold per ton. A rich sample of mineralized float below the workings assayed 8.74 ounces of gold per ton. They report two adits, 1,600 and 550 feet long, a winze, and a stope.

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Alteration:**Age of mineralization:**

Isotopic studies indicate that the gold-quartz veins in coastal southern and southeastern Alaska are Eocene, about 50 Ma in age (Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997).

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
36a

Production Status: Yes; small

Site Status: Undetermined

Workings/exploration:

Reed and Coats (1941) report a lower tunnel about 1,330 feet long and an upper tunnel about 540 feet long. Bittenbender and others (1999) report two adits, 1,600 and 550 feet long, a winze, and a stope.

Production notes:

Bittenbender and others (1999) report production of 100 ounces of gold from a mineralized fault- zone, 57 feet long and 3 feet wide, that averaged 0.28 ounce of gold per ton.

Reserves:

Additional comments:

The mine is in West Chichagof-Yakobi Wilderness.

References:

Stewart, 1931; Ship and Shipman, 1938; Reed and Coats, 1941; Cobb, 1972; Cobb, 1978; Kimball, 1982; Johnson and Karl, 1985; Haeussler and others, 1995; Goldfarb, 1997; Goldfarb and others, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Reed and Coats, 1941

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (northeast of Slocum Arm)**Site type:** Occurrence**ARDF no.:** SI146**Latitude:** 57.4933**Quadrangle:** SI B-6**Longitude:** 135.7159**Location description and accuracy:**

This occurrence is northeast of Slocum Arm at an elevation of about 1,500 feet, about 1.4 miles north-northeast of the outlet of lake 1052. The occurrence is 0.3 mile northwest of the center of sec. 36, T. 50 S., R. 60 E. It is location P-94 of Bittenbender and others (1999) and MAS no. 0021140221 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Ag, Au**Other:** Mo, Zn**Ore minerals:** Sphalerite?**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area as Triassic(?) greenstone and Mesozoic or Paleozoic, siliceous metasedimentary and metavolcanic rocks. The rocks are intruded by a stock of Tertiary(?) granodiorite, and cut by high-angle faults that mainly strike northwest.

Bittenbender and others (1999), citing Still and Weir (1981), describe this occurrence as a zone of orange-colored mineralized rock in a gulch along a fault contact between metamorphic rocks and greenstone. Samples of the mineralized material contained up to 12 parts per million (ppm) gold, 7 ppm silver, 3,400 ppm zinc, and 100 ppm molybdenum. The ore minerals are not specified.

Alteration:

Oxidation of mineralized rock.

Age of mineralization:**Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:**

Additional comments:

References:

Still and Weir, 1981; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (northeast of Slocum Arm)**Site type:** Occurrence**ARDF no.:** SI147**Latitude:** 57.4717**Quadrangle:** SI B-6**Longitude:** 135.7912**Location description and accuracy:**

This occurrence is at an elevation of about 1,900 feet, about a mile east-northeast of Flat Cove in Slocum Arm. The occurrence is 0.3 mile south of the center of sec. 4, T. 51 S., R. 60 E. It is location P-95 of Bittenbender and others (1999), location 45 of Cobb (1972, 1978), and MAS no. 0021140136 (U.S. Bureau of Land Management, 2002). The location is accurate within about 0.5 mile.

Commodities:**Main:** Mo**Other:****Ore minerals:** Malachite?**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this occurrence as Triassic(?) greenstone and marble, Cretaceous(?) phyllite, and the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The contact between the Triassic(?) strata and the Cretaceous/Cretaceous(?) strata is the Border Ranges Fault, a regional-scale, high-angle fault that strikes northwest. Other faults in the area strike northwest, north, and east-southeast. One of them appears to offset the Border Ranges Fault for about 2 miles along a right-lateral fault.

Cobb (1972, 1978), citing Loney and others (1963), describes the occurrence as disseminated sulfides and secondary copper minerals in greenstone. Bittenbender and others (1999), citing Ballard (1968) and Still and Weir (1981), describe the occurrence as a porphyry molybdenum deposit that extends over an area of at least a square mile. They specify the country rocks as greenstone intruded by granodiorite, but do not name the ore minerals.

Alteration:**Age of mineralization:****Deposit model:**

Porphyry molybdenum deposit? (Cox and Singer, 1986; models 21b).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

21b?

Production Status: None**Site Status:** Undetermined**Workings/exploration:**

Production notes:**Reserves:****Additional comments:**

The occurrence is in West Chichagof-Yakobi Wilderness.

References:

Williams, 1928; Thorne, 1952; Wells, 1952; Loney and others, 1963; Ballard, 1968; Cobb, 1972; Cobb, 1978; Still and Weir, 1981; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Next**Site type:** Prospect**ARDF no.:** SI148**Latitude:** 57.4330**Quadrangle:** SI B-6**Longitude:** 135.7702**Location description and accuracy:**

The Next prospect is at an elevation of about 1,000 feet, about 1.7 miles southeast of the head of Slocum Arm. The prospect is 0.2 mile west-southwest of the center of sec. 22, T. 51 S., R. 60 E. It is location P-96 of Bittenbender and others (1999) and MAS no. 0021140199 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Malachite, pyrite, pyrrhotite**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the area of this prospect as Triassic(?) greenstone and marble, Cretaceous(?) phyllite, and the Freeburn assemblage, a collage of kilometer-scale, fault-bounded, lozenge-shaped blocks of Cretaceous and Cretaceous(?) metasedimentary and metavolcanic rocks. The contact between the Triassic(?) strata and the Cretaceous/Cretaceous(?) strata is the regional-scale Border Ranges Fault, a high-angle, northwest-striking fault that passes through just southwest of the prospect.

Bittenbender and others (1999), citing Loney and others (1963), describe the prospect as malachite and disseminated pyrite and pyrrhotite in greenstone. Triassic(?) greenstone elsewhere on northwest Chichagof Island generally contains primary sulfide minerals that are about the same age as the greenstone host rock (see, for example, SI035 and SI036).

Alteration:**Age of mineralization:**

Triassic(?) greenstone elsewhere on northwest Chichagof Island generally contains primary sulfide minerals that are about the same age as the greenstone host rock.

Deposit model:

Basaltic copper? (Cox and Singer, 1986; model 23).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

23?

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Production notes:

Reserves:

Additional comments:

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Loney and others, 1963; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Suloia**Site type:** Prospect**ARDF no.:** SI149**Latitude:** 57.3937**Quadrangle:** SI B-6**Longitude:** 135.6743**Location description and accuracy:**

The Suloia Group prospect is at an elevation of about 150 feet, about 1.1 miles east-southeast of the outlet of Suloia Lake. The prospect is 0.5 mile northeast of the center of sec. 6, T. 52 S., R. 61 E. It is MAS no. 0021140139 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Ag, Au, Cu, Pb**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the vicinity of this prospect as a stock of Jurassic tonalite. The rocks are cut by steeply-dipping, northwest-striking faults; they include the regional-scale Border Ranges Fault, which truncates the stock about a mile southwest of the prospect. The only published information about the prospect is that it has been staked for lode gold, silver, copper, and lead (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:**

The prospect is in West Chichagof-Yakobi Wilderness.

References:

Johnson and Karl, 1985; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (south of Sealion Cove)**Site type:** Occurrence**ARDF no.:** SI150**Latitude:** 57.2851**Quadrangle:** SI B-6**Longitude:** 135.8345**Location description and accuracy:**

This occurrence is at an elevation of about 100 feet in an unnamed cove about 0.4 mile south of the head of Sealion Cove on northwest Kruzof Island. The occurrence is 0.3 mile southwest of the center of sec. 11, T. 53 S., R. 60 E. It is location P-105 of Bittenbender and others (1999), location 49 of Cobb (1972, 1978), and MAS no. 0021140076 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Au, Cu, Mo**Other:** As**Ore minerals:** Chalcopyrite, molybdenite**Gangue minerals:** Quartz**Geologic description:**

Loney and others (1975) map the rocks in the area of this occurrence as Jurassic and Cretaceous graywacke that is intruded by a stock of Tertiary (Eocene) granodiorite. The graywacke is widely metamorphosed by the intrusion to hornfels and schist.

Cobb (1972, 1978), citing Loney and others (1963), describes the occurrence as molybdenite and chalcopyrite in quartz veins in biotite hornfels associated with pegmatite dikes. Bittenbender and others (1999) describe the occurrence as a porphyry molybdenum-copper deposit; samples contained up to 2,450 parts per billion gold, 21 parts per million (ppm) molybdenum, 110 ppm copper, and more than 1 percent arsenic.

Alteration:**Age of mineralization:****Deposit model:**

Polymetallic veins and/or porphyry Mo-Cu deposit (Cox and Singer, 1986; models 22c and 21a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

22c and/or 21a

Production Status: None**Site Status:** Undetermined**Workings/exploration:**

Only surface sampling.

Production notes:

Reserves:

Additional comments:

References:

Loney and others, 1963; Cobb, 1972; Cobb, 1978; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Loney and others, 1963; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Little Blonde; High Grade**Site type:** Prospect**ARDF no.:** SI151**Latitude:** 57.2720**Quadrangle:** SI B-6**Longitude:** 135.6919**Location description and accuracy:**

This prospect is at an elevation of about 450 feet on northeast Kruzof Island, about 3.5 miles south of Sukoi Point. The prospect is 0.2 mile southeast of the center of sec. 15, T. 53 S., R. 61 E. It is location P-106 of Bittenbender and others (1999) and MAS no. 0021140151 (U.S. Bureau of Land Management, 2002). The location is accurate within about a mile.

Commodities:**Main:** Au, Pb, Zn**Other:****Ore minerals:****Gangue minerals:** Quartz**Geologic description:**

Loney and others (1975) map the rocks in the area of this prospect as Jurassic and Cretaceous graywacke. The rocks near the prospect are cut by at least one high-angle, north-striking fault, and the Neva Strait Fault, a regional-scale, steeply-dipping, northwest-striking fault is about 4 miles northeast of the prospect. Bittenbender and others (1999) describe the prospect as a gold-lead-zinc-bearing, quartz vein along the contact between greenstone and argillite. Samples from the Little Blonde claim assayed up to 0.42 ounce of gold per ton across 0.6 foot of quartz. Selected mineralized float on the High Grade claim assayed up to 3 ounces of gold per ton, but most of the samples contained no gold. The ore minerals were not identified.

Alteration:**Age of mineralization:****Deposit model:**

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:**

Additional comments:

References:

Roehm, 1938 (Little Blonde); Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (northeast shore of Deep Bay)**Site type:** Occurrence**ARDF no.:** SI152**Latitude:** 57.4511**Quadrangle:** SI B-5**Longitude:** 135.6347**Location description and accuracy:**

The location of this (placer?) occurrence is known only approximately; it is on the northeast shore of Deep Bay, about 0.8 mile from the head of the bay. The occurrence is 0.2 mile west of the center of sec. 16, T. 51 S., R. 61 E. It is location P-97 of Bittenbender and others (1999) and MAS no. 0021140303 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:****Geologic description:**

Johnson and Karl (1985) map the rocks in the vicinity of this occurrence as part of a Tertiary(?) granodiorite stock. The stock contains roof pendants and inclusions of Mesozoic or Paleozoic amphibolite, gneiss, schist, and marble; the rocks are cut by high-angle, mainly northwest-striking faults. Bittenbender and others (1999), citing Kimball (1982), report that a stream-sediment sample at this site contained 12 parts per million gold, but that no gold was found in other samples.

Alteration:**Age of mineralization:**

Quaternary.

Deposit model:

Placer gold? (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a?

Production Status: None**Site Status:** Undetermined**Workings/exploration:**

Only stream sampling.

Production notes:**Reserves:**

Additional comments:

References:

Kimball, 1982; Johnson and Karl, 1985; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Black Hawk and Susie Groups**Site type:** Prospect(?)**ARDF no.:** SI153**Latitude:** 57.3720**Quadrangle:** SI B-5**Longitude:** 135.6486**Location description and accuracy:**

This prospect(?) is at sea level at the south mouth of Fish Bay on northern Baranof Island. The prospect (?) is 0.4 mile north-northwest of the southeast corner of sec. 8, T. 52 S., R. 61 E. It is location P-104 of Bittenbender and others (1999) and MAS no. 0021140147 (U.S. Bureau of Land Management, 2002). The location probably is accurate within a mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold**Gangue minerals:** Quartz**Geologic description:**

Loney and others (1975) map the rocks in the area of this prospect as a Jurassic tonalite stock that contains roof pendants or inclusions of undivided Mesozoic or Paleozoic, amphibolite, gneiss, schist, and marble. The prospect is at or near the contact between the tonalite and a metamorphic roof pendant. Bittenbender and others (1999) describe this prospect as an auriferous quartz vein; samples contained up to 0.45 ounce of gold per ton.

Alteration:**Age of mineralization:****Deposit model:**

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Undetermined.**Site Status:** Undetermined**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:****Additional comments:**

References:

Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (south of Rodman Bay)**Site type:** Prospect**ARDF no.:** SI154**Latitude:** 57.4102**Quadrangle:** SI B-5**Longitude:** 135.3792**Location description and accuracy:**

This prospect is at an elevation of about 550 feet, about 1.8 miles south-southeast of the south end of Rodman Bay. The prospect is 0.1 mile south-southwest of the northeast corner of sec. 36, T. 51 S., R. 62 E. It is location P-98 of Bittenbender and others (1999), location 52 of Cobb (1972, 1978), and MAS no. 0021140075 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold, unspecified sulfides**Gangue minerals:** Calcite, quartz**Geologic description:**

Loney and others (1975) map the rocks in the area of this prospect as Triassic(?) phyllite and greenstone, and undivided Mesozoic metasedimentary and metavolcanic strata. The rocks are complexly folded and cut by diverse, mainly northwest-striking, high-angle faults.

Wright and Wright (1905) describe this prospect as a mineralized belt several hundred feet wide of wrinkled slate that contains interlaced quartz and calcite stringers with (unspecified) sulfides and gold. The slate is intruded by diabase dikes and a granodiorite pluton crops out a few miles away. Workings in the early 1900s included a 700-foot tunnel and considerable surface exploration, and construction of a 7-mile-long railroad to tidewater. The deposit reportedly is very low grade and there is no record of any production. Wright (1907) and Wright and Wright (1905) describe this prospect as an auriferous quartz vein. A high-grade, picked sample assayed 45 parts per billion gold (Bittenbender and others, 1999). Knopf (1912, p. 8) termed this prospect 'A remarkable mining failure.'

Alteration:**Age of mineralization:****Deposit model:**

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: None**Site Status:** Undetermined**Workings/exploration:**

Workings in the early 1900s included a 700-foot tunnel and considerable surface exploration; and con-

struction of a 7-mile-long railroad to tidewater.

Production notes:

Reserves:

Additional comments:

References:

Wright and Wright, 1905; Wright, 1907; Knopf, 1912; Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Cobb, 1978; Bittenbender and others, 1999

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (upper Fish Bay Creek)**Site type:** Prospect(?)**ARDF no.:** SI155**Latitude:** 57.3403**Quadrangle:** SI B-5**Longitude:** 135.3381**Location description and accuracy:**

This prospect(?) is at an elevation of about 1,800 feet, about 5.5 miles east-southeast of the middle of the head of Fish Bay. The prospect is 0.4 mile south of the center of sec. 20, T. 52 S., R. 63 E. It is MAS no. 0021140150 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Loney and others (1975) map the rocks in the area as Triassic(?) phyllite, greenschist, and greenstone, and Mesozoic or Paleozoic, metasedimentary and metavolcanic rocks. The rocks are cut by steeply-dipping, mainly northwest-striking faults. The only published information about the prospect is that it has been staked for an unspecified commodity (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** Undetermined.**Site Status:** Undetermined**Workings/exploration:****Production notes:****Reserves:****Additional comments:****References:**

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): H.C. Berg (U.S. Geological Survey)

Last report date: 10/16/2004

Site name(s): Unnamed (South Arm, Kelp Bay)**Site type:** Occurrence**ARDF no.:** SI156**Latitude:** 57.2747**Quadrangle:** SI B-4**Longitude:** 135.0154**Location description and accuracy:**

This occurrence is at sea level on the west side of the South Arm of Kelp Bay, about 1.3 miles from the head of the bay. The occurrence is 0.5 mile south-southeast of the northwest corner of sec. 13, T. 53 S., R. 65 E. It is location P-103 of Bittenbender and others (1999), location 63 of Cobb (1972, 1978), and MAS no. 0021140190 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au, Cu, Zn**Other:****Ore minerals:** Bornite, chalcopyrite, covellite, pyrite, pyrrhotite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of this occurrence are part of the Jurassic and/or Triassic, Kelp Bay Group which consists of phyllite, quartzite greenschist, greenstone, graywacke, and semischist. (Loney and others, 1975). Loney and others (1963) noted pyrite, chalcopyrite, covellite, and bornite in quartz veins and iron-stained siliceous rocks in this area. Bittenbender and others (1999) collected two samples here: 1) mudstone and tuff with 5 percent pyrite and pyrrhotite, and 2) altered metavolcanic rock with minor chalcopyrite and pyrite. The samples contained less than 5 parts per billion gold, 128 and 485 parts per million (ppm) copper, and 164 and 310 ppm zinc; all of the other common metallic elements were at background level.

Alteration:

Unspecified alteration of metavolcanic rocks.

Age of mineralization:

Triassic or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Apparently only surface sampling by government geologists.

Production notes:**Reserves:**

Additional comments:

References:

Loney and others, 1963; Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999;
U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (southwest shore of Portage Arm)**Site type:** Occurrence**ARDF no.:** SI157**Latitude:** 57.3526**Quadrangle:** SI B-3**Longitude:** 134.9397**Location description and accuracy:**

This occurrence on northeast Baranof Island is at sea level on the southwest shore of Portage Arm. The occurrence is 0.2 mile northeast of the center of sec. 23, T. 52 S., R. 65 E. It is location 60 of Cobb (1972, 1978). Several of the old publications include this with the Brown prospect which is on Admiralty Island some distance away (SI163). The location probably is accurate within 0.2 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Bornite, chalcopyrite, covellite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of this occurrence are part of the Jurassic and/or Triassic, Kelp Bay Group which consists of phyllite, quartzite greenschist, greenstone, graywacke, and semischist. (Loney and others, 1975). There is little information on this occurrence other than that it consists of quartz veins and siliceous rocks that contain chalcopyrite, covellite, and bornite. (Loney and others, 1963).

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Only limited surface sampling by government geologists.

Production notes:**Reserves:****Additional comments:****References:**

Loney and others, 1963; Loney and others, 1975; Cobb, 1972; Cobb, 1978.

Primary reference: Loney and others, 1963

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (Middle Arm Kelp Bay)**Site type:** Occurrence**ARDF no.:** SI158**Latitude:** 57.3319**Quadrangle:** SI B-3**Longitude:** 134.9942**Location description and accuracy:**

This occurrence is at an elevation of about 100 feet on the south shore of the Middle Arm of Kelp Bay. The occurrence is 0.2 mile west of the center of sec. 28, T. 52 S., R. 65 E. It is location P-99 of Bittenbender and others (1999), location 62 of Cobb (1972, 1978), and MAS no. 0021140188 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:****Other:****Ore minerals:** Bornite, chalcopyrite, covellite, pyrite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of this occurrence are part of the Jurassic and/or Triassic, Kelp Bay Group which consists of phyllite, quartzite greenschist, greenstone, graywacke, and semischist. (Loney and others, 1975). Loney and others (1963) noted pyrite, chalcopyrite, covellite, and bornite in quartz veins and iron-stained siliceous rocks in this area. Bittenbender and others (1999) sampled a quartz veinlet with minor pyrite and a trace of chalcopyrite. The samples had low metal values; the only elements of note were from less than 5 to 10 parts per billion gold and up to 192 parts per million copper.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rock.

Deposit model:

Quartz veins with copper minerals in low-grade metamorphic rocks.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Apparently only limited surface sampling by government geologists.

Production notes:**Reserves:**

Additional comments:

References:

Loney and others, 1963; Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999;
U.S. Bureau of Land Management, 2002.

Primary reference: Loney and others, 1963

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (northeast shore of Portage Arm)**Site type:** Occurrence**ARDF no.:** SI159**Latitude:** 57.3423**Quadrangle:** SI B-3**Longitude:** 134.9043**Location description and accuracy:**

This occurrence on Catherine Island is at sea level on the northeast shore of Portage Arm, about a mile north of Portage Point. The occurrence is 0.4 mile south-southeast of the center of sec. 21, T. 52 S., R. 65 E. It is location P-100 of Bittenbender and others (1999), location 61 of Cobb (1972, 1978), and MAS no. 0021140050 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Bornite, chalcopyrite, covellite, pyrite, pyrrhotite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of this occurrence are part of the Jurassic and/or Triassic, Kelp Bay Group which consists of phyllite, quartzite, greenschist, greenstone, graywacke, and semischist. (Loney and others, 1975). The rocks in this area are marked by the development of an intense cataclastic foliation. Loney and others (1963) noted pyrite, chalcopyrite, covellite, and bornite in quartz veins and iron-stained siliceous rocks in this area. Bittenbender and others (1999) collected 4 samples along several miles of shoreline of quartz and quartz veins with up to 1-2 percent chalcopyrite and 10 percent pyrite and pyrrhotite. Gold was below 5 parts per billion in all the samples and the highest copper value was 1,810 parts per million; all of the other metallic elements were at background level.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rocks.

Deposit model:

Quartz veins with copper minerals.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Apparently only surface sampling by government geologists.

Production notes:

Reserves:

Additional comments:

References:

Loney and others, 1963; Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999;
U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Lost Anchor**Site type:** Occurrence**ARDF no.:** SI160**Latitude:** 57.3158**Quadrangle:** SI B-3**Longitude:** 134.8550**Location description and accuracy:**

This occurrence is at sea level on the southwest shore of Catherine Island, about 1.8 miles north-northwest of North Point. The occurrence is 0.7 mile south-southwest of the northeast corner of sec. 32, T. 52 S., R. 66 E. It is location P-101 of Bittenbender and others (1999) and MAS no. 0021140153 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Chalcopyrite, pyrite, pyrrhotite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of this occurrence are part of the Jurassic and/or Triassic, Kelp Bay Group which consists of phyllite, quartzite, greenschist, greenstone, graywacke, and semischist. (Loney and others, 1975). The rocks in this area are marked by the development of an intense cataclastic foliation. Bittenbender and others (1999) collected 5 samples along the shoreline of quartz veins that contain rare chalcopyrite, pyrite, and up to 2 percent pyrrhotite. The samples contained less than 5 parts per billion gold and up to 4,060 parts per million copper; all other of the common metallic elements were at background level.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rock.

Deposit model:

Quartz vein with copper minerals.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Apparently only sampling by government geologists.

Production notes:**Reserves:**

Additional comments:**References:**

Loney and others, 1963; Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999;
U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (Pond Island)**Site type:** Occurrence**ARDF no.:** SI161**Latitude:** 57.2704**Quadrangle:** SI B-3**Longitude:** 134.8964**Location description and accuracy:**

This occurrence is at sea level on the southwest end of Pond Island on the east side of 'The Basin' of Kelp Bay. The occurrence is 0.4 mile west-northwest of the center of sec. 15, T. 53 S., R. 66 E. It is location P-102 of Bittenbender and others (1999), location 64 of Cobb (1972, 1978), and MAS no. 0021140189 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.2 mile.

Commodities:**Main:** Cu**Other:****Ore minerals:** Bornite, chalcopyrite, covellite, pyrite, pyrrhotite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of this occurrence are part of the Jurassic and/or Triassic, Kelp Bay Group which consists of phyllite, quartzite, greenschist, greenstone, graywacke, and semischist. (Loney and others, 1975). Loney and others (1963) noted pyrite, chalcopyrite, covellite, and bornite in quartz veins and iron-stained siliceous rocks in this area. Bittenbender and others (1999) collected 3 samples of: 1) quartz veins in siliceous greenschist; 2) siliceous metavolcanic rocks with 1 percent pyrite; and 3) mudstone and tuff with up to 5 percent pyrite and pyrrhotite. Gold values were all less than 5 parts per billion and the highest copper value was 230 parts per million; all of the other common metallic elements were at background level.

Alteration:

Alteration noted but no details.

Age of mineralization:

Triassic or younger based on the age of the host rock.

Deposit model:

Quartz veins with copper minerals.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Apparently only surface sampling by government geologists.

Production notes:

Reserves:

Additional comments:

References:

Loney and others, 1963; Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999;
U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (on Hood Bay)**Site type:** Prospect(?)**ARDF no.:** SI162**Latitude:** 57.3690**Quadrangle:** SI B-2**Longitude:** 134.4588**Location description and accuracy:**

This prospect (?) on western Admiralty Island is at sea level on the south shore of Hood Bay, opposite Cabin Point. The prospect is 0.4 mile north-northwest of the center of sec. 14, T. 52 S., R. 68 E. It is MAS no. 0021140166 under the name 'Miller-Hall' (U.S. Bureau of Land Management, 2002). The location probably is accurate within a mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Devonian, Gambier Bay Formation which here consists mainly of schist and phyllite (Lathram and others, 1965). The only information on this prospect is that a claim was staked here for lode gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Devonian or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

The only information on this prospect is that a lode claim was staked here for gold.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness Area of the Admiralty Island National Monument that is closed to mineral exploration and development.

References:

Lathram and others, 1965; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Brown**Site type:** Prospect**ARDF no.:** SI163**Latitude:** 57.4907**Quadrangle:** SI B-1**Longitude:** 134.1190**Location description and accuracy:**

The Brown prospect is at an elevation of about 1,000 feet, about 1.7 miles north of the southwest arm of Gambier Bay. The prospect is 0.4 mile southwest of the center of sec. 36, T. 50 S., R. 70 E. It is location 71 of Cobb (1972, 1978) and MAS no. 0021140035 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.5 mile.

Commodities:**Main:** Au, Cu**Other:****Ore minerals:** Chalcopyrite, pyrite**Gangue minerals:** Quartz**Geologic description:**

The Brown prospect is near the contact of a thick Devonian marble unit within greenschist, phyllite, and metachert of the Devonian Gambier Bay Formation (Loney, 1964). The prospect has been mentioned several times over the years but apparently the only definitive descriptions are by Wright and Wright (1905) and Wright (1906). They describe the deposit as a 'ledge'--a vein probably--that was exposed for more than 200 feet in open cuts. The host rock is mostly calcareous schist and the deposit is in brecciated limestone that is replaced by quartz with small masses of pyrite and chalcopyrite. Samples had low values in copper and gold. Apparently there has been little work on the prospect since the early part of the 20th century and Wright and Wright (1905) noted that it had not been active for several years before 1904.

Alteration:**Age of mineralization:**

Devonian or younger based on the age of the host rock.

Deposit model:

Limestone replaced by quartz with low copper and gold values.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Inactive**Workings/exploration:**

The deposit was explored before 1904 by several trenches.

Production notes:

Reserves:**Additional comments:**

The prospect is now within the Wilderness Area of the Admiralty Island National Monument that is closed to mineral exploration and development.

References:

Wright and Wright, 1905; Wright, 1906; Lathram and others, 1960; Herbert and Race, 1964; Herbert and Race, 1965; Berg and Cobb, 1967; Race and Rose, 1967; Loney, 1964; U.S. Bureau of Land Management, 2002.

Primary reference: Wright, 1906

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): HP**Site type:** Prospect**ARDF no.:** SI164**Latitude:** 57.3998**Quadrangle:** SI B-1**Longitude:** 134.2413**Location description and accuracy:**

The HP prospect is at an elevation of about 1,700 feet, about 1.7 miles northwest of the head of Pybus Bay. The site is 0.4 mile north of the center of sec. 6, T. 52 S., R. 70 E. It is MAS no. 0021140195 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.25 mile.

Commodities:**Main:** Cu, Zn**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of the HP prospect are part of the Devonian, Hood Bay Formation which consists of carbonaceous chert, argillite, graywacke, limestone, and minor basic volcanic rocks (Loney, 1964). The only information about the prospect is that it was discovered in 1972 and staked for copper and zinc by WGM, Inc. (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Devonian or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Staked for copper and zinc in 1972.

Production notes:**Reserves:****Additional comments:**

The prospect is now within the Wilderness Area of the Admiralty Island National Monument that is closed to mineral exploration and development.

References:

Loney, 1964; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Krestof**Site type:** Prospect**ARDF no.:** SI165**Latitude:** 57.2098**Quadrangle:** SI A-5**Longitude:** 135.5478**Location description and accuracy:**

The Krestof prospect is at sea level on the northwest coast of Krestof Island, about a mile south of the Sound Islands. The prospect is at the southeast corner of sec. 3, T. 54 S., R. 62 E. It is location P-107 of Bittenbender and others (1999) and MAS no. 0021140052 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au**Other:** As**Ore minerals:** Arsenopyrite, gold, pyrite**Gangue minerals:** Calcite or dolomite, quartz, sericite**Geologic description:**

The Krestof prospect was discovered in 1937 from gold-bearing float along the beach. It was optioned to the Hirst-Chicagof Mining Company who brought a small diamond-drill to the property and drilled a few holes in 1938 (Roehm, 1938 [PE 114-12]; Smith, 1939 [B 910-A]; Smith, 1939 [B 917-A]). The results of the drilling were not encouraging and the property was dropped by 1939. Apparently there has been no work on the property since.

The rocks in the vicinity are part of the Jurassic and Cretaceous, Sitka Graywacke which is mainly graywacke and argillite that in this area has been hornfelsed by a nearby Tertiary granodiorite intrusion to the south (Loney and others, 1975). The rocks generally strike N45W and dip 60-70NE.

The deposit consists of three showings about 1,500 feet apart (Roehm, 1938 [PE 114-12]). One showing consists of three quartz veins No 1 vein is exposed for 80 feet and passes into water at both ends. It strikes N60E, dips 60SE, and is 4 to 6 inches thick. No 2 vein is exposed in a trench for 50 feet. It strikes N55E, dips 70NW, and is 6 to 8 inches thick. No. 3 vein is exposed for 35 feet; it strikes N83E and dips nearly vertically. At another showing, a small banded quartz vein up to 7 inches thick is exposed for 300 feet in five trenches. Numerous quartz boulders also occur along the beach nearby and there are several exposures of quartz stringers that are exposed in graywacke and argillite along the beach. All of the veins consist mainly of slightly-banded, white milky quartz with minor amounts of calcite or dolomite, sericite, and altered pieces of wallrock. The veins commonly contain small amounts of arsenopyrite, pyrite, and visible gold. Roehm (1938 [PE 114-12]) collected 3 samples 6 to 8 inches long across the veins. they contained nil to 0.03 ounce of gold per ton and nil silver.

Bittenbender and others (1999) collected 3 samples of quartz vein material and sheared graywacke; one had 1 percent arsenopyrite. The samples contained 45 to 8,050 parts per billion gold.

Alteration:

The wallrocks are at least locally altered.

Age of mineralization:

Jurassic or younger based on the age of the host rock.

Deposit model:

Low-sulfide gold-quartz veins (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: None

Site Status: Undetermined

Workings/exploration:

The veins were explored by several trenches and a few holes were diamond drilled in 1938.

Production notes:**Reserves:****Additional comments:****References:**

Roehm, 1938 (PE 114-12); Smith, 1939 (B 910-A); Smith, 1939 (B 917-A); Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Roehm, 1938 (PE 114-12)

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (southwest coast of Halleck Island)**Site type:** Prospect**ARDF no.:** SI166**Latitude:** 57.1924**Quadrangle:** SI A-5**Longitude:** 135.4634**Location description and accuracy:**

This prospect is at sea level on the southwest coast of Halleck Island, about 0.9 mile northwest of Krugloi Point. The prospect is 0.4 mile north-northwest of the center of sec. 18, T. 54 S., R. 63 E. It is location P-109 of Bittenbender and others (1999) and MAS no. 0021140152 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Gold, pyrite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of this prospect are Jurassic and Cretaceous, black slate and graywacke, with greenstone and chert bands (Roehm, 1938 [PE 114-10]; Loney and others, 1975). The rocks are locally altered to amphibolite or greenschist with minor phyllite and schist, and often have an intense cataclastic foliation.

This prospect was discovered a few years before 1938 and in 1936, the property was restaked and held by the Baranof Mining Company. The original discovery was said to be a quartz showing 6 feet long and 2 feet wide with visible gold (Roehm, 1938 [PE 114-10]). In 1938, there was considerable activity on the property and 5 men were employed. The machinery included a compressor powered by a gas engine, a hoist, and a jackhammer. The camp consisted of a compressor house, an oil house, a blacksmith shop, a dock house on a scow, a powder house and a bunk house. There is little indication of exploration work after 1939.

The early work was a rock cut 30 feet in length on the original quartz showing that proved to be only a 'small bunch of quartz'. At the time of Roehm's visit in 1938, only a few small quartz veinlets were exposed along a fault zone. The only sulfide in the quartz was sparse pyrite. A tunnel was being driven along the fault zone. Later information indicated that it was driven 66 feet and an 80 foot shaft was being sunk. Only scattered quartz veinlets were cut in the tunnel. A sample 2 feet long with quartz stringers was collected in the tunnel; it had nil gold. Roehm also collected a 54-inch sample across the fault zone that had small quartz veinlets in mineralized slate; it contained 0.02 ounce of gold per ton and nil silver.

Bittenbender and others (1999) collected seven samples of quartz with sheared graywacke; several of the quartz samples had minor pyrite. They contained less than 5 to 295 parts per billion gold, less than 0.2 parts per million silver, and background values of other metals.

Alteration:**Age of mineralization:**

Jurassic or younger based on the age of the host rock.

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: None

Site Status: Undetermined

Workings/exploration:

Apparently there was little work except from 1937 to 1939 when a substantial camp was on the property. Several trenches were dug, an adit was driven 66 feet, and a shaft was sunk 80 feet.

Production notes:

Probably none.

Reserves:

Additional comments:

References:

Roehm, 1938 (PE 114-10); Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Roehm, 1938 (PE 114-10)

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Cedar**Site type:** Prospect**ARDF no.:** SI167**Latitude:** 57.1995**Quadrangle:** SI A-5**Longitude:** 135.3492**Location description and accuracy:**

The Cedar prospect is at an elevation of about 500 feet, about a mile north of Cedar Cove on Katlian Bay. The prospect is 0.2 mile south-southeast of the center of sec. 11, T. 54 S., R. 63 E. It is MAS no. 0021140048 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.2 mile.

Commodities:**Main:****Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of the Cedar prospect are Triassic and/or Jurassic schist, gneiss, amphibolite and greenschist characterized by intense cataclasis (Loney and other, 1975). The only information about the prospect is that at least one claim was staked by WGM Inc. (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

The only information about the prospect is that at least one claim was staked by WGM Inc.

Production notes:**Reserves:****Additional comments:****References:**

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (Magoun Islands)**Site type:** Occurrence**ARDF no.:** SI168**Latitude:** 57.1659**Quadrangle:** SI A-5**Longitude:** 135.5787**Location description and accuracy:**

The location of this occurrence is only known approximately; it is at sea level on the westernmost of the Magoun Islands in Krestof Sound. For this record, the site is plotted at the southeast corner of sec. 20, T. 54 S., R. 62 E. It is location P-108 of Bittenbender and others (1999), location 50 of Cobb (1972, 1978), and MAS no. 0021140059 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.5 mile.

Commodities:**Main:** Au, Cu, Mo**Other:****Ore minerals:** Chalcopyrite, molybdenite, pyrite**Gangue minerals:****Geologic description:**

The rocks on the Magoun Islands are part of a Tertiary intrusive stock that consists mainly of hornblende-biotite tonalite with subordinate biotite tonalite and hornblende-biotite granodiorite (Loney and others, 1975). As described by Smith (1942 [B 926-C]) the deposit consists of quartz veinlets up to 6 inches thick in the tonalite. The veinlets contain sparse chalcopyrite and pyrite, and near the walls of the veinlets, plates of molybdenite up to 1/2 inch in diameter. Bittenbender and others (1999) collected 7 samples of quartz veinlets in tonalite, with various combinations of up to 3 percent molybdenite, pyrite, and chalcopyrite. The samples contained from less than 5 to 125 parts per billion gold, 52 parts per million (ppm) to 1 percent copper, and up to 800 ppm molybdenum. There is no indication of exploration beyond surface sampling.

Alteration:**Age of mineralization:**

Tertiary or younger based on the age of the host rock.

Deposit model:

Porphyry copper-molybdenum deposit?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Inactive**Workings/exploration:**

Apparently only surface sampling.

Production notes:

Reserves:

Additional comments:

The Magoun Islands have now been set aside as the Magoun State Marine Park.

References:

Smith, 1942 (B 926-C); Berg and Cobb, 1967; Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Smith, 1942 (B 926-C)

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (Siginaka Islands)**Site type:** Occurrence**ARDF no.:** SI169**Latitude:** 57.1675**Quadrangle:** SI A-5**Longitude:** 135.4480**Location description and accuracy:**

This occurrence is at sea level at the north end of the northernmost of the Siginaka Islands in Sitka Sound. The occurrence is near the southeast corner of sec. 19, T. 54 S., R. 63 E. It is location P-110 of Bittenbender and others, (1999), location 51 of Cobb (1972, 1978), and MAS no. 0021140198 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Jurassic and/or Triassic, Kelp Bay Group which is a heterogeneous unit composed of phyllite, quartzite, greenschist, greenstone, graywacke, and semischist (Loney and others, 1975). The rocks are characterized by intense cataclasis. The only information on this prospect is that a lode claim was staked for gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

The only evidence of workings is that a claim was staked here.

Production notes:**Reserves:****Additional comments:****References:**

Loney and others, 1975; Cobb, 1972; Cobb, 1978; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (Starrigavan Bay)**Site type:** Occurrence**ARDF no.:** SI170**Latitude:** 57.1420**Quadrangle:** SI A-5**Longitude:** 135.3702**Location description and accuracy:**

The location of this occurrence is only known approximately. It is at sea level in an unnamed small cove just north of Starrigavan Bay. For this record, the site is plotted in sec. 34, T. 54 S., R. 63 E. It is MAS no. 0021140156 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Jurassic and/or Triassic, Kelp Bay Group, which consists of phyllite, quartzite, greenschist, greenstone, graywacke, and semischist (Loney and others, 1975). The rocks are characterized by intense cataclasis. The only information on this prospect is that a lode claim for gold was staked here (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

The only information on this prospect is that a claim was staked here.

Production notes:**Reserves:****Additional comments:****References:**

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Groundhog**Site type:** Prospect(?)**ARDF no.:** SI171**Latitude:** 57.1256**Quadrangle:** SI A-5**Longitude:** 135.3762**Location description and accuracy:**

The location of this prospect(?) is known only approximately to be at an elevation of about 100 feet, 0.6 mile east of Harbor Point and south of Starrigavan Bay. For this record, it is plotted 0.5 mile west-northwest of the southeast corner of sec. 3, T. 55 S., R. 63 E. It is MAS no. 0021140192 (U.S. Bureau of Land Management, 2002).

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

This prospect may be on either side of a major northwest-striking fault that separates rocks of the Triassic or Jurassic, Khaz Formation to the east from rocks of the Jurassic and Cretaceous, Sitka Graywacke to the west (Loney and others, 1975). The Khaz Formation is a heterogeneous unit that consists of greenstone, graywacke, greenschist, metachert, phyllite, and minor limestone. The Sitka Graywacke consists mainly of graywacke and argillite. The only information about this prospect is that a lode claim for gold was staked there (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

The only evidence of workings is that a claim was staked here.

Production notes:**Reserves:****Additional comments:**

This prospect is now within the city of Sitka on private land.

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (Eagle Point)**Site type:** Occurrence(?)**ARDF no.:** SI172**Latitude:** 57.1101**Quadrangle:** SI A-5**Longitude:** 135.3938**Location description and accuracy:**

This occurrence(?) is at an elevation of about 100 feet on the east side of Halibut Point Road, about mid-way between Halibut Point and Harbor Point. The site is 0.2 mile north-northwest of the southeast corner of sec. 9, T. 55 S., R. 63 E. It is MAS no. 0021140157 (U.S. Bureau of Land Management, 2002). The location probably is accurate within 0.5 mile.

Commodities:**Main:** Au, Fe**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Jurassic and Cretaceous, Sitka Graywacke, which consists mainly of graywacke and argillite (Loney and others, 1975) The only information about this prospect is that a lode claim was staked for gold and iron.

Alteration:**Age of mineralization:**

Jurassic or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

The only information about this prospect is that a claim was staked here for gold and iron.

Production notes:**Reserves:****Additional comments:**

This prospect is now within the city of Sitka on private land.

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Arkie**Site type:** Prospect(?)**ARDF no.:** SI173**Latitude:** 57.1043**Quadrangle:** SI A-5**Longitude:** 135.3979**Location description and accuracy:**

The Arkie prospect(?) is at an elevation of about 50 feet on the east side of Halibut Point Road, about 0.4 mile north of Halibut Point. The prospect is in the NE1/4 sec. 16, T. 55 S., R. 63 E. It is MAS no. 0021140158 (U.S. Bureau of Land Management, 2002). The location probably is accurate within about 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Jurassic and Cretaceous, Sitka Graywacke, which consists mainly of graywacke and argillite (Loney and others, 1975) The only information about this prospect is that a lode claim was staked for gold (U.S. Bureau of Land Management, 2002).

Alteration:**Age of mineralization:**

Jurassic or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

The only information about this prospect is that a lode claim was staked for gold.

Production notes:**Reserves:****Additional comments:**

This prospect is now within the city of Sitka on private land.

References:

Loney and others, 1975; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (west of upper Indian River)**Site type:** Occurrence**ARDF no.:** SI174**Latitude:** 57.0999**Quadrangle:** SI A-4**Longitude:** 135.3005**Location description and accuracy:**

This occurrence is at an elevation of about 2,400 feet on the ridge west of upper Indian River, about 0.8 mile northeast of hill 2505. The occurrence is 0.1 mile southwest of the center of sec. 18, T. 55 S., R.64 E. It is location P-111 of Bittenbender and others (1999); location 53 of Cobb (1972, 1978); and MAS no. 0021140001 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Cr, Fe, Ni**Other:****Ore minerals:** Chromite, magnetite**Gangue minerals:** Serpentine**Geologic description:**

This occurrence consists of magnetite and chromite in serpentine. Loney and others (1963, 1975) map this small Mesozoic serpentinite body (sliver?) in rocks of the Jurassic and Triassic, Kelp Bay Group which consists of phyllite, greenschist, greenstone, graywacke, and semischist that has been cataclastically deformed. There is no indication that the magnetite and chromite are other than normal trace minerals in the serpentine. Spectrographic analysis indicates a small amount of nickel in the samples but probably no more than the expected level of background in serpentine.

Alteration:**Age of mineralization:**

The magnetite and chromite was probably contemporaneous with the solidification of the ultramafic rock that was altered to serpentine in the Mesozoic.

Deposit model:

Minor magnetite and chromite in serpentine.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Only surface sampling.

Production notes:**Reserves:**

Additional comments:

References:

Loney and others, 1963; Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999;
U.S. Bureau of Land Management, 2002.

Primary reference: Loney and others, 1963

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Cascade**Site type:** Prospect**ARDF no.:** SI175**Latitude:** 57.0732**Quadrangle:** SI A-4**Longitude:** 135.2679**Location description and accuracy:**

The Cascade prospect is at an elevation of about 1,000 feet on the ridge just southwest of Billy Basin. The prospect is 0.2 mile northeast of the center of sec. 29, T. 55 S., R. 64 E. It is location P-114 of Bittenbender and others (1999); location 54 of Cobb (1972, 1978); and MAS no. 0021140021 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** As, Au?, Cu, Fe**Other:****Ore minerals:** Arsenopyrite, chalcopyrite, pyrrhotite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of the Cascade prospect consist of Jurassic and Triassic, amphibolite and greenschist surrounded by rocks of the Jurassic and Triassic, Khaz Formation which consists of graywacke, greenschist, metachert, phyllite, and minor limestone (Loney and others, 1975).

As originally described by Knopf (1912), the Cascade prospect consists of shattered quartzite cemented by quartz veinlets with pyrrhotite, arsenopyrite, and rare chalcopyrite. Cobb (1978) infers gold in the deposit. There has apparently been little work on the deposit since before 1912 and while Bittenbender and other (1999) show the prospect on a location map, they do not mention it otherwise.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rocks.

Deposit model:

Shattered quartzite with pyrrhotite, arsenopyrite, and chalcopyrite.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Apparently only surface sampling.

Production notes:**Reserves:**

Additional comments:

References:

Knopf, 1912; Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Knopf, 1912

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Bullion**Site type:** Prospect**ARDF no.:** SI176**Latitude:** 57.0719**Quadrangle:** SI A-4**Longitude:** 135.2573**Location description and accuracy:**

The location of the old Bullion prospect is obscure. The few early, passing references to it place it in Billy Basin (Wright and Wright, 1905; Knopf, 1912), a well known geographic feature mentioned by Becker in 1898 (although he called it 'Bilys Basin'). Billy Basin is about 3 miles northeast of the center of the Sitka National Monument just outside Sitka. For this record, this prospect is somewhat arbitrarily placed in the middle of Billy Basin (as shown on the modern U.S.G.S. topographic maps) at an elevation of about 750 feet. This location is about 0.5 mile west of the center of section 28, T. 55 S., R. 64 E. However, the queried coordinates in Cobb (1972, 1978) place it about 7 miles to the southeast of Billy Basin near Medvejie Lake. The coordinates of the MAS record (U.S. Bureau of Land Management, 2002) put it at an even more unlikely location south of the head of Leesoffskaia Bay, far distant from any known mineral deposit, and with a locational uncertainty of more than 6 miles (which could put it in Billy Basin).

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Little is known about the Bullion prospect; it was only mentioned in passing by Wright and Wright (1905) as a gold prospect and that statement was quoted in Knopf (1912). Wright and Wright mention only that no work had been done on it as of 1904. In view of the uncertainty of its location, little can be said about the host rocks at this prospect. The only other references to it are the U.S. Bureau of Land Management MAS file (2002) that notes only that there was gold lode claim on it, and a table in Bittenbender and others (1999), who indicate it was active in 1900.

Alteration:**Age of mineralization:****Deposit model:****Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

A claim was staked about 1900.

Production notes:

Reserves:

Additional comments:

References:

Becker, 1898; Wright and Wright, 1905; Knopf, 1912; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Wright and Wright, 1905

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Thetis**Site type:** Prospects**ARDF no.:** SI177**Latitude:** 57.0686**Quadrangle:** SI A-4**Longitude:** 135.2536**Location description and accuracy:**

There may be several old workings in the vicinity and the location used here is an adit that was found by Bittenbender and others (1999) The Thetis prospect is at an elevation of about 850 feet, about 0.7 mile north-northeast of Mount Verstovia in the NW1/4SW1/4 sec. 28, T. 55 S., R. 64 E. The prospect is location P-115 of Bittenbender and others (1999), location 55 of Cobb (1972, 1978), and MAS no. 0021140016 (U.S. Bureau of Land Management, 2002). The location is probably accurate but Cobb (1972, 1978) places it about a mile to the northeast based on a 1898 map by Becker that is probably more diagrammatic than precise.

Commodities:**Main:** Au, Pb**Other:****Ore minerals:** Galena, pyrite, pyrrhotite**Gangue minerals:** Calcite, quartz**Geologic description:**

The Thesis prospect was located in 1888 (DeArmond 1997). By 1898, the prospect had been developed by two adits, a sawmill, and 2 prospecting mills (Becker, 1898). He described the deposit as a reticulated quartz vein 2 1/2 feet thick with calcite, pyrrhotite, and galena. A mill test of the ore indicated that it contained about \$7 in gold (about 0.35 ounce of gold per ton) and \$1 in silver. Becker described the host rock as schistose diorite. But modern mapping by Loney and others (1975) assign the rocks to the Jurassic and Triassic, Khaz Formation which consists of graywacke, greenschist, metachert, phyllite, and minor limestone--all cataclastically deformed. Bittenbender and others (1999) located and sampled a 30-foot adit here that cut a quartz vein less than a foot thick, and several thin quartz veinlets The gold values in 4 samples were below the detection limit.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rock.

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: None**Site Status:** Probably inactive

Workings/exploration:

In 1898, the workings consists of two adits, a sawmill, and two prospecting mills. One 30-foot adit was located by Bittenbender and others (1999).

Production notes:

Apparently none.

Reserves:**Additional comments:****References:**

Becker, 1898; Cobb, 1972; Loney and others, 1975; Cobb, 1978; DeArmond, 1997; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (east of Arrowhead Peak)**Site type:** Occurrence**ARDF no.:** SI178**Latitude:** 57.0691**Quadrangle:** SI A-4**Longitude:** 135.2069**Location description and accuracy:**

This occurrence is near elevation 2245 at the east end of the east spur of Arrowhead Peak. The occurrence is in the NE1/4SE1/4 sec. 27, T. 55 S., R. 64 E. It location 56 of Cobb (1972, 1978). The location probably is accurate within about 0.2 mile.

Commodities:**Main:** Cr, Fe**Other:****Ore minerals:** Chromite, magnetite**Gangue minerals:** Serpentine**Geologic description:**

This occurrence is near the contact of two similar units of Jurassic and Triassic age (Loney and others, 1975). The Khaz Formation consists of graywacke, greenschist, metachert, phyllite, and minor limestone. The Kelp Bay Group consists of quartzite, greenschist, greenstone, graywacke and semischist, all of which are subject to intense cataclasis.

The occurrence consists of magnetite and chromite in serpentine, which probably are small fault blocks or slivers (Loney and others, 1963). The serpentinite body is too small to be shown on the geologic map of Loney and other (1975). There is no indication that the occurrence is any more than accessory minerals in a small serpentinite body. Samples of diabase or greenstone collected by Loney and others (1963) show small amounts of chromium, nickel, copper, cobalt, and zinc that are little if any above normal background in these types of rocks.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the rocks in the area.

Deposit model:

Accessory magnetite and chromite in serpentine.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

Only surface sampling.

Production notes:

Reserves:

Additional comments:

References:

Loney and others, 1963; Cobb, 1972; Cobb, 1978.

Primary reference: Loney and others, 1963

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Pande Basin**Site type:** Prospect**ARDF no.:** SI179**Latitude:** 57.0963**Quadrangle:** SI A-4**Longitude:** 135.0758**Location description and accuracy:**

This placer prospect is at the outlet of Glacier Lake, in sec. 16, T. 55 S., R. 65 E. It is location P-112 of Bittenbender and others (1999) and MAS no. 0021140159 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Au?**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this placer prospect are part of the Jurassic and Triassic, Kelp Bay Group which consists of quartzite, greenschist, greenstone, graywacke and semischist, all of which are subject to intense cataclasis. There was an early placer claim located by the Pandee Basin Gold Mining Company (Knopf, 1912; U.S. Bureau of Land Management, 2002). Bittenbender and others (1999) only note that there is no evidence of gold bearing gravels here.

Alteration:**Age of mineralization:**

Quaternary.

Deposit model:

Placer Au? (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: None**Site Status:** Undetermined**Workings/exploration:**

An early placer claim was located here but there is no evidence of actual mining.

Production notes:**Reserves:****Additional comments:**

References:

Knopf, 1912; Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Knopf, 1912

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Boston**Site type:** Prospect**ARDF no.:** SI180**Latitude:** 57.0446**Quadrangle:** SI A-4**Longitude:** 135.2400**Location description and accuracy:**

Bittenbender and others (1999, fig. 12) and the US Bureau of Land Management (2002; MAS no. 0021140018) locate the Boston claim at an elevation of about 500 feet in the SW1/4NE1/4 sec. 4, T. 56 S., R. 64 E. Cobb (1972, 1978) locates it at an elevation of about 100 feet about 0.8 mile to the southwest, in the NW1/4 sec. 9, same township and range. For this record, the site is plotted at the location of Bittenbender and others and U.S. Bureau of Land Management.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of the Boston prospect are part of the Cretaceous Sitka Graywacke which consists mainly of graywacke and argillite (Loney and others, 1975). Little is known about the Boston prospect other than that a claim was staked here and some samples contained a trace amount of gold (Wright and Wright, 1905; Knopf, 1912, Nelson, 1931). It was not found by Bittenbender and others (1999).

Alteration:**Age of mineralization:**

Cretaceous or younger based on the age of the host rock.

Deposit model:

A gold-quartz vein?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Little is known other than that a claim was staked here before 1905. There is no indication of recent work.

Production notes:**Reserves:**

Additional comments:**References:**

Wright and Wright, 1905; Knopf, 1912; Nelson, 1931; Cobb, 1972; Cobb, 1978; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Haley and Hanlon**Site type:** Prospect**ARDF no.:** SI181**Latitude:** 57.0406**Quadrangle:** SI A-4**Longitude:** 135.1956**Location description and accuracy:**

Bittenbender and others (1999; location P-117) and Cobb (1972; 1978, location 58) locate the Haley and Hanlon prospect at an elevation of about 450 feet just east of Herring Cove, in the NW1/4SW1/4 sec. 2, T. 56 S., R. 64 E. The US Bureau of Land Management (2002, MAS no. 0021140042) locates the prospect at an elevation of about 850 feet about a mile to the northeast. This site is plotted at the location of Bittenbender and others and Cobb, the more likely of the two. The location is probably accurate to within 0.5 mile.

Commodities:**Main:** Co, Cu, Ni**Other:****Ore minerals:** Chalcopyrite, pyrrhotite**Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of the Jurassic and Triassic, Khaz Formation which consists of graywacke, greenschist, metachert, phyllite, and minor limestone (Loney and others, 1975). This prospect consists of a 15-foot adit driven along a fault in hornblendite (Kennedy and Walton, 1946 [B947-C], B 947-D]) Hornblendite is not typical of the Khaz Formation and Loney and others (1975) do not map any hornblendite in this area. Masses of pyrite with minor chalcopyrite occur in the fault in the adit; the largest such mass is 10 inches wide and 2 to 3 feet long. A sample contained 0.99 percent copper, 0.20 percent nickel, and 0.09 percent cobalt. The prospect was not found by Bittenbender and others (1999).

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rocks.

Deposit model:

Masses of pyrrhotite with chalcopyrite along a fault.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

A 15-foot adit was driven on the property prior to 1946.

Production notes:

Reserves:

Additional comments:

References:

Kennedy and Walton, 1946 (B 947-C); Kennedy and Walton, 1946 (B 947-D); Cobb, 1972; Loney and others, 1975; Cobb, 1978; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Kennedy and Walton, 1946

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Gangola**Site type:** Prospect**ARDF no.:** SI182**Latitude:** 57.0274**Quadrangle:** SI A-4**Longitude:** 135.1776**Location description and accuracy:**

The Gangola prospect is at an elevation of about 200 feet on the east side of Silver Bay, about midway between Herring Cove and Bear Cove. The prospect is 0.5 mile west of the center of sec. 12, T. 56 S., R. 64 E. It is location P-118 of Bittenbender and others (1999) and MAS no. 0021140160 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Au, Cu, W**Other:****Ore minerals:** Chalcopyrite, pyrrhotite, scheelite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of this prospect are part of the Jurassic and Triassic, Khaz Formation which consists of graywacke, greenschist, metachert, phyllite, and minor limestone (Loney and others, 1975). A prospector located a claim here in 1970 and dug several trenches. The deposit consists of three quartz veins up to 1.5 feet thick that are exposed for up to 15 feet; they strike N35-70E and dip steeply (U.S. Bureau of Mines, 1973). The veins contain scheelite, chalcopyrite and pyrrhotite (Bittenbender and others, 1999). The best sample of a vein was a 1.5-foot-long sample in a small cut that contained 80 parts per billion (ppb) gold, 375 parts per million (ppm) copper, and 380 ppm tungsten. A sample of sulfide-bearing greenstone on the side of a vein contained 570 ppm gold, 960 ppm copper, and 1,100 ppm tungsten. A hand-picked sample from a dump contained 85 ppb gold, 260 ppm copper, and 760 ppm tungsten.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rocks.

Deposit model:

Quartz vein with scheelite and chalcopyrite.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

Several short trenches on quartz veins.

Production notes:

Reserves:**Additional comments:****References:**

U.S. Bureau of Mines, 1973; Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Trepple H**Site type:** Prospect**ARDF no.:** SI183**Latitude:** 57.0194**Quadrangle:** SI A-4**Longitude:** 135.1601**Location description and accuracy:**

The Trepple H prospect is at an elevation of about 400 feet on the east side of Silver Bay, on an unnamed creek 0.3 mile north of the mouth of Bear Cove. The prospect is in the NE1/4 sec. 13, T. 56 S., R. 64 E. It is MAS no. 0021140161 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Ni**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this prospect are part of a Triassic and/or Jurassic unit that consists of biotite schist and gneiss with some amphibolite, quartzite, phyllite, and hornfels (Loney and others, 1975). The unit is a thermal aureole around a large Tertiary tonalite stock. Little is known about this prospect other than that it was staked for nickel (U.S. Bureau of Land Management, 2002). It is shown by name on a map in Bittenbender and others (1999) but is not listed or described in their report.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the host rocks.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

No information other than that a claim was staked here.

Production notes:**Reserves:****Additional comments:**

References:

Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Edgcumbe Exploration (Lode)**Site type:** Prospect**ARDF no.:** SI184**Latitude:** 57.0238**Quadrangle:** SI A-4**Longitude:** 135.1443**Location description and accuracy:**

This prospect is at an elevation of about 2,300 feet, about 0.5 mile southwest of the outlet of Bear Lake. The prospect is in the SW1/4 sec. 7, T. 56 S., R.65 E. It is MAS no. 0021140019 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

This prospect is near a Triassic and/or Jurassic unit that consists of biotite schist and gneiss, with some amphibolite, quartzite, phyllite and hornfels, that is in contact with a Tertiary stock that consists of hornblende-biotite tonalite with subordinate granodiorite (Loney and others, 1975) The only information about this prospect is that a lode claim was staked for gold here (U.S. Bureau of Land Management, 2002). It is shown on a map in Bittenbender and others (1999) but it is not described.

Alteration:**Age of mineralization:**

Triassic or younger based on the age of the rocks in the area.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Probably inactive**Workings/exploration:**

The only information about this prospect is that a claim was staked for gold here.

Production notes:**Reserves:****Additional comments:****References:**

Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Edgecumbe Exploration (Placer)**Site type:** Prospect**ARDF no.:** SI185**Latitude:** 57.0132**Quadrangle:** SI A-4**Longitude:** 135.1452**Location description and accuracy:**

This placer prospect is at sea level at the head of Bear Cove. The prospect is 0.3 mile west of the center of sec. 18, T. 56 S., R. 65 E. It is MAS no. 0021140022 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Au**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of this placer prospect are part of a Triassic and/or Jurassic unit that consists of biotite schist and gneiss with some amphibolite, quartzite, phyllite, and hornfels (Loney and others, 1975). The only information about this prospect is that a placer claim was staked for gold here (U.S. Bureau of Land Management, 2002). Its location is shown on a map in Bittenbender and others (1999) but it is not described otherwise.

Alteration:**Age of mineralization:**

Quaternary.

Deposit model:

Gold placer (Cox and Singer, 1986; model 39a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

39a

Production Status: None**Site Status:** Undetermined**Workings/exploration:**

The only information about this prospect is that a placer claim was staked here.

Production notes:**Reserves:****Additional comments:**

References:

Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: U.S. Bureau of Land Management, 2002

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Apex**Site type:** Prospect**ARDF no.:** SI186**Latitude:** 57.0138**Quadrangle:** SI A-4**Longitude:** 135.1895**Location description and accuracy:**

The Apex prospect is at an elevation of about 600 feet on the west side of Silver Bay opposite Bear Cove. The prospect is 0.1 mile east of the center of sec. 14, T. 56 S., R. 64 E. It is location P-120 of Bittenbender and others (1999) and MAS no. 0021140162 (U.S. Bureau of Land Management, 2002). The location is accurate within 0.2 mile.

Commodities:**Main:** Ag, Au, Cu**Other:****Ore minerals:** Arsenopyrite, chalcopyrite**Gangue minerals:** Quartz**Geologic description:**

The rocks in the vicinity of the Apex prospect are part of the Jurassic and Cretaceous, Sitka Graywacke that consists mainly of graywacke and argillite (Loney and others, 1975). The location of the Apex prospect is shown on a map by Becker (1898) but it is not described in the text. The prospect was examined by Bittenbender and others (1999) who found abundant quartz float in a creek and a quartz breccia vein along a fault. The only working was an 8-foot adit along the fault. The vein strikes N30W, dips 75SW, is up to 1.7 feet thick, and contains arsenopyrite and trace chalcopyrite. A sample across the vein contained 270 parts per million (ppm) copper, 44 ppm arsenic, and 0.2 ppm silver. A select sample of the quartz float contained 920 ppm copper and 1.0 ppm silver. The highest gold values in any of the samples was 40 parts per billion.

Alteration:**Age of mineralization:**

Jurassic or younger based on the age of the host rock.

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: None**Site Status:** Undetermined**Workings/exploration:**

The only working is an old 8-foot adit.

Production notes:

Probably none.

Reserves:

Additional comments:

References:

Becker, 1898; Knopf, 1912; Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Belle**Site type:** Prospect**ARDF no.:** SI187**Latitude:** 57.0117**Quadrangle:** SI A-4**Longitude:** 135.1826**Location description and accuracy:**

The Belle prospect is at an elevation of about 300 feet on the west side of Silver Bay opposite Bear Cove. The prospect is 0.4 mile southeast of the center of sec. 14, T. 56 S., R. 64 E. It is MAS no. 0021140163 (U. S. Bureau of Land Management, 2002). The location is accurate within 0.5 mile.

Commodities:**Main:** Ag, Au, Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

The rocks in the vicinity of the Belle prospect are part of the Jurassic and Cretaceous, Sitka Graywacke that consists mainly of graywacke and argillite. The location of the Belle prospect is shown on a map by Becker (1898) but it is not described in the text. The prospect was not found or noted by Bittenbender and others (1999) who worked in the area; the only other mention of it is that a claim was filed here for gold, silver, and copper (U.S. Bureau of Land Management, 2002). This may have been part of the nearby Apex (SI186) or Liberty prospects (SI188).

Alteration:**Age of mineralization:**

Jurassic or younger based on the age of the host rock.

Deposit model:**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production Status:** None**Site Status:** Undetermined**Workings/exploration:**

The only information on this prospect is that a claim was once filed here, probably before WWI.

Production notes:**Reserves:****Additional comments:**

References:

Becker, 1898; Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Becker, 1898

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Liberty**Site type:** Mine**ARDF no.:** SI188**Latitude:** 57.0082**Quadrangle:** SI A-4**Longitude:** 135.1733**Location description and accuracy:**

Bittenbender and others (1999, location. P-121) and the US Bureau of Land Management (2002, MAS no. 0021140055) locate the Liberty prospect at sea level in the west side of Silver Bay, about 0.4 mile west of triangulation station Ranus. It is in the SW1/4SW1/4 sec. 13, T. 56 S., R. 64 E. (Cobb (1972; 1978, location 59) locates it at an elevation of about 500 feet in the NW1/4 sec. 24, of the same township and range, but Bittenbender and others actually mapped the workings.) The location is accurate.

Commodities:**Main:** Au**Other:** As, Cu, Hg**Ore minerals:** Arsenopyrite, chalcopyrite, pyrite**Gangue minerals:****Geologic description:**

The host rock at the Liberty Mine is part of the Jurassic and Cretaceous, Sitka Graywacke which consists mainly of graywacke and argillite (Loney and others, 1975).

The mine was first mentioned by Becker (1898) when the property was in operation. He described the deposit as a series of imbricate quartz lenses up to 7 feet thick, along a fault. The vein contained pyrite, chalcopyrite, and arsenopyrite. A mill recovered about \$2.50 in gold per ton of feed stock and about half of the gold was probably passed into the tailings. Some mill test recovered as much as \$5 per ton, i.e., the ore contained up to about 0.5 ounce of gold per ton. The amount of gold that was produced was not given. There is no indication of any significant amount of work on the property after 1905 (Wright and Wright, 1905; Wright, 1907; Knopf, 1912).

The deposit was mapped by Bittenbender and others (1999) who located two adits, one 30 feet long and the other 300 feet long. In the longer adit, discontinuous quartz lenses, often brecciated, are exposed along a fault zone for about 100 feet. The quartz lenses are up to 5 feet thick. The quartz contains minor sulfides, mainly pyrite. The best sample they collected contained 60 parts per billion gold, across 3 feet. Samples contained up to 398 parts per million (ppm) arsenic and two samples contained more than 2 ppm mercury. The same vein structure is exposed in the shorter and higher adit.

Alteration:**Age of mineralization:**

Jurassic or younger based on the age of the host rock.

Deposit model:

Low-sulfide gold-quartz vein (Cox and Singer, 1986; model 36a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

36a

Production Status: Yes; small

Site Status: Probably inactive

Workings/exploration:

The property was active before 1900, but probably not in any substantial way since.

Production notes:

Becker (1898) implies that some gold was produced.

Reserves:

Additional comments:

References:

Becker, 1898; Wright and Wright, 1905; Wright, 1907; Knopf, 1912; Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

Site name(s): Unnamed (north shore of Warm Springs Bay)**Site type:** Prospect**ARDF no.:** SI189**Latitude:** 57.0933**Quadrangle:** SI A-3**Longitude:** 134.8096**Location description and accuracy:**

This prospect is plotted near the site of Manleyville (which is shown on the 1:63,360-scale U.S. Geological Survey topographic map) on the north side of Warm Springs Bay. The prospect covers an area of about a square mile north of Manleyville. The occurrence is at the northeast corner of sec. 19, T. 55 S., R. 67 E. It is location P-113 of Bittenbender and others (1999) and MAS no. 0021140154 (U.S. Bureau of Land Management, 2002). The location is accurate.

Commodities:**Main:** Cu, Mo, Zn**Other:** Bi**Ore minerals:** Chalcopyrite, pyrite, sphalerite**Gangue minerals:** Quartz**Geologic description:**

This prospect is a porphyry copper deposit about a square mile in area that was first identified and staked by El Paso Natural Gas company in 1973. There apparently has been little or no further work by private industry but Bittenbender and others (1999) of the U.S. Bureau of Mines sampled extensively in the area.

The rocks in the area are mostly part of a large Tertiary batholith that consists mainly of hornblende-biotite tonalite with subordinate hornblende-biotite granodiorite and garnet-muscovite-biotite trondhjemite (Loney and others, 1975). The northern part of the mineralized area borders on or extends into a mass of Triassic and Jurassic schist and gneiss about 3 miles long and 2 miles wide within the batholith.

The deposit consists of: 1) disseminated sulfides in silicified tonalite; 2) pyrite and chalcopyrite at the edges of granodiorite inclusions; and 3) quartz veinlets with pyrite, chalcopyrite, and sphalerite in the tonalite. The mineralization is extensive but relatively low grade. Bittenbender and others (1999) collected 74 samples over the deposit; 20 representative samples of the deposit average 600 parts per million (ppm) copper and 85 ppm molybdenum. Samples of the quartz veinlets with sulfides gave higher values, the highest of which were 9,000 ppm copper, 1,650 ppm molybdenum, and 544 ppm bismuth. Gold and silver values were below detection or negligible in all samples.

Alteration:

The granodiorite host rock is silicified and cut by quartz veinlets.

Age of mineralization:

Tertiary or younger based on the age of the granodiorite host rocks.

Deposit model:

Porphyry copper.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**Production Status:** None

Site Status: Undetermined

Workings/exploration:

Apparently only surface sampling.

Production notes:

Reserves:

Additional comments:

Some of the deposit is probably within the townsite of Baranof that is private land. However, most of it is within the Tongass National Forest.

References:

Loney and others, 1975; Bittenbender and others, 1999; U.S. Bureau of Land Management, 2002.

Primary reference: Bittenbender and others, 1999

Reporter(s): Donald Grybeck (U.S. Geological Survey)

Last report date: 5/5/2005

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