



# Alaska Resource Data File, Taku River quadrangle, Alaska

By John C. Barnett<sup>1</sup> and Lance D. Miller<sup>1</sup>

Open-File Report 03–38

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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, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

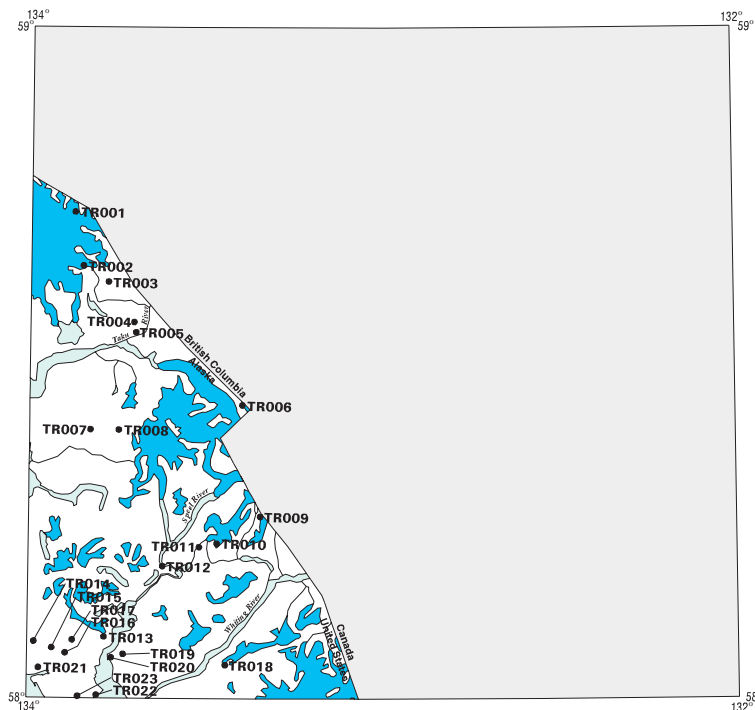
**U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY**

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<sup>1</sup> Juneau, Alaska

## Taku River quadrangle

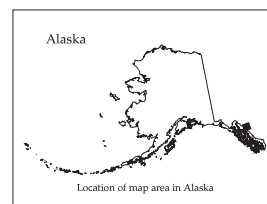
Descriptions of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for a description of the information content of each field in the records. The data presented here are maintained as part of a statewide database on mines, prospects and mineral occurrences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



*Distribution of mineral occurrences in the Taku River  
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](mailto:fwilson@usgs.gov), telephone (907) 786-7448. This compilation is authored by:

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**OPEN-FILE REPORT 03-38**

**Site name(s):** Unnamed (near Michaels Sword)

**Site type:** Prospect

**ARDF no.:** TR001

**Latitude:** 58.7245

**Quadrangle:** TR C-6

**Longitude:** 133.8765

**Location description and accuracy:**

This prospect is on the west flank of Michaels Sword at an elevation of 5,697 feet. It is near the NE corner of section 27, T.36 S., R.69 E. of the Copper River Meridian. The prospect was originally described in MAS/MILS record 0021130003. It is also listed as Alaska Kardex file number 113-009. This is location T001 of Wells and others (1986). The location is accurate within 1/4 mile.

**Commodities:**

**Main:** Pb, Zn

**Other:**

**Ore minerals:**

**Gangue minerals:**

**Geologic description:**

This prospect is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite. The metamorphic rocks are derived from volcanic, pelitic and minor carbonate strata of unknown protolith age (Brew and Ford, 1974, 1984).

The rocks at this prospect include granodiorite, quartz monzonite, and alaskite, and pendants of Eocene pyroclastic volcanic rocks, minor sedimentary rocks, and hornfels derived from pelitic and intermediate to mafic volcanic and volcanoclastic rocks (Brew and Ford, 1985).

Little is known about the prospect; the last reported activity was in 1957 (Wells and others, 1986). The commodities suggest it could be a lead-zinc replacement deposit.

**Alteration:**

**Age of mineralization:**

**Deposit model:**

Possible polymetallic replacement deposit (Cox and Singer, 1986; model 19a)

**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**  
19a

**Production Status:** None

**Site Status:** Inactive

**Workings/exploration:**  
The last reported activity was in 1957 (Wells and others, 1986).

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**  
U. S. Bureau of Mines, 1973; Brew and Ford, 1974; Brew and Ford, 1984; Brew and Ford, 1985; Wells and others, 1986.

**Primary reference:** Wells and others, 1986

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** Unnamed (head of Boundary Creek)

**Site type:** Occurrence

**ARDF no.:** TR002

**Latitude:** 58.6443

**Quadrangle:** TR C-6

**Longitude:** 133.8515

**Location description and accuracy:**

This occurrence is at the head of Boundary Creek about midway between the Antler Peaks and the Bacon Glacier. It is in about the center of the east side of section 21, T.37 S., R.70 E. of the Copper River Meridian. This is location T002 of Wells and others (1986). The map location is the approximate center of several reported occurrences and is accurate within 1/4 mile.

**Commodities:**

**Main:** Mo

**Other:** Ag, Cu, W

**Ore minerals:** Molybdenite, pyrite, pyrrhotite

**Gangue minerals:**

**Geologic description:**

This occurrence is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite. The metamorphic rocks are derived from volcanic, pelitic and minor carbonate strata of unknown protolith age (Brew and Ford, 1974, 1984).

Molybdenite was first reported in the Boundary Creek area by the U.S. Geological Survey in 1967 (Brew and Ford, 1969). Later investigations were conducted by the U.S. Geological Survey in 1985 (Koch and others, 1987) and the U.S. Bureau of Mines in 1987 (Clough, 1990). The USGS work identified a 100-foot-wide zone of highly altered and intensely iron-stained, north to northeast-trending aplite that contains pyrite and molybdenite. The mineralized zone was exposed for a slope distance of 300 feet. The host rock is a large dike-like body of aplite and granodiorite at least 2 miles long and 2000 feet thick. The country rocks include Mesozoic (?) schistose, biotite hornfels, hornblende hornfels, calc-silicate hornfels, and minor marble. The rocks are deformed into north to west-trending folds and are cut by Cretaceous (?) tonalite, a large dike of Tertiary aplite, and altered granodiorite (Brew and Ford, 1969). Silicification is coincident with the mineralization, and the rocks are iron-stained due to weathering of accessory pyrite and pyrrhotite (Clough, 1990). K/Ar dating of hydrothermal muscovite at the geologically similar

Boundary Creek 2 occurrence (TR003), 3 miles to the southeast, indicates that the molybdenite formed at or after 59.7 Ma (Miller and others, 1997).

U.S. Geological Survey sampled a 6- by 12-foot area with visible molybdenite (Brew and Ford, 1969). A COMPOSITE CHIP SAMPLE OF IRON-STAINED molybdenite-bearing ROCK contained 1000 ppm molybdenum, 9.6 ppm silver, and 300 ppm copper; another sample contained 1000 ppm molybdenum, 0.9 ppm silver, and 7 ppm copper. The U.S. Bureau of Mines sampled more widely (Clough 1990). A 3-foot sample of garnet skarn contains 1000 ppm molybdenum, 45 ppm copper, and 300 ppm zinc; a 2-foot sample of syenite contains 33 ppm copper, 57 ppm molybdenum, and 400 ppm tungsten; a float sample of siliceous alaskite contains 1.0% molybdenum.

**Alteration:**

Silicification is coincident with the mineralization. Iron staining is due to weathering of accessory pyrite and pyrrhotite (Clough, 1990).

**Age of mineralization:**

K/Ar dating of hydrothermal muscovite at the geologically similar Boundary Creek 2 occurrence (TR003), 3 miles to the southeast, indicates that the molybdenite formed at or later than 59.7 Ma (Miller and others, 1997).

**Deposit model:**

Porphyry Mo (Cox and Singer, 1986; model 21b)

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

21B

**Production Status:** No**Site Status:** Inactive**Workings/exploration:**

There are no surface or underground workings and exploration has been limited.

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

Brew and Ford, 1969; Brew and Ford, 1974; Brew and Ford, 1984; Wells and others, 1986; Koch and others, 1987; Clough, 1990; Miller and others, 1997.

**Primary reference:** Clough, 1990**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

Last report date: 11/27/01

**Site name(s): Boundary Creek 2****Site type:** Occurrence**ARDF no.:** TR003**Latitude:** 58.6206**Quadrangle:** TR C-6**Longitude:** 133.7795**Location description and accuracy:**

This occurrence is on the crest of the ridge between Boundary Creek and Bacon Creek, 5.5 miles north of the Taku River, and 1.5 miles west of the Canadian border. It is in the SE1/4NW1/4 section 36, T.37 S., R.70 E.; the NE1/4 section 2, T.38 S., R.70 E.; and the N1/2 section 31, T.37 S., R.71 E. of the Copper River Meridian. The map location is the approximate center of several reported occurrences and is accurate within 1/4 mile.

**Commodities:****Main:** Ag, Mo**Other:** Au, Cu, Pb, W**Ore minerals:** MOLYBDENITE**Gangue minerals:****Geologic description:**

This occurrence is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite. The metamorphic rocks are derived from volcanic, pelitic, and minor carbonate strata of unknown protolith age (Brew and Ford, 1974, 1984).

Molybdenite was first reported in the Boundary Creek area (TR002) by the U.S. Geological Survey in 1967 (Brew and Ford, 1969). Investigations were conducted by the U.S. Geological Survey in 1985 (Koch and others, 1987) and the U.S. Bureau of Mines in 1987 (Clough, 1990).

This occurrence, which is geologically similar to the one at the head of Boundary Creek (TR002) is in Tertiary or younger, iron-stained alkali granite and aplite. It consists of disseminations of fine- to coarse-grained flakes of molybdenite in miarolitic cavities in the granite and aplite (Clough, 1990). Pyrite and pyrrhotite accompany the molybdenite. Widely spaced, narrow, pyrite-bearing quartz veins cut the granite and aplite, but they do not contain molybdenite (Koch and others, 1987). The U.S. Bureau of Mines collected a 4-foot sample of molybdenite-bearing aplite that contained 4,800 ppm molybdenum, 1,600 ppm lead, 250 ppm silver, and 0.210 ppm gold (Clough, 1990). Molybdenite occurrences in this area are localized along sets of fractures that strike northeast and east-



northeast, and dip steeply. The molybdenite forms rosettes that are associated with muscovite on fracture surfaces. The fracture surfaces are also coated with epidote (Miller, and others, 1997). There is pervasive silicification throughout the mineralized area. The area is intensely iron-stained due to the weathering of pyrite and pyrrhotite (Clough, 1990). K/Ar dating of hydrothermal muscovite from a biotite-rich, molybdenite-bearing granite dike indicates that the molybdenite formed at after 59.7 Ma. (Miller, and others, 1997).

**Alteration:**

There is pervasive silicification throughout the mineralized area. The rocks are intensely iron-stained due to the weathering of pyrite and pyrrhotite (Clough, 1990).

**Age of mineralization:**

K/Ar dating of hydrothermal muscovite from a biotite-rich, molybdenite-bearing granite dike indicates that the molybdenite formed at after 59.7 Ma. (Miller, and others, 1997).

**Deposit model:**

Porphyry Mo (Cox and Singer, 1986; model 21b)

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

21b

**Production Status:** No**Site Status:** Inactive**Workings/exploration:**

There are no surface or underground workings and exploration has been limited.

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

Brew and Ford, 1969; Brew and Ford, 1974; Brew and Ford, 1984; Koch and others, 1987; Clough, 1990; Miller and others, 1997.

**Primary reference:** Koch and others, 1987**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)**Last report date:** 11/27/01

**Site name(s):** West Hill; Chester; Eva; Taku River

**Site type:** Prospect

**ARDF no.:** TR004

**Latitude:** 58.5606

**Quadrangle:** TR C-6

**Longitude:** 133.7057

**Location description and accuracy:**

This prospect is on the southeast flank of Kluchman Mountain near the Taku River. It is in the SW1/4SW1/4 section 21, T.38 S., R.71 E. of the Copper River Meridian. The prospect was described in MAS/MILS record 0021130014; it is also listed as Alaska Kardex file number 112-065. This is location T003 of Wells and others (1986). The location is accurate within 1/4 mile. This is possibly the Taku River prospect described by Cobb (1978[OFR 78-698]).

**Commodities:**

**Main:** Ag, Au, Cu, Pb, Zn

**Other:**

**Ore minerals:** Chalcopyrite, galena, gold, pyrite, pyrrhotite, sphalerite

**Gangue minerals:** Quartz

**Geologic description:**

The West Hill prospect is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite (Brew and Ford, 1984). Brew and Ford (1974) indicate that the area consists of tonalitic to granitic plutons that intrude and contact metamorphosed high-grade, regionally metamorphosed, rocks derived from volcanic, pelitic, and minor carbonate strata of unknown protolith age. Roof pendants of the metamorphic rocks are common, as are mafic and aplite dikes (Miller and others, 1997).

Development consists of a shaft, a 130-foot tunnel, short crosscuts, and trenches. The prospect consists of quartz veins that cut schist and slate. The veins are 1 foot to 10 feet thick, average about 2 feet thick, and contain sphalerite, pyrrhotite, minor pyrite, galena, and chalcopyrite, and small amounts of gold and silver (Wells and others, 1986).

**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:** Inactive

**Workings/exploration:**

Development consists of a shaft, a 130-foot tunnel, short crosscuts, and trenches (Wells and others, 1986).

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

U. S. Bureau of Mines, 1973; Brew and Ford, 1974; Brew and Ford, 1984; Wells and others, 1986; Cobb, 1978 (OF 78-698); Gehrels and Berg, 1992; Miller and others, 1997.

**Primary reference:** Wells and others, 1986

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** El Paso**Site type:** Prospect**ARDF no.:** TR005**Latitude:** 58.5453**Quadrangle:** TR C-6**Longitude:** 133.7002**Location description and accuracy:**

This prospect is on the south flank of Kluchman Mountain near the Taku River. It is near the center of the S1/2 section 28, T.38 S., R.71 E. of the Copper River Meridian. The prospect was originally described in MAS/MILS record 0021130008; it is also listed as Alaska Kardex file number 113-011. This is location T004 of Wells and others (1986). The location is accurate within 1 mile.

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

The El Paso prospect is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite (Brew and Ford, 1984). Brew and Ford (1974) indicate that rocks at the prospect are shallow, tonalitic to granitic plutons that intrude and contact metamorphosed high-grade, regionally metamorphosed, rocks derived from volcanic, pelitic and minor carbonate strata of unknown protolith age. Roof pendants of the metamorphic rocks are common, as are mafic and aplite dikes (Miller and others, 1997).

Wells, and others, 1986, report this as a Ni-Cu prospect. No other information is available. Claims were active from 1970 to 1976 (Wells and others, 1986).

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

Possible synorogenic-synvolcanic 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:**

Claims were active in 1970-1976 (Wells and others, 1986).

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

U. S. Bureau of Mines, 1973; Brew and Ford, 1974; Brew and Ford, 1984; Wells and others, 1986; Miller and others, 1997.

**Primary reference:** Wells and others, 1986**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)**Last report date:** 11/27/01

**Site name(s): Mt. Ogden****Site type:** Prospect**ARDF no.:** TR006**Latitude:** 58.4374**Quadrangle:** TR B-5**Longitude:** 133.3970**Location description and accuracy:**

This prospect is on the west flank of Mount Ogden near the international boundary. It is just under about the center of the north side of section 5, T.40 S., R.73 E. of the Copper River Meridian. This is location T006 of Wells and others (1986). The location is accurate within 1/2 mile.

**Commodities:****Main:** Cu, Mo**Other:** Au, Pb, W, Zn**Ore minerals:** Arsenopyrite, galena, gold, molybdenite, scheelite, sphalerite**Gangue minerals:** Fluorite, quartz, rhodochrosite**Geologic description:**

The Mount Ogden prospect is in a diorite porphyry stock that covers an area about 4,500 feet by 6,900 feet in size. The stock is marked by sericitic, potassic and chloritic alteration. Molybdenite occurs as sparsely disseminated crystals in the porphyry, in miarolitic cavities in the porphyry, along fractures, in quartz breccia bodies, and in quartz veins. Minor scheelite, fluorite, rhodochrosite, arsenopyrite, sphalerite, galena and gold are present (Wells and others, 1986). Most of this deposit is located on the Canadian side of the international boundary, where it is known as the Nan prospect (Miller and others, 1997). The U.S. Bureau of Mines describe the Mount Ogden prospect as an alaskite intrusive with molybdenite in stockworks, veins, and along fractures (Clough, 1990). Investigations on the Canadian portion of the deposit describe molybdenite clots and fracture coatings that are restricted to aplite dikes and hydrothermally altered felsite (Miller and others, 1997). U-Pb dates from a quartz monzonite porphyry on Mt. Eriksen in British Columbia give an age of 53.5 Ma. A K/Ar date on a biotite-rich, molybdenite-bearing granite dike at the nearby Boundary Creek 2, molybdenum occurrence (TR003) is 59.7 Ma (Miller and others, 1997).

**Alteration:**

Sericitic, potassic, and chloritic alteration is present (Wells and others, 1986).

**Age of mineralization:**

U-Pb dates from a quartz monzonite porphyry on Mt. Eriksen in British Columbia give an age of 53.5 Ma. A K/Ar date on a biotite-rich, molybdenite-bearing granite dike at the nearby Boundary Creek 2, molybdenum occurrence (TR003) is 59.7 Ma (Miller and others, 1997).

**Deposit model:**

Porphyry Mo (Cox and Singer, 1986; model 21b)

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

21b

**Production Status:** No

**Site Status:** Inactive

**Workings/exploration:**

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Wells and others, 1986; Clough, 1990; Miller and others, 1997.

**Primary reference:** Wells and others, 1986

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** Unnamed (near head of Yehring Creek)

**Site type:** Occurrence

**ARDF no.:** TR007

**Latitude:** 58.4003

**Quadrangle:** TR B-6

**Longitude:** 133.8273

**Location description and accuracy:**

This occurrence is near the crest of the ridge between the north fork of Davidson Creek and the head of Yehring Creek. It is in SE1/4 section 15, T.40 S., R.70 E. of the Copper River Meridian. The map location is the approximate center of several reported occurrences and is accurate within 1/4 mile.

**Commodities:**

**Main:** Mo

**Other:** Ag, Au, Cu

**Ore minerals:** Chalcopyrite, molybdenite, pyrite, pyrrhotite

**Gangue minerals:** Quartz

**Geologic description:**

This occurrence is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite (Brew and Ford, 1974, 1984). The rocks at this occurrence consist of Tertiary granite to granodiorite. The occurrence consists of molybdenite, chalcopyrite, pyrite, and pyrrhotite in a granular iron-stained quartz monzonite. The molybdenite occurs as large flakes concentrated along the contact between the quartz monzonite and granodiorite. The molybdenite is erratically distributed and appears to be confined to areas marked by iron-staining (Clough, 1990). The U.S. Bureau of Mines has reported values up to 0.606% copper and more than 2.0% molybdenum in selected float samples (Clough, 1990). K/Ar dating of hydrothermal muscovite at the near by, geologically similar Boundary Creek 2 (TR003) occurrence indicates that the molybdenite formed at or after 59.7 Ma (Miller and others, 1997).

**Alteration:**

Locally conspicuous iron staining.

**Age of mineralization:**

K/Ar dating of hydrothermal muscovite at the near by, geologically similar Boundary



Creek 2 (TR003) occurrence indicates that the molybdenite formed at or after 59.7 Ma (Miller and others, 1997).

**Deposit model:**

Porphyry Mo (Cox and Singer, 1986; model 21b)

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

21b

**Production Status:** None

**Site Status:** Inactive

**Workings/exploration:**

This occurrence was discovered by the U.S. Bureau of Mines in 1985 (Clough, 1990)  
There are no surface or underground workings and exploration has been limited.

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Brew and Ford, 1974; Brew and Ford, 1984; Clough, 1990; Miller and others, 1997.

**Primary reference:** Clough, 1990

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** Unnamed (west of upper Hidden Creek)

**Site type:** Occurrence

**ARDF no.:** TR008

**Latitude:** 58.4002

**Quadrangle:** TR B-6

**Longitude:** 133.7474

**Location description and accuracy:**

This occurrence is along the west side of upper Hidden Creek valley. It is just east of the center of section 18, T.40 S., R.71 E. of the Copper River Meridian. The map location is the approximate center of several reported occurrences and is accurate within 1/4 mile.

**Commodities:**

**Main:** Mo

**Other:** Au

**Ore minerals:** Molybdenite

**Gangue minerals:**

**Geologic description:**

This occurrence is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite (Brew and Ford, 1974, 1984). In 1985, the U.S. Bureau of Mines found granite float in the area that contained sparse molybdenite. Their sampling indicated anomalous values of molybdenum, barium, copper and gold. Limited reconnaissance failed to locate the bedrock source of the molybdenite-bearing float (Clough, 1990). Recent studies of other molybdenite occurrences in this area (TR002, TR003, TR006, TR007) suggest that molybdenite mineralization is associated with Paleocene-Eocene (63-50 Ma) magmatism (Miller and others, 1997).

**Alteration:**

**Age of mineralization:**

Recent studies of other molybdenite occurrences in this area (TR002, TR003, TR006, TR007) suggest that molybdenite mineralization is associated with Paleocene-Eocene (63-50 Ma) magmatism (Miller and others, 1997).

**Deposit model:**

Porphyry Mo (Cox and Singer, 1986; model 21b)

**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):**  
21b

**Production Status:** None

**Site Status:** Inactive

**Workings/exploration:**

There are no surface or underground workings and exploration has been limited.

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Brew and Ford, 1974; Brew and Ford, 1984; Clough, 1990; Miller and others, 1997.

**Primary reference:** Clough, 1990

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** Unnamed (on Mt. Brundage)

**Site type:** Occurrence

**ARDF no.:** TR009

**Latitude:** 58.2713

**Quadrangle:** TR B-5

**Longitude:** 133.3457

**Location description and accuracy:**

This occurrence is on the south flank of Mt. Brundage near the international boundary. It is near the center of the W1/2 section 32, T.41 S., R.74 E. of the Copper River Meridian. This is location T007 of Wells and others (1986). The location is accurate within 1/4 mile.

**Commodities:**

**Main:** Cu

**Other:**

**Ore minerals:** Chalcopyrite, pyrrhotite

**Gangue minerals:**

**Geologic description:**

This occurrence is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite (Brew and Ford, 1984). Brew and Ford (1985) describe the area as consisting predominately of sphene-bearing, biotite-hornblende granodiorite associated with a pendant of marble and calc-silicate granofels on the southwest flank of Mt. Brundage. Wells and others (1986), report traces of chalcopyrite and pyrrhotite in iron-stained siliceous gneiss here. Samples of this gneiss collected by the U.S. Geological Survey contain minor pyrrhotite and traces of chalcopyrite, but no significant metal values (Cobb, 1978 [OFR 78-698]).

**Alteration:**

Local iron staining.

**Age of mineralization:**

**Deposit model:**

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

**Production Status:** No

**Site Status:** Inactive

**Workings/exploration:**

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Cobb, 1978 (OF 78-698); Brew and Ford, 1984; Brew and others, 1984; Brew and Ford, 1985; Wells and others, 1986.

**Primary reference:** Cobb, 1978 (OFR 78-698)

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** Unnamed (near Crescent Lake)

**Site type:** Prospect

**ARDF no.:** TR010

**Latitude:** 58.2310

**Quadrangle:** TR A-5

**Longitude:** 133.4681

**Location description and accuracy:**

This prospect is 2.5 miles west-northwest of Crescent Lake at an elevation of 4,500 feet. It is in about the center of the W1/2 section 15, T.42 S., R.73 E. of the Copper River Meridian. This is location T008 of Wells and others (1986). The location is accurate within 1/4 mile.

**Commodities:**

**Main:** Cu

**Other:**

**Ore minerals:**

**Gangue minerals:**

**Geologic description:**

The Crescent Lake prospect is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite (Brew and Ford, 1984). Brew and Ford (1985) describe the rocks in the vicinity of the prospect to be underlain predominately by sphene-bearing biotite-hornblende granodiorite. Wells and others report that this may be a copper prospect and that 6 lode claims were active in 1956 (Wells and others, 1986; Kimball and others, 1984). No other information is available.

**Alteration:**

**Age of mineralization:**

**Deposit model:**

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

**Production Status:** None

**Site Status:** Inactive

**Workings/exploration:**

Six lode claims were active in 1956.

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Brew and Ford, 1984; Kimball and others, 1984; Brew and Ford, 1985; Wells and others, 1986.

**Primary reference:** Wells and others, 1986

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s): Red Mountain****Site type:** Prospect**ARDF no.:** TR011**Latitude:** 58.2257**Quadrangle:** TR A-5**Longitude:** 133.5178**Location description and accuracy:**

This prospect is midway between Crescent Lake and the Speel River at an elevation of 1900 feet. It is about 0.1 mile southwest of the center of section 17, T.42 S., R.73 E. of the Copper River Meridian. The prospect was originally described in MAS/MILS record 0021130006. It is also listed as Alaska Kardex file number 113-003. The location is accurate within 1/2 mile.

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

This prospect is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite (Brew and Ford, 1984). Brew and Ford (1985) describe the rocks at this prospect as predominately migmatite gneiss and sphene-bearing biotite-hornblende granodiorite. The MAS/MILS record reports 6 lode claims, Red Mountain 1 through 6. No other information is available.

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



**Site Status:** Inactive

**Workings/exploration:**

The MAS/MILS record reports 6 lode claims, Red Mountain 1 through 6. No other information is available.

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

U. S. Bureau of Mines, 1973; Brew and Ford, 1984; Brew and Ford, 1985.

**Primary reference:** This record

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** Unnamed (northeast of Indian Lake)

**Site type:** Prospect

**ARDF no.:** TR012

**Latitude:** 58.1970

**Quadrangle:** TR A-5

**Longitude:** 133.6211

**Location description and accuracy:**

This prospect is at an elevation of 600 feet, about 1 mile east of Indian Lake, near the center of section 27, T.42 S., R.72 E. of the Copper River Meridian. The prospect is described in MAS/MILS record 0021130005. The location is accurate within 1/2 mile.

**Commodities:**

**Main:** Au

**Other:**

**Ore minerals:**

**Gangue minerals:**

**Geologic description:**

This prospect is in the Coast Range plutonic-metamorphic complex (Brew and Ford, 1984), which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite. Brew and Ford (1985) show the rocks near this placer area as predominately sphene-bearing biotite-hornblende granodiorite. The MAS/MILS record reports this occurrence as a lode gold claim. No other information is available.

**Alteration:**

**Age of mineralization:**

**Deposit model:**

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

**Production Status:** Undetermined.

**Site Status:** Inactive

**Workings/exploration:**

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

Brew and Ford, 1984; Brew and Ford, 1985.

**Primary reference:** This record

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** Bach; Beach Group**Site type:** Prospect**ARDF no.:** TR013**Latitude:** 58.0916**Quadrangle:** TR A-6**Longitude:** 133.7844**Location description and accuracy:**

This prospect is at an elevation of 3,000 feet near the southeast end of a ridge west of outer Speel Arm. It is about 0.5 mile north of the center of section 3, T. 44 S., R. 71 E. of the Copper River Meridian. The location is accurate within 1/2 mile.

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

The Bach or Beach Group prospect is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite (Brew and Ford, 1984). Brew and Ford (1985) describe the rocks at this prospect as mainly by tonalite, quartz diorite, and minor granodiorite. The deposit consists of a quartz vein that contains an auriferous sulfide (arsenopyrite?), in diorite (Wright and Wright, 1906). This prospect was active prior to 1905 but reconnaissance work by the U.S. Bureau of Mines in the 1980's failed to locate it (Redman and others, 1985).

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

Possibly low-sulfide Au-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:** Inactive

**Workings/exploration:**

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Wright and Wright, 1906; Brew and Ford, 1984; Brew and Ford, 1985; Redman and others, 1985.

**Primary reference:** Redman and others, 1985

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s): Taku Chief; Steeple****Site type:** Prospect**ARDF no.:** TR014**Latitude:** 58.0841**Quadrangle:** TR A-6**Longitude:** 133.9813**Location description and accuracy:**

This prospect is about 0.5 mile east of Steeple Peak at an elevation of about 2,100 feet. It is in the SW1/4NW 1/4 section 4, T. 44 S., R. 70 E. of the Copper River Meridian. This is location T009 of Wells and others (1986). The location is accurate within 1/4 mile.

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

The Taku Chief prospect is in black phyllite, felsic phyllite, and chlorite phyllite that have been intruded by Cretaceous diorite and metagabbro (Redman and others, 1989). The phyllite locally contains both disseminated and stratiform pyrrhotite and pyrite. Zinc and gold values have been reported (Redman and others, 1985). A few open cuts, trenches, and an adit have been excavated (Redman and others, 1989). The Taku Chief claims were originally staked in 1954 by Henry (Tiger) Olson (Redman and others, 1985).

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

Possibly low-sulfide Au-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:** Inactive

**Workings/exploration:**

The Taku Chief claims were originally staked in 1954 by Henry (Tiger) Olson (Redman and others, 1985). Open cuts, trenches and an adit have been excavated (Redman and others, 1989).

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Redman and others, 1985; Wells and others, 1986; Redman and others, 1989.

**Primary reference:** Redman and others, 1989

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s): Sunrise****Site type:** Prospect**ARDF no.:** TR015**Latitude:** 58.0748**Quadrangle:** TR A-6**Longitude:** 133.9308**Location description and accuracy:**

The Sunrise manganese prospect is at an elevation of about 3,000 feet, about 2.3 miles northeast of Arthur Peak. It is near the northwest corner of section 11, T. 44 S., R. 70 E. of the Copper River Meridian. This is location T012 of Wells and others (1986). The location is accurate within 1/4 mile.

**Commodities:****Main:** Mn**Other:****Ore minerals:** Manganite, psilomelane, pyrolusite, rhodochrosite, rhodonite**Gangue minerals:** Quartz**Geologic description:**

The Sunrise manganese prospect consists of several outcrops of short manganese-bearing veins that are 1.0 to 3.5 feet wide, composed of about 70% rhodochrosite, 15% manganese dioxide (pyrolusite and/or manganite), 10% quartz, 5% rhodonite, and possibly some psilomelane (Wells and others, 1986). Several other parallel manganese-bearing veins 0.1 to 1.0 ft wide have been identified over a strike length of 6000 feet. The manganese-bearing veins are in a 200- to 300-foot section of phyllite that is overlain by schistose basalt and tuff. The veins are conformable to the phyllite which strikes N 50 W and dips 45-80 NE (Pittman, 1957). Pittman (1957) describes jasperoid at this prospect that may represent local silicification.

A channel sample 3.5 feet long contain 22.4% manganese; another over 1 foot long contain 31.6% manganese (Pittman, 1957). Roehm (1943) reported that assays of several samples of low-grade and high-grade veins vary from 10.76% to 38.45% manganese. A beneficiation test in 1957 by the U.S. Bureau of Mines produced a 40.6% manganese concentrate (Pittman, 1957). The beneficiation test failed to produce a marketable concentrate (Cobb, 1978 [OFR 78-698]). Development consists of a few shallow pits and trenches. The prospect was discovered by Henry 'Tiger' Olson in 1935 (Redman and others, 1985). There were active claims on the property from 1935 to 1979 (Wells and others, 1986).



**Alteration:**

Jasperoid may represent local silicification (Pittman, 1957).

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

Possible volcanogenic Mn (Cox and Singer, 1986; model 24c)

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

24c

**Production Status:** No**Site Status:** Inactive**Workings/exploration:**

Development consists a few shallow pits and trenches. The prospect was discovered by Henry 'Tiger' Olson in 1935 (Redman and others, 1985). There were active claims on the property from 1935 to 1979 (Wells and others, 1985).

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

Roehm, 1943; Pittman, 1957; Cobb, 1978 (OFR 78-698); Redman and others, 1985; Wells and others, 1986.

**Primary reference:** PITTMAN, 1957**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)**Last report date:** 11/27/01

**Site name(s):** AEK**Site type:** Prospect**ARDF no.:** TR016**Latitude:** 58.0672**Quadrangle:** TR A-6**Longitude:** 133.893**Location description and accuracy:**

The AEK prospect is located near the divide between Limestone Creek and Prospect Creek at an elevation of about 2,000 feet. It is in the NW1/4SE1/4 section 12, T. 44 S., R. 70 E. of the Copper River Meridian. This is location T010 of Wells and others (1986). The location is accurate within 1/4 mile.

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

The AEK prospect consists of iron-stained slate that contains thin quartz veins. Assays indicate barium and traces of silver (Redman and others, 1985). This prospect has been an active exploration target since 1880 (Wells and others, 1986). In 1980, over 200 claims covered the ridge near the divide between Prospect and Limestone Creeks. They were staked in a long narrow belt that parallels the NW-trending geologic structure of the area.

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

Possibly low-sulfide Au-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:** Inactive

**Workings/exploration:**

This prospect has been an active exploration target since 1880 (Wells and others, 1986). In 1980, over 200 claims covered the ridge divide between Prospect and Limestone Creeks. They were staked in a long narrow belt that parallels the geologic structure of the area.

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Redman and others, 1985; Wells and others, 1986; Redman and others, 1989.

**Primary reference:** Redman and others, 1985

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** Unnamed (upper Prospect Creek)

**Site type:** Prospect

**ARDF no.:** TR017

**Latitude:** 58.0867

**Quadrangle:** TR A-6

**Longitude:** 133.8735

**Location description and accuracy:**

The prospect is at an elevation of about 300 feet on the northeast side of upper Prospect Creek. It is in about the center of the NW1/4 section 6, T. 44 S., R. 71 E. of the Copper River Meridian. This is location T011 of Wells and others (1986). The location is accurate within 1/2 mile.

**Commodities:**

**Main:** Cu

**Other:** Ag, Be, Mo

**Ore minerals:** Pyrite

**Gangue minerals:** Quartz

**Geologic description:**

This prospect consists of iron-stained slate that contains sparse 0.3- to 2.5-inch-thick quartz veins and euhedral pyrite disseminated in fractures. A 6.5-foot chip sample collected in 1983 contains 0.5% copper and traces of beryllium and silver (Wells and others, 1986).

**Alteration:**

**Age of mineralization:**

**Deposit model:**

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

**Production Status:** None

**Site Status:** Inactive

**Workings/exploration:**

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

Wells and others, 1986.

**Primary reference:** Wells and others, 1986

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s): Whiting River; Lost Charlie Ross****Site type:** Prospect**ARDF no.:** TR018**Latitude:** 58.0499**Quadrangle:** TR A-5**Longitude:** 133.4430**Location description and accuracy:**

This prospect, marked by a symbol on the topographic map, is about 2 miles east of the Whiting River at an elevation of about 3,000 feet. It is near the southeast corner of section 15, T. 44 S., R. 73 E. of the Copper River Meridian. This is location T019 of Wells and others (1986). The location is accurate.

**Commodities:****Main:** Ag, Au, Pb**Other:** Cu, Zn**Ore minerals:** Argentiferous (?) galena, auriferous (?) arsenopyrite, chalcopyrite, pyrite, sphalerite**Gangue minerals:** Quartz**Geologic description:**

This prospect is in the Coast Range plutonic-metamorphic complex which consists of high-grade schist and gneiss intruded by Cretaceous and Tertiary granodiorite. The metamorphic rocks are derived from volcanic, pelitic, and minor carbonate strata of unknown protolith age (Brew and Ford, 1974, 1984). Brew and Ford (1985) show the prospect in sphene-bearing biotite-hornblende granodiorite associated with a large pendant of marble and calc-silicate granofels immediately to the east.

The Whiting River prospect, also referred to as the Lost Charlie Ross, consists of several quartz veins in a dolomite roof pendant within diorite (Cobb, 1978 [OFR 78-698]). The dolomite is probably part of an assemblage of Paleozoic metamorphic rocks that outcrop discontinuously to the south of the Whiting River (Clough, 1990). Knopf (1910) describes the deposit as a quartz vein 4.5 feet wide and 100 feet long that contains arsenopyrite, pyrite, sphalerite, galena, and chalcopyrite. A sample of 'a streak of solid mineral 11 inches wide' on the footwall assayed more than 1 ounce of gold per ton, 50 ounces of silver per ton, and 40% lead. The dominant sulfide is arsenopyrite. Buddington (1929) describes an open cut along the vein and a 118-foot crosscut that did not reach the vein; also that the prospect has been known since 1898.

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

Polymetallic replacement deposit (Cox and Singer, 1986; Model 19a)

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

19a

**Production Status:** No**Site Status:** Inactive**Workings/exploration:**

Buddington (1929) describes an open cut along the vein and a 118-foot crosscut that did not reach the vein; also that the prospect has been known since 1898.

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

Knopf, 1910; Buddington, 1925; Brew and Ford, 1974; Cobb, 1978 (OFR 78-698); Brew and Ford, 1984; Brew and Ford, 1985; Wells and others, 1986; Clough, 1990.

**Primary reference:** Cobb, 1978 (OFR 78-698)**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)**Last report date:** 11/27/01

**Site name(s): JLC****Site type:** Prospect**ARDF no.:** TR019**Latitude:** 58.0659**Quadrangle:** TR A-6**Longitude:** 133.7302**Location description and accuracy:**

The JLC placer prospect is on an unnamed creek that enters Speel Arm, 0.85 mile northeast Bogert Point . The prospect is about in the center of the south half of section 12, T. 44 S., R. 71 E. of the Copper River Meridian. The location is accurate within 1/4 mile.

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

The regional geology of the area consists of pelitic schist, calc-silicate schist, marble, and quartzite (Brew and Ford,1985). Gehrels and Berg (1992) show a small pluton of Cretaceous granodiorite west of the prospect. Redman and others (1989) describe the host rocks at the prospect as foliated diorite. Claims were reported active from 1880 through 1980 (Wells and others, 1986). The location given by Wells and others (1986) appears to be incorrect and conflicts with all other reported locations. The Wells report may have mistaken the Bogert Point placer (TR020), for the JLC prospect. No other information is available.

**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:** Inactive**Workings/exploration:**

Claims were reported active from 1880 through 1980 (Wells and others, 1986).

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

Brew and Ford, 1985; Wells and others, 1986; Redman and others, 1989; Gehrels and Berg, 1992.

**Primary reference:** Redman and others, 1985**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)**Last report date:** 11/27/01

**Site name(s):** Bogert Point; Lady Dee

**Site type:** Prospect

**ARDF no.:** TR020

**Latitude:** 58.0606

**Quadrangle:** TR A-6

**Longitude:** 133.7636

**Location description and accuracy:**

This prospect is on a short creek that enters Port Snettisham about 0.7 mile, south-southeast of Bogert Point and 1/2 mile east of Speel Arm in Port Snettisham. The prospect is on the creek at an elevation of about 200 feet, in the NE1/4NW1/4 section 14, T. 44 S., R. 71 E. of the Copper River Meridian. The location is accurate within 1/4 mile.

**Commodities:**

**Main:** Au

**Other:**

**Ore minerals:**

**Gangue minerals:**

**Geologic description:**

The regional geology of the area consists of pelitic schist, calc-silicate schist, marble, and quartzite (Brew and Ford, 1985). Gehrels and Berg (1992) show a small pluton of Cretaceous granodiorite west of the prospect. Redman and others (1989) describe the rocks beneath the placer as black phyllite and mafic metavolcanic rocks. Very small amounts of fine gold have been panned from the creek (Redman and others, 1989). The location given by Wells and others (1986) appears to be incorrect (see TR019).

**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:** Inactive

**Workings/exploration:**

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Brew and Ford, 1985; Wells and others, 1986; Redman and others, 1989; Gehrels and Berg, 1992.

**Primary reference:** Redman and others, 1989

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s):** Enterprise; Arizona

**Site type:** Mine

**ARDF no.:** TR021

**Latitude:** 58.0450

**Quadrangle:** TR A-6

**Longitude:** 133.9678

**Location description and accuracy:**

This mine is indicated by a mine symbol on the Taku River A-6 topographic map. It is on the north side of Limestone Inlet at an elevation of 1,600 feet, in the NE1/4NE1/4 section 21, T. 44 S., R. 70 E. of the Copper River Meridian.

**Commodities:**

**Main:** Au

**Other:** Cu, Pb, Zn

**Ore minerals:** Chalcopyrite, galena, gold, pyrite, sphalerite

**Gangue minerals:** Quartz

**Geologic description:**

The deposit at the Enterprise Mine consists of two parallel, sheeted quartz veins, 3 inches to 9 feet thick and several hundred feet long, that strike N 25 E and dip 45 NW. The veins contain free gold and small amounts of galena, sphalerite, pyrite, and chalcopyrite. Wells and others (1986) describe the host rocks as slate and greenstone intruded by Cretaceous porphyritic diorite. Redman and others (1989) describe the Enterprise vein as cutting porphyritic biotite-hornblende granite. According to Roehm (1936), at least one of the veins is well-defined and shows evidence of some normal-fault movement parallel to the vein. Roehm reports that gold values decrease with depth. Samples from the lower adit assayed 0.01 to 0.22 ounce of gold per ton, and samples from a raise in the adit assayed 0.06 to 0.48 ounce of gold per ton. Samples from the upper adit assayed 0.12 to 0.98 ounce of gold per ton and samples from an open cut above the adit assayed 1.34 ounces of gold per ton (Roehm, 1936). U.S. Bureau of Mines samples collected in 1988 contain similar amounts of gold (Redman and others, 1989). Redman and others (1989) describe carbonate alteration that is restricted to within an inch or two of the margins of the veins.

The deposit was probably discovered about 1905 (Redman and others, 1985), and there was some surface activity prior to 1911 (Knopf, 1911). Currently (2001), there are 800 feet of surface trenches and at least two adits, including a 120-foot-long upper adit and a 320-foot-long lower adit. In 1934, a 52-foot inclined raise was driven by H. Jackson and

A. Westhall. A stamp mill on the property had five,1250-pound stamps (Roehm, 1936). By 1914, 200 tons of ore had been processed in a Johnson rod mill; at least 15 ounces of gold and a small amount of silver were recovered. Later in 1914, B.L. Thane took over the property and recovered 85 ounces of gold from 300 tons of ore that was processed in a 5-stamp mill (Roehm, 1936). The Enterprise mine has an inferred resource of 24,600 short tons of ore with an average of 0.23 ounce of gold per ton (Redman and others, 1989).

**Alteration:**

Carbonate alteration is restricted to within an inch or two of the margins of the veins (Redman and others, 1989).

**Age of mineralization:**

The veins apparently formed between 56 Ma and 53 Ma (Miller and others, 1994).

**Deposit model:**

Low-sulfide Au-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:** Inactive**Workings/exploration:**

The deposit was probably discovered about 1905 and there was some surface activity prior to 1911 (Knopf, 1911; Redman and others, 1985). Currently (2001), there are 800 feet of surface trenches and at least two adits, including a 120-foot-long upper adit and a 320-foot-long lower adit. In 1934, a 52-foot inclined raise was driven by H. Jackson and A. Westhall. A stamp mill on the property had five,1,250-pound stamps (Roehm, 1936).

**Production notes:**

By 1914, 200 tons of ore had been processed in a Johnson rod mill; at least 15 ounces of gold and a small amount of silver were recovered. Later in 1914, B.L. Thane took over the property and recovered 85 ounces of gold from 300 tons of ore that was processed in a 5-stamp mill (Roehm, 1936).

**Reserves:**

The Enterprise mine has an inferred resource of 24,600 short tons of ore with an average grade of 0.23 ounce of gold per ton (Redman and others, 1989).

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

Knopf, 1911; Roehm, 1936; Roehm, 1942; Redman and others, 1985; Wells and others,

1986; Redman and others, 1989; Gehrels and Berg, 1992; Miller and others, 1994.

**Primary reference:** Roehm, 1936

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

**Site name(s): Whigg Creek****Site type:** Mine**ARDF no.:** TR022**Latitude:** 58.0047**Quadrangle:** TR A-6**Longitude:** 133.8046**Location description and accuracy:**

The Whigg placer mine, labeled on the A-6 topographic map, is at sea level about one mile southwest of Sharp Point in Port Snettisham. It is near the northeast corner of section 6, T. 45 S., R. 71 E. of the Copper River Meridian. This is location T015 of Wells and others (1986). The location is accurate.

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

The regional geology consists of pelitic schist, calc-silicate schist, marble, and quartzite (Brew and Ford, 1985). Redman and others (1989) describe the rocks under the placer as black phyllite; a diorite pluton crops out approximately 1 mile to the west. Redman and others (1989) confirm the occurrence of gold in stream sediments at this site. The ruins of a log cabin are located on the north side of Port Snettisham just above the high tide line near the mouth of Whigg Creek (Redman and others, 1989). Wells and others (1986) report that claims were active from 1880 to 1982.

**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:** Inactive

**Workings/exploration:**

The ruins of a log cabin are located on the north side of Port Snettisham just above the high tide line near the mouth of Whigg Creek (Redman and others, 1989). Wells and others (1986) report that claims were active from 1880 to 1982. There may have been some minor placer gold production from the creek.

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Brew and Ford, 1985; Wells and others, 1986; Redman and others, 1989.

**Primary reference:** Redman and others, 1989

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01



**Site name(s):** Mist Creek**Site type:** Occurrence**ARDF no.:** TR023**Latitude:** 58.0026**Quadrangle:** TR A-6**Longitude:** 133.8568**Location description and accuracy:**

This placer occurrence is on Mist Creek, about 1 mile from the northwest shore of Port Snettisham. It is in the NE1/4NE1/4 section 2, T. 45 S., R. 70 E. of the Copper River Meridian. The location is accurate within 1/4 mile.

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

The regional geology consists of pelitic schist, calc-silicate schist, marble, and quartzite (Brew and Ford, 1985). Gehrels and Berg (1992) show a small pluton of Cretaceous granodiorite west of the occurrence. Redman and others (1989) report that the rocks in the immediately area of the placer are diorite, black phyllite, and mafic metavolcanic rocks. Visible gold occurs in placer samples collected by the U.S. Bureau of Mines and placer claims were active in from 1980 to 1982 (Redman and others, 1989).

**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:** Inactive

**Workings/exploration:**

**Production notes:**

**Reserves:**

**Additional comments:**

**References:**

Brew and Ford, 1985; Redman and others, 1989; Gehrels and Berg, 1992.

**Primary reference:** Redman and others, 1989

**Reporter(s):** J.C. Barnett and L.D. Miller (Juneau, Alaska)

**Last report date:** 11/27/01

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