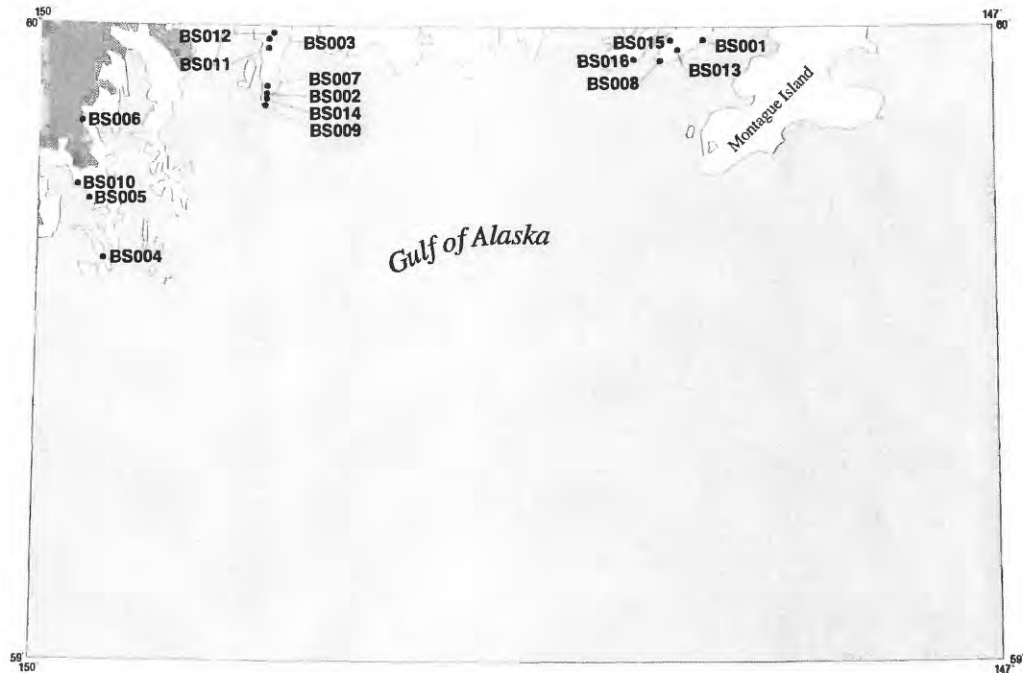


Blying Sound quadrangle

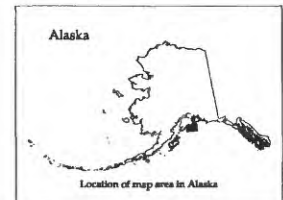
Descriptions of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for a description of the information content of each field in the records. The data presented here are maintained as part of a statewide database on mines, prospects and mineral occurrences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



*Distribution of mineral occurrences in the Blying Sound
1:250,000-scale quadrangle, southcentral 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: Donald Grybeck, USGS, 4200 University Dr., Anchorage, AK 99508-4667, e-mail dgrybeck@usgs.gov, telephone (907) 786-7424. This compilation is authored by:

Jeff Huber
Anchorage, Alaska



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): Unnamed (on southeast side of Latouche Island)

Site type: Occurrence

ARDF no.: BS001

Latitude: 59.98

Quadrangle: BS D-3

Longitude: 147.91

Location description and accuracy:

The occurrence is located on the southeast side of Latouche Island in the E1/2 of section 28, T. 2 S., R. 9 E., of the Seward Meridian. This occurrence is described as a landslide block of unknown size (Nelson and others, 1984). This location is accurate to within a half a mile.

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite, pyrrhotite

Gangue minerals:

Geologic description:

The occurrence is on a landslide block of slate and graywacke of the Tertiary Orca Group which contains three beds with chalcopyrite and pyrrhotite that are conformable to the bedding. The beds are up to 2 foot wide and extend along strike for 500 feet. A 20 foot wide chip sample across all three zones contained 2.5% copper and 18 ppm silver (Nelson and others, 1984). Other limonite-stained rock are exposed in this area.

Alteration:

None reported.

Age of mineralization:

Tertiary.

Deposit model:

Besshi massive sulfide (Cox and Singer, 1986; model 24b).

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

24b

Production Status: None

Site Status: Inactive

Workings/exploration:
None reported.

Production notes:

Reserves:

Additional comments:

References:
Nelson and others, 1985.

Primary reference: Nelson and others, 1985

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 03/15/99

Site name(s): Fairview**Site type:** Prospect**ARDF no.:** BS002**Latitude:** 59.895**Quadrangle:** BS D-7**Longitude:** 149.281**Location description and accuracy:**

The occurrence is located on the Resurrection Peninsula about 1.7 miles north of Cape Resurrection on the southwest flank of Hill 2077. The main showing is about three quarters of a mile east of the shore along a cliff in the NE1/4 of section 28, T. 3 S., R. 1 E., of the Seward Meridian. At the base of the cliff, there is a 8 to 10 feet thick breccia zone that strikes N78E and dips vertically. Higher up and about 300 feet to the east another similar zone (possibly the same one faulted a little to the north) is 8 to 10 feet thick. This is location 6 of Cobb and Tysdal (1980) and location 109 in Tysdal (1978). This location is accurate within a quarter of a mile.

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

Tysdal and Case (1979) described the bedrock geology in this area as Cretaceous, pale to dark green, aphanitic to porphyritic pillow basalt with subordinate pillow breccia, tuff, and siltstone.

The mineralization is hosted in a breccia that is fractured and recemented with quartz and sulfides. The breccia cement is soft and weathers to a gossen, although the sulfides are not evenly distributed through the cement. One zone 6 foot wide is particularly rich in sulfides. A sample of this material assayed 9.8% copper (Martin and others, 1915).

Alteration:

Cement in breccia is iron stained and weathered to gossen.

Age of mineralization:

Cretaceous.

Deposit model:

Cyprus massive sulfide (Cox and Singer, 1986; model 24a).

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

24a

Production Status: None

Site Status: Inactive

Workings/exploration:

one short, 10 foot adit was driven prior to 1918. The adit was driven in a 6 foot wide breccia zone where the cement was rich in sulfides. A sample of this richly mineralized zone assayed 9.8% Cu (Martin and others, 1915).

Production notes:**Reserves:**

No information available.

Additional comments:**References:**

Grant and Higgins, 1909; Grant and Higgins, 1910; Martin and others, 1915; Berg and Cobb, 1967; Cobb, 1972 (MF-440); MacKevett and Holloway, 1977; Tysdal and Case, 1979; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Martin and others, 1915

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/22/99

Site name(s): Feather Bed**Site type:** Prospect**ARDF no.:** BS003**Latitude:** 59.986**Quadrangle:** BS D-7**Longitude:** 149.267**Location description and accuracy:**

The Feather Bed occurrences are located on the Resurrection Peninsula about 11 miles south of Seward, Alaska. The occurrence consists of two locations, one along the shore of Humpy Cove (formerly called Sunny Bay by Martin and others, 1915) and the main showing is about a mile and a half east of the shore in the SW1/4 of section 22, T. 2 S., R. 1 W., of the Seward Meridian. This is location 2-3 of Cobb (1980, OFR 80-621) and location 106a-106b of Tysdal (1978). The location is accurate to within a quarter of a mile.

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

Tysdal and Case (1979) described the bedrock geology in this area as Cretaceous, pale to dark green aphyric to porphyritic pillow basalt with subordinate pillow breccia, tuff, and siltstone.

The shoreline occurrence consists of a few shallow pits containing pyrite- and chalcopyrite-bearing float. The main occurrence mineralization is contained in a shear zone that holds four stringers of nearly pure chalcopyrite. The stringers, the largest of which is 7 inches thick, assayed 14 to 19 percent copper (Martin and others, 1915 p. 234-235). The shear zone strikes north-south and is about vertical. This zone has been traced from an elevation of 2,500 feet to 3,500 feet (Martin and others, 1915 p. 234-235).

Alteration:

None reported.

Age of mineralization:

Cretaceous.

Deposit model:

Cyprus massive sulfide (Cox and Singer, 1986; model 24a).

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

24a

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

Surface samples assayed 14 to 19 percent copper in the main showing. No assay results reported for the shoreline occurrence (Martin and others, 1915).

Production notes:**Reserves:**

None reported.

Additional comments:**References:**

Grant and Higgins, 1909; Grant and Higgins, 1910; Martin and others, 1915; Berg and Cobb, 1967; Cobb, 1972 (MF-440); MacKevett and Holloway, 1977; Tysdal and Case, 1979; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Martin and others, 1915**Reporter(s):** Jeff A. Huber (Anchorage)**Last report date:** 01/26/99

Site name(s): Unnamed (on Granite Island)**Site type:** Occurrence**ARDF no.:** BS004**Latitude:** 59.635**Quadrangle:** BS C-8**Longitude:** 149.794**Location description and accuracy:**

Granite Island is located in Harris Bay about 35 miles southwest of Seward Alaska. The occurrence is located on the southwest side of the island in the first cove north of Granite Cape; it is in the NE1/4 of section 28, T. 6 S., R. 3 W., of the Seward Meridian. This location is accurate to within a quarter of a mile. This is location 116 of Tysdal (1978).

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

The occurrence is described as a 10-centimeter-wide quartz vein which crosscuts coarse-grained, foliated biotite granite. Tysdal and Case (1979) have dated the granite as Eocene.

Alteration:

None reported.

Age of mineralization:

Eocene or younger; vein cuts Eocene granite.

Deposit model:

Insufficient information to classify.

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

Site Status: Inactive

Workings/exploration:

A surface sample contained, 0.2 PPM Au by A.A. and 150 PPM Cu by semiquantitative analysis (Tysdal, 1978).

Production notes:

Reserves:

None reported.

Additional comments:

References:

MacKevett and Holloway, 1977; Tysdal, 1978; Tysdal and Case, 1979; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Tysdal, 1978

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/25/99

Site name(s): Harris Bay Mining Co.

Site type: Prospect

ARDF no.: BS005

Latitude: 59.732

Quadrangle: BS C-8

Longitude: 149.847

Location description and accuracy:

The prospect is located on the north shore of Harris Bay about half a mile north of VAMB Glacier in the NE1/4 of section 19, T. 3 S., R. 5 W., of the Seward Meridian. This is location 115 of Tysdal (1978) and is accurate to within a quarter of a mile.

Commodities:

Main: Au?

Other:

Ore minerals:

Gangue minerals: Quartz

Geologic description:

The occurrence is described as a thin quartz vein in Eocene granite (Cobb, and Tysdal, 1978).

Alteration:

None reported.

Age of mineralization:

Eocene or younger; vein cuts Eocene granite.

Deposit model:

Insufficient information to classify.

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Cobb and Tysdal, (1980) report post-1950 activity but give no details.

Production notes:

Reserves:

None.

Additional comments:

This occurrence is located in Kenai Fjords National Park; the area is now closed to mineral entry.

References:

MacKevett and Holloway, 1977; Tysdal, 1978; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Cobb and Tysdal, 1980

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/25/99

Site name(s): Unnamed (on Holgate Arm)

Site type: Occurrence

ARDF no.: BS006

Latitude: 59.849

Quadrangle: BS D-8

Longitude: 149.867

Location description and accuracy:

Holgate Arm is a northwest trending fjord of Aialik Bay. The occurrence is near the mouth of Holgate glacier in the NW1/4 of section 7, T. 4 S., R. 3 W., of the Seward Meridian. This is both Cobb and Holloway's (1980) and Tysdal's (1978) location 113, and MacKevett's (1977) location 11. This location is accurate to within a quarter of a mile.

Commodities:

Main: Au

Other:

Ore minerals:

Gangue minerals:

Geologic description:

Eocene iron-stained dikes cut hornfelsed, Upper Cretaceous Valdez Group metasediments. One sample contained 0.3 ppm Au (Tysdal, 1978).

Alteration:

Age of mineralization:

Eocene; auriferous dike is that age.

Deposit model:

Insufficient information to classify.

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

Production Status: None

Site Status: Inactive

Workings/exploration:

A single sample of iron-stained dike contained 0.3 ppm gold (Tysdal, 1978).

Production notes:

Reserves:

None reported.

Additional comments:

This occurrence is in Kenai Fjords National Park; the area is now closed to mineral entry.

References:

MacKevett and Holloway, 1977; Tysdal, 1978; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Tysdal, 1978

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/25/99

Site name(s): Iron Mask**Site type:** Prospect**ARDF no.:** BS007**Latitude:** 59.907**Quadrangle:** BS D-7**Longitude:** 149.289**Location description and accuracy:**

The prospect is on the east shore of Resurrection Bay, opposite Renard Island (Fox Island) in the NW1/4 of section 21, T. 3 S., R. 1 E., of the Seward Meridian. A small adit has been driven above the high tide level in a brecciated metamorphosed basalt. The breccia as exposed is 12 feet thick and has been traced 100 feet or more along the shore. This is prospect number 78 of Martin and others (1915, p. 235) and location 108 of Tysdal (1978). This location is accurate to within a quarter of a mile.

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

The host rock is a Lower Cretaceous diabase (Tysdal and Case, 1979) that has been brecciated and recemented by quartz and sulfide mineralization. The breccia is composed of fine-grained, diabase fragments which range in size from less than a fourth of an inch to several inches in size. The matrix material is a greenish cement. The original breccia is probably a flow breccia mixed with tuffaceous material that has been slightly broken and rehealed with quartz, and pyrite with a little calcite and chalcopyrite (Martin and others, 1915). The breccia is about 12 feet wide at this location and an sample across this zone showed 1.1% copper (Grant and Higgins, 1909, p. 104-105).

Alteration:

Silicification.

Age of mineralization:

Probably Upper Cretaceous; massive sulfide.

Deposit model:

Cyprus massive sulfide (Cox and Singer, 1986; model 24a).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
24a

Production Status: No

Site Status: Inactive

Workings/exploration:

A small adit above the high tide line assayed 1.1% copper (Grant and Higgins, 1909, p. 104-105).

Production notes:

Reserves:

None report.

Additional comments:

On the 1:250,000-scale map the island is called Fox Island while on the 1:63,000-scale map is Renard Island.

References:

Grant and Higgins, 1909; Martin and others, 1915; Cobb, 1972 (MF-440); MacKevett and Holloway, 1977; Tysdal, 1978; Tysdal and Case, 1979; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Grant and Higgins, 1909

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/25/99

Site name(s): Latouche Consolidated Copper Co.; Tibbits**Site type:** Prospect**ARDF no.:** BS008**Latitude:** 59.94**Quadrangle:** BS D-3**Longitude:** 148.04**Location description and accuracy:**

The prospect is located on the southern end of Latouche Island in the SW1/4 of section 2, T. 3 S., R. 8 W., of the Seward Meridian. This is location 271 of Tysdal (1978) and location BS1 of Nelson and others (1984). This location is accurate to within a half mile.

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

The host rock of this prospect is graywacke of the Tertiary Orca Group. The mineralization consists of quartz-chalcopyrite stringers within a 3 foot wide shear zone. The strike and dip if the mineralization is unknown. The graywacke strikes northeast and dips 50 to 70 to the southeast. A 3 foot chip wide chip sample of the mineralization contained 1.7% Cu and 8.5 ppm silver (Nelson and others, 1980).

Alteration:

None reported.

Age of mineralization:

Early Tertiary; stringers cut early Tertiary rocks.

Deposit model:

Quartz-chalcopyrite stringers.

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

Site Status: Inactive

Workings/exploration:

A 6 by 6 foot shaft to an unknown depth was dug on the prospect in the early 1900's. There has been no production from this prospect (Nelson and others, 1980).

Production notes:

Reserves:

None reported.

Additional comments:

References:

Grant and Higgins, 1909; Condon and Cass, 1958; MacKevett and Holloway, 1977; Tysdal, 1978; Cobb, 1972 (MF-440); Cobb and Tysdal, 1980 (OFR 80-621); Nelson and others, 1985.

Primary reference: Grant and Higgins, 1909

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 03/07/99

Site name(s): Lietzke**Site type:** Occurrence**ARDF no.:** BS009**Latitude:** 59.873**Quadrangle:** BS D-7**Longitude:** 149.287**Location description and accuracy:**

This occurrence is situated in a small cove northeast of Cape Resurrection within the SW1/4 of section 33, T. 3 S., R. 1 E., of the Seward Meridian. This is location 7 of Cobb and Tysdal (1980) and location 6 of Tysdal (1978). This location is accurate to within one quarter of a mile.

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

Martin and others, (1915) examined hand samples from this occurrence and described them as quartz containing fragments of diabase, pyrite, and a little chalcopyrite. They then went on to speculate that this occurrence is similar to the Fairview and Iron Mask prospects (Martin and others, 1915). Tysdal and Case (1979) described the bedrock geology in this area as Cretaceous, pale to dark green aphyric to porphyritic pillow basalts with subordinate pillow breccia, tuff, and siltstones. Along the west shore of Resurrection Bay the pillows are right side up, dip 30 to 50W, and the long axes of the pillows and pillow bifurcation plung westward down dip.

Alteration:

None reported.

Age of mineralization:

Cretaceous.

Deposit model:

Massive sulfide?

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Production notes:

Reserves:

None reported.

Additional comments:

Grant and Higgins (1909) did not visit this occurrence and their description is based on hand samples. Subsequent authors have reprinted their description.

References:

Grant and Higgins, 1909; Martin and others, 1915; Cobb, 1972 (MF-440); MacKevett and Holloway, 1977; Tysdal, 1978; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Grant and Higgins, 1909

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/26/99

Site name(s): Unnamed (near the mouth of Northwestern Lagoon)**Site type:** Occurrence**ARDF no.:** BS010**Latitude:** 59.748**Quadrangle:** BS C-8**Longitude:** 149.892**Location description and accuracy:**

The occurrence is located on the north shore of Harris Bay in the NW1/4 of section 13, T. 5 S., R. 4 W., of the Seward Meridian. This is location 114 of Tysdal (1978); it is accurate to within a quarter of a mile.

Commodities:**Main:** Au**Other:****Ore minerals:** Pyrite**Gangue minerals:** Feldspar, muscovite, quartz**Geologic description:**

The host rock of the occurrence is a Tertiary iron-stained, muscovite granite dike which cuts hornfelsed slate and graywacke of the Cretaceous Valdez Group. The dike contains disseminated pyrite and (by atomic absorption analysis) 0.15 ppm gold (MacKevett and Holloway, 1977).

Alteration:

None reported.

Age of mineralization:

Tertiary?

Deposit model:

Pyrite and gold; Tertiary granite dike.

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

Workings/exploration:

Hand sample assayed 0.15 ppm Au by atomic absorption (MacKevett and Holloway, 1977).

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

The occurrence is in Kenai Fjords National Park; the area is now closed to mineral entry.

References:

MacKevett and Holloway, 1977; Tysdal, 1978; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Cobb and Tysdal, 1980

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/27/99

Site name(s): Peterson

Site type: Prospect

ARDF no.: BS011

Latitude: 59.965

Quadrangle: BS D-7

Longitude: 149.284

Location description and accuracy:

The occurrence is on the east side of the south arm of Humpy Cove (formerly called Sunny Bay by Martin and others, 1915) in the NE1/4 of section 33, T. 3 S., R. 1 E., of the Seward Meridian. This is Tysdal's (1978) location 107 and is accurate to within a quarter mile.

Commodities:

Main: Cu, Zn

Other:

Ore minerals: Chalcopyrite, pyrite, sphalerite

Gangue minerals: Calcite, epidote, quartz

Geologic description:

The mineralization is within a brecciated shear zone of Cretaceous Valdez Group greenstone (Tysdal and Case, 1979). The cement of the breccia is composed of quartz, calcite, sphalerite, pyrite, epidote, and chalcopyrite. A tunnel, 35 feet long, has been run along a shear zone that strikes N32W and dips 68 W. About 200 feet southwest of this tunnel another shear occurs which has been drifted on for about 35 feet. This zone is about six feet wide and strikes N12W with a vertical dip (Martin and others, 1915). No assay results are reported for this prospect.

Alteration:

Age of mineralization:

Cretaceous or younger; breccia zone in Cretaceous greenstone.

Deposit model:

Cyprus massive sulfide (Cox and Singer, 1986; model 24a).

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

24a

Production Status: None

Site Status: Inactive

Workings/exploration:

Two tunnels each about 35 feet in length were driven prior to 1915. No assay results were reported (Martin and others, 1915).

Production notes:

Reserves:

None reported.

Additional comments:

Prior to 1953 Humpy Cove was known as Sunny Cove.

References:

Grant and Higgins, 1909; Martin and others, 1915; Berg and Cobb, 1967; Cobb, 1972 (MF-440); MacKevett and Holloway, 1977; Tysdal, 1978; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Martin and others, 1915

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/26/99

Site name(s): Reynolds-Alaska Development Co.**Site type:** Prospect**ARDF no.:** BS012**Latitude:** 59.989**Quadrangle:** BS D-7**Longitude:** 149.268**Location description and accuracy:**

The occurrence is located on the steep slopes of an east-west trending stream which drains into Humpy Cove; it is in the SW1/4 of section 22, T. 2 S., R. 1 E., of the Seward Meridian. Humpy Cove is about 11 miles southeast of Seward, Alaska. This is Cobb's (1972, MF-440) location 1 and Tysdal's (1978) location 105. This location is accurate to within a quarter of a mile.

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

The prospect consists of a shear zone in a sheeted basalt dike unit of the Upper Cretaceous Valdez Group. The shear zone was reported to contain chalcopyrite (Cobb and Tysdal, 1980).

Alteration:

None reported.

Age of mineralization:

Cretaceous or younger; associated with shearing of Cretaceous basalt dike.

Deposit model:

Chalcopyrite in shear zone.

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

Site Status: Inactive

Workings/exploration:

Production notes:

Reserves:

None reported.

Additional comments:

References:

Grant and Higgins, 1909; Grant and Higgins, 1910; Martin and others, 1915; Cobb, 1972 (MF-440); MacKevett and Holloway, 1977; Tysdal, 1978; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Cobb and Tysdal, 1980

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/27/99

Site name(s): Seattle Alaska Copper Co.

Site type: Mine

ARDF no.: BS013

Latitude: 59.965

Quadrangle: BS D-3

Longitude: 147.989

Location description and accuracy:

The occurrence consists of three tunnels that are located just below VABM Fairview 1926; it is in the NE1/4 of section 36, T. 2 S., R. 8 E., of the Seward Meridian. The lower tunnel is at an elevation of 1,150 feet. The middle tunnel is at an elevation of 1,350 feet and the upper tunnel is at an elevation of 1,450 feet. There is an open cut on the discovery outcrop just above the upper tunnel. This is location number 8 of Cobb (1972, MF-440) and location 270 of Tysdal (1978). This location is accurate to within a quarter of a mile.

Commodities:

Main: Cu, Zn

Other: Ag

Ore minerals: Chalcopyrite, pyrrhotite, sphalerite

Gangue minerals: Quartz

Geologic description:

The country rock in the vicinity of the prospect is graywacke and shale of the Tertiary Orca Group (Nelson and others, 1980). The strike of the bedding is northeast and dips 70W. The mineralization consists of siliceous massive sulfides and stringers of sulfides containing predominantly pyrite, pyrrhotite, and chalcopyrite. The mineralization varies from 18 to 66 inches in width and strikes N35 to 50E and dips 70 to 80W. Locally the mineralization is parallel to the schistosity of the country rock. Samples by the Bureau of Mines (Kurtak and Jeske, 1986) assayed up to 6.5% copper and 14 ppm silver.

Alteration:

None reported.

Age of mineralization:

Tertiary; massive sulfides in Tertiary rocks.

Deposit model:

Cyprus massive sulfide (Cox and Singer, 1986; model 24a).

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

24a

Production Status: None

Site Status: Inactive

Workings/exploration:

There were 840 feet of underground workings driven between 1908 and 1911. In 1911 a mill was set up and run for a short while. In 1914 a test shipment of 12 tons of ore that ran 0.97% copper and 1.92 ounces of silver per ton resulted in the production of 2,350 pounds of copper and 23 ounces of silver (Johnson, 1918 p. 209-210). The prospect has tunnels at three levels and one open cut. The lower two tunnels are the most extensively developed. The lower tunnel is collapsed and reported to consist of 400 feet of workings. The middle tunnel was open in 1985 and is about 400 feet long; two drifts, 20 feet and 50 feet in length, were driven along the mineralized zone. The Bureau of Mines (Kurtak and Jeske, 1986) sampled the middle tunnel across a four foot width that contained 6.5% copper and 14 ppm silver. The 40-foot-long upper tunnel is collapsed. Martin and others (1915) reported that this tunnel was weakly mineralized. In 1976, Noranda Exploration staked the area and conducted geophysical studies.

Production notes:

In 1914 a test shipment of 12 tons of ore that ran 0.97% copper and 1.92 ounces of silver per ton resulted in the production of 2,350 pounds of copper and 23 ounces of silver (Johnson, 1918 p. 209-210).

Reserves:

Kurtak and Jeske (1986) inferred a reserve of 2,900 tons copper in ore that contains 3% copper and 8.7ppm silver.

Additional comments:

References:

Grant and Higgins, 1909; Martin and others, 1915; Johnson, 1918; Johnson, 1919; Moffit and Fellows, 1950; Condon and Cass, 1958; Cobb, 1972 (MF-440); MacKevett and Holloway, 1977; Tysdal, 1978; Cobb and Tysdal, 1980 (OFR 80-621); Kurtak and Jeske, 1986.

Primary reference: Johnson, 1918; Kurtak and Jeske, 1986

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/21/99

Site name(s): Unnamed (near Cape Resurrection)**Site type:** Occurrence**ARDF no.:** BS014**Latitude:** 59.881**Quadrangle:** BS D-7**Longitude:** 149.278**Location description and accuracy:**

The occurrence is located on the beach about 3/4 mile north of Cape Resurrection in section 33, T. 3 S., R. 1 E., of the Seward Meridian. This is location 110 of Tysdal (1978) and is accurate to within one quarter of a mile.

Commodities:**Main:** Ag, Cu, Pb, Zn**Other:** Cd**Ore minerals:** Chalcopyrite, galena, pyrite, unknown zinc mineral**Gangue minerals:** Quartz**Geologic description:**

The host rock is Upper Cretaceous sheeted basalt of the Valdez Group that has been sheared and brecciated (Tysdal, 1978). The shear and breccia zone is 0.6 meters wide and contains quartz, pyrite, chalcopyrite, and galena. Analysis showed 3 ppm silver, 70 ppm cadmium, 1,500 ppm copper, 3,000 ppm lead, and 9,200 ppm zinc. Tysdal (1978) considers this occurrence to be a volcanogenic massive sulfide deposit.

Alteration:

None reported.

Age of mineralization:

Cretaceous or younger; breccia zone in Cretaceous basalt.

Deposit model:

Cyprus massive sulfide (Cox and Singer, 1986; model 24a).

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

24a

Production Status: None

Site Status: Inactive

Workings/exploration:

A hand sample contained 3 PPM silver, 70 ppm cadmium, 1500 ppm copper, 3000 ppm lead, and 9,200 PPM Zn (Tysdal, 1978).

Production notes:

Reserves:

None.

Additional comments:

References:

Tysdal, 1978; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Tysdal, 1978

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/28/99

Site name(s): Whale**Site type:** Occurrence**ARDF no.:** BS015**Latitude:** 59.979**Quadrangle:** BS D-3**Longitude:** 148.013**Location description and accuracy:**

The Whale occurrence is in the NE1/4 of section 26, T. 2 S., R. 8 E., of the Seward Meridian, near the south end of Latouche Island. This is Tysdal's (1978) location 269, and MacKevett and Holloway's (1977) location 13. This location is accurate to within a quarter of a mile.

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

The country rock in the vicinity of the occurrence is graywacke and shale of the Tertiary Orca Group (Nelson and others, 1985). The bedding strikes N75E and dips west. The mineralization consist of stringers of and disseminated chalcopyrite and bornite within fracture zones that parallel bedding (Schrader and Spencer, 1901).

Alteration:**Age of mineralization:**

Tertiary or younger; mineralized fractures cut Tertiary Orca Group rocks.

Deposit model:

Besshi massive sulfide (Cox and Singer, 1986; model 24b).

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

24b

Production Status: None

Site Status: Inactive

Workings/exploration:
None.

Production notes:

Reserves:

Additional comments:

References:

Schrader and Spencer, 1901; Tysdal, 1978; Cobb and Tysdal, 1980 (OFR 80-621).

Primary reference: Schrader and Spencer, 1901

Reporter(s): Jeff A. Huber (Anchorage)

Last report date: 01/22/99

Site name(s): Unnamed (on Elrington Island)**Site type:** Occurrence**ARDF no.:** BS016**Latitude:** 59.95**Quadrangle:** BS D-4**Longitude:** 148.13**Location description and accuracy:**

The occurrence has been located in the NW1/4, of section 6, T. 2 S., R. 8 E., of the Seward Meridian by Kurtak and Jeske (1986) although they could not located the prospect on the ground. This location 272 of Tysdal (1978) and Cobb and Tysdal (1980, OFR 80-621).

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

Country rock in the area is intermixed graywacke, slate and greenstones of the Orca Group (Cobb and Tysdal, 1980, OFR 80-621). The occurrence is thought to be a copper occurrence but both Nelson and others (1984) and Kurtak and Jeske (1986) were unable to locate any mineralization in this area.

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

Insuffecient information to classify.

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

Workings/exploration:

None.

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

Condon and Cass, 1958; Tysdal, 1978; Cobb and Tysdal, 1980; Kurtak and Jeske, 1986.

Primary reference: Cobb and Tysdal, 1980 (OFR 80-621)**Reporter(s):** Jeff A. Huber (Anchorage)**Last report date:** 5/15/99

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