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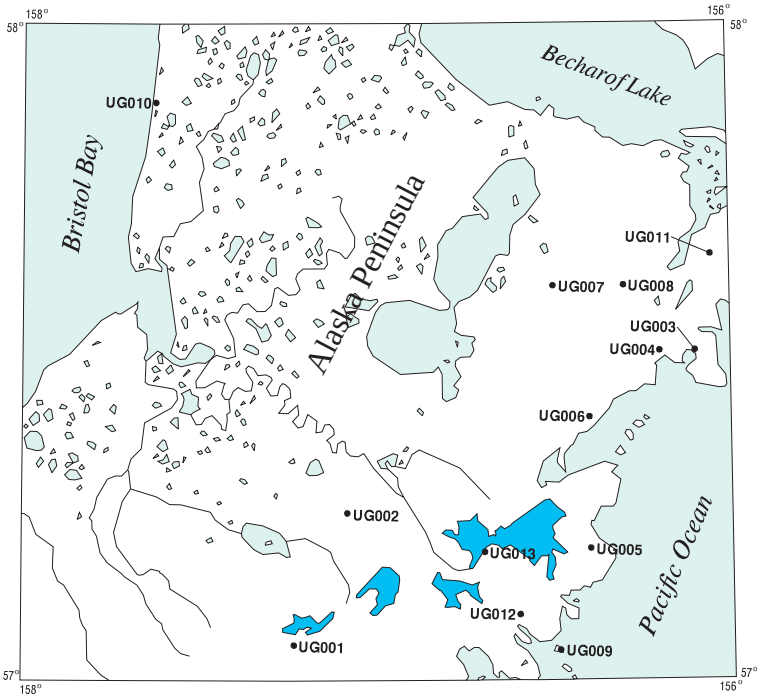
Alaska Resource Data File

Ugashik quadrangle

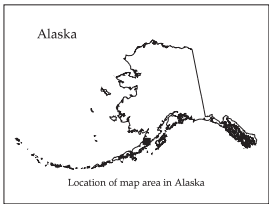
Descriptions of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for a description of the information content of each field in the records. The data presented here are maintained as part of a statewide database on mines, prospects and mineral occurrences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



Distribution of mineral occurrences in the Ugashik 1:250,000-scale quadrangle, Alaska Peninsula, 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:

Steven H. Pilcher
Anchorage, AK



OPEN-FILE REPORT 00-122

Site name(s): Mike

Site type: Prospect

ARDF no.: UG001

Latitude: 57.054 **Quadrangle:** UG A-4

Longitude: 157.235

Location description and accuracy:

The Mike prospect is located approximately 9 miles south of Mother Goose Lake in sec. 24, T. 36 S., R. 50 W., of the Seward Meridian (Church and others, 1989: MF-1593I, locality 1; Nokleberg and others, 1987, locality AP 14; MacKevett and Holloway, 1977, locality 1). Site location is accurate to within 1/2 mile.

Commodities:

Main: Mo

Other: Cu, Pb, Zn

Ore minerals: Chalcopyrite, galena, hematite, magnetite, molybdenite, pyrite, sphalerite

Gangue minerals: Quartz, barite?, fluorite?, tourmaline?

Geologic description:

The Mike prospect is marked by a large color anomaly and by a large copper-molybdenum anomaly shown by stream sediment analyses (Church and others, 1989: MF-1539I). The area of this site consists of dikes, sills, and stocks which have intruded sandstones and siltstones of the Jurassic Naknek Formation (Detterman and others, 1987). The main area of mineralization occurs in a zone of silica flooding around and within a rhyolite porphyry stock. The stock is bordered to the north and west by numerous dacitic dikes. A small quartz monzonite stock has intruded the rhyolite stock on its east side and another cuts sedimentary rocks approximately 1 mile north-northeast of the rhyolite. A breccia pipe measuring 400 by 700 feet occurs near the latter quartz monzonite stock. Late-stage quartz veins trending northeast and northwest cut the rhyolite stock. Some if these are traceable for up to 10,000 feet. Potassium-argon dating of the intrusives indicates they are of Pliocene age (Wilson and Shew, 1992).

Sulfides (mostly pyrite) are present in amounts of 5 to 10 percent over an area of 1 square mile. Sulfide content grades outward to 1 to 2 percent over an area of 3 square miles. Northwest of the porphyry stock magnetite is present in veins, breccias, and as disseminations in quartzite and siltstone (Hedderly-Smith, 1977).

Within the rhyolite porphyry, fine-grained molybdenite occurs within a stockwork of small quartz-filled fractures. The mineralized area measures approximately 3600 by 4300

feet as defined by values of greater than 40 ppm molybdenum. Locally. molybdenite may occur in larger, coarsely crystalline quartz veins. Lesser amounts of it are present sporadically in the hornfelsed sedimentary rocks surrounding the stock. The average molybdenum content of surface rock samples from the main mineralized area averaged 130 ppm (Church and others, 1989: B-1858). Grades of up to 0.21 percent molybdenum have been reported (Eakins and others, 1984). Within the mineralized zone copper (10-50 ppm), lead, zinc, and silver values are generally low. This zone also contains some tin and tungsten anomalies and has a fluorine content averaging 710 ppm with values up to 2100 ppm. Fluorine and molybdenum values show a strong correlation.

In 1977 Bear Creek Mining Company drilled 3 holes for a total of 258 feet. The drill cut silicified rhyolite stock, rhyolitic sill, and silicified sedimentary rock. Average molybdenum values for the holes ranged from 10 to 125 ppm (Church and others, 1989: B-1858). The bottom 7 feet of hole 77-3 averaged 253 ppm molybdenum.

A second stockwork occurs on the east side of the rhyolite porphyry, apparently in the quartz monzonite (Hedderly-Smith, 1977). Chalcopyrite is present as disseminations and fracture fillings. Samples of mineralized quartz monzonite are reported to contain 500 to 1000 ppm copper and 10 to 20 ppm molybdenum (Church and others, 1989: B1858). A sample of skarn adjacent to a dacite dike contained 3450 ppm copper and a grab sample of the breccia pipe contained 160 ppm molybdenum.

The molybdenum stockwork and area of silica flooding is surrounded in part and overlapped by intense sericitic and phyllic alteration. Beyond this zone the rocks have been propylized. The alteration has been dated as Pliocene (Wilson and Shew, 1992).

Alteration:

The silica-flooded zone in the rhyolite stock is in part surrounded and overlapped by intense sericitic and phyllic alteration. Beyond this zone the rocks have been propylized.

Age of mineralization:

Pliocene or younger.

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 prospect was originally identified in 1975 by Resource Associates of Alaska on the basis of the color anomaly and a stream-sediment survey (Hedderly-Smith, 1977). In 1977 Bear Creek Mining Company did detailed mapping and sampling and drilled 3 short holes at this prospect. Average molybdenum values for the holes ranged from 10 to 125 ppm with the lower 7 feet of one hole containing 253 ppm. An average value of the sur-

face of the main mineralized zone is stated at 130 ppm molybdenum (Church and others, 1989: B-1858). Grades of up to 0.21 percent molybdenum have been reported (Eakins and others, 1984). In the 1980's the U.S. Geological Survey did geochemical sampling of the prospect and of the surrounding area (Church and others, 1989: B-1858).

Production notes:

Reserves:

Additional comments:

This prospect is located on land selected by the Koniag Native Corporation.

References:

MacKevett and Holloway, 1977; Hedderly-Smith, 1977; Cobb, 1980 (OFR 80-909); Nokleberg and others, 1987; Church and others, 1989 (MF-1539I); Church and others, 1989 (B-1858); Wilson and Shew, 1992.

Primary reference: Church and others, 1989 (B-1858)

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Rex

Site type: Prospect

ARDF no.: UG002

Latitude: 57.255 **Quadrangle:** UG B-4

Longitude: 157.084

Location description and accuracy:

The Rex prospect is located approximately 8 miles northeast of Mother Goose Lake in sec. 12, T. 34 S., R. 49 W., of the Seward Meridian (MacKevett and Holloway, 1977, locality 2; Nokleberg and others, 1987, locality AP 13; Church and others, 1989: MF-1539I, locality 2). Site location is accurate to within 1/2 mile.

Commodities:

Main: Au, Cu

Other: Mo, Pb, Zn

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

Gangue minerals: Barite?, quartz?

Geologic description:

At the Rex prospect, sedimentary rocks of the Cretaceous Chignik and Eocene Tolstoi Formations are cut by an Oligocene porphyritic quartz diorite stock (Church and others, 1989: B-1858). The site is marked by a color anomaly and by copper, molybdenum, lead, zinc, silver, gold and tungsten stream-sediment anomalies. Panned concentrates taken in the vicinity of the prospect contain free gold.

Chalcopyrite and molybdenite are present mostly in a zone of potassic alteration which occurs over an area of 1 mile square within the stock (Church and others, 1989: B-1858). The chalcopyrite occurs as disseminations and in stockwork fractures, whereas the molybdenite is locally present only in the stockwork fractures. Sampling by Bear Creek Mining Company indicated a small area containing 1350 to 3900 ppm copper and 26 to 56 ppm molybdenum (Hedderly-Smith, 1977). In a separate? area he describes a 500-foot wide zone containing 0.2 to 0.25 percent copper. Elsewhere values of 500 to 1000 ppm copper were found sporadically. Gold values, up to 0.37 ppm, were coincident with the higher copper values. Float samples of intrusive with secondary potassium feldspar and tourmaline contained 0.2 to 0.25 percent copper. Scattered galena and sphalerite are present in the altered rocks peripheral to the copper mineralization. Occasional anomalies of 40 to 60 ppm lead and 100 to 300 ppm zinc have been detected (Hedderly-Smith, 1977). Pyrite is present in the mineralized zone and in the surrounding altered sedimentary rocks in

amounts up to 10 percent.

Beyond the potassic mineralized zone, defined by the presence of seondary biotite, some phyllic alteration has developed. The dominant alteration at this prospect is propylitic and is present in the sedimentary rocks surrounding the stock.

Alteration:

This prospect exhibits zoned potassic, phyllic, and propylitic alteration.

Age of mineralization:

Oligocene or younger.

Deposit model:

Porphyry copper-gold (Cox and Singer, 1986; model 20c)

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

20c

Production Status: None

Site Status: Inactive

Workings/exploration:

This prospect was originally identified in 1975 by Resource Associates of Alaska in the basis of the color anomaly and a stream-sediment survey (Hedderly-Smith, 1977).

Bear Creek Mining Company did extensive mapping and sampling at the Rex prospect in 1977 (Church and others, 1989: B-1858). A small area in the intrusive was found to contain 1350 to 3900 ppm copper and 26 to 56 ppm molybdenum (Hedderly-Smith, 1977). In a separate(?) 500-foot wide zone, copper values of 0.2 to 0.25 percent were reported. Elsewhere in the intrusive, sporadic copper values of 500 to 1000 ppm were indicated. Gold values up to 0.37 ppm were found to be coincident with the higher copper values. The average copper, gold, and molybdenum values are not available.

In the 1980's the U.S. Geological Survey did a silt and rock geochemical survey which included the area around this prospect (Church and others, 1989: B-1858).

Production notes:

Reserves:

Additional comments:

This prospect is located on land selected by the Koniag Native Corporation.

References:

MacKevett and Holloway, 1977; Hedderly-Smith, 1977; Eakins and others, 1982; Nokleberg and others, 1987; Church and others, 1989 (MF-1539I); Church and others, 1989 (B-1858); Wilson and Shew, 1992.

Primary reference: Hedderly-Smith, 1977

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (north of Kanatak Lagoon)

Site type: Occurrence

ARDF no.: UG003

Latitude: 57.5 **Quadrangle:** UG C-1

Longitude: 156.1

Location description and accuracy:

This occurrence is located just north of Kanatak Lagoon and south of Mount Becharof in sec. 3, T. 31 S., R. 42 W., of the Seward Meridian (MacKevett and Holloway, 1977, locality 4; Church and others, 1989: MF-1539I, locality 3). Location is accurate to within 2 miles.

Commodities:

Main: Fe

Other:

Ore minerals:

Gangue minerals:

Geologic description:

At this occurrence a quartz diorite pluton of Pliocene age (Wilson and Shew, 1992) cuts sedimentary rocks of the Jurassic Naknek Formation. Case and others (1988) report large magnetic anomalies associated with the pluton. It has been suggested that the anomalies are due to magnetite-rich segregations in mafic phases of the pluton (MacKevett and Holloway, 1977). Skarn-type mineralization may also account for the anomalies. In the past the area has been staked as lode claims for iron.

Alteration:

Age of mineralization:

Pliocene?

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

In the past the area has been staked as lode claims for iron (U.S. Bureau of Mines, 1973).

Production notes:

Reserves:

Additional comments:

This mineral occurrence is located on land selected by the Koniag Native Corporation.

References:

U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Cobb, 1978; Case and others, 1988; Church and others, 1989 (MF-1539I); Church and others, 1989 (B-1858); Wilson and Shew, 1992.

Primary reference: Church and others, 1989 (B-1858)

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (west of Kanatak Lagoon)

Site type: Occurrence

ARDF no.: UG004

Latitude: 57.5 **Quadrangle:** UG C-1

Longitude: 156.2

Location description and accuracy:

This occurrence is located west of Kanatak Lagoon and south of Ruth Lake in sec. 6, T. 31 S., R. 42 W., of the Seward Meridian (MacKevett and Holloway, 1977, locality 5; Church and others, 1989: MF-1539I, locality 4). Location is accurate to within 2 miles.

Commodities:

Main: Fe

Other:

Ore minerals:

Gangue minerals:

Geologic description:

At this occurrence a quartz diorite pluton of Pliocene age (Wilson and Shew, 1992) cuts sedimentary rocks of the Jurassic Naknek Formation. Case and others (1988) report large magnetic anomalies associated with the pluton. It has been suggested that the anomalies are due to magnetite-rich segregations in mafic phases of the pluton (MacKevett and Holloway, 1977). Skarn-type mineralization may also account for the anomalies. In the past the area has been staked as lode claims for iron.

Alteration:

Age of mineralization:

Pliocene?

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

In the past this area was staked as lode claims for iron (U.S. Bureau of Mines, 1973).

Production notes:

Reserves:

Additional comments:

This site is located within the Becharof Natural Wildlife Refuge.

References:

U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Cobb, 1978; Case and others, 1988; Church and others, 1989 (MF-1539I); Church and others, 1989 (B-1858); Wilson and Shew, 1992.

Primary reference: Church and others, 1989 (B-1858)

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (near Kilokak Creek)

Site type: Occurrence

ARDF no.: UG005

Latitude: 57.2 **Quadrangle:** UG A-2

Longitude: 156.4

Location description and accuracy:

This occurrence is located near Kilokak Creek on Cape Kilokak north of triangulation point Imuya in T. 35 S., R. 44 W., of the Seward Meridian (MacKevett and Holloway, 1977, locality 13; Nokleberg and others,1987, locality AP 15). The site location is accurate to within 3 miles.

Commodities:

Main: Pb, Zn

Other: Au?, Cu?, Mo?

Ore minerals: Galena?, pyrite, sphalerite?

Gangue minerals: Quartz?, barite?, tourmaline?

Geologic description:

At this site sedimentary rocks of the Cretaceous Hoodoo and Chignik Formations and Eocene Tolstoi Formation are cut by the northern part of the Pliocene Agripina batholith (Detterman and others, 1987). The batholith also intrudes sills, dikes, and volcanic rocks of Oligocene age.

The occurrence is marked by a color anomaly, mostly in the sedimentary rocks, and by copper, gold, lead, molybdenum, tungsten, and zinc anomalies in stream sediments from Kilokak Creek (Church and others, 1989: B-1858). Tourmaline and barite have been found in panned concentrates from this drainage.

Bear Creek Mining company examined and sampled the area in 1977 (Hedderly-Smith, 1977). Pyrite, in amounts of 2-3 percent, was the only sulfide mineral reported. Rock-chip sampling indicated only low level metal anomalies. Except for localized silicification, little alteration was found.

Nokleberg and others (1987) describe a zone of alteration and sparse veining within a black shale member of the Hoodoo Formation. The veins are anomalous in lead and zinc. They also report an unaltered andesite plug (Oligocene?) which is surrounded by an extensive zone of disseminated pyrite in the surrounding sedimentary rocks.

Alteration:

The rocks exhibit only localized silicification.

Age of mineralization:
Tertiary 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: Inactive

Workings/exploration:
A stream-sediment geochemical survey was done here by Resource Associates of Alaska in 1975. Bear Creek Mining Company mapped and sampled the prospect in 1977 (Hedderly-Smith, 1977). The U.S. Geological Survey geochemically sampled the stream-sediments in the 1980's (Church and others, 1989: B-1858). Anomalous values of copper, gold, lead, molybdenum, tungsten and zinc were reported.

Production notes:

Reserves:

Additional comments:
This site is located on land selected by the Koniag Native Corporation.

References:
MacKevett and Holloway, 1977; Hedderly-Smith, 1977; Nokleberg and others, 1987; Detterman and others, 1987; Church and others, 1989 (MF-1539I); Church and others, 1989 (B-1858); Wilson and Shew, 1992.

Primary reference: Hedderly-Smith, 1977

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (on Pass Creek)

Site type: Occurrence

ARDF no.: UG006

Latitude: 57.4 **Quadrangle:** UG B-2

Longitude: 156.4

Location description and accuracy:
This site is located southeast of Mount Shannon on Pass Creek, which drains southeast into Wide Bay (MacKevett and Holloway, locality 3; Church and others, 1989: MF-1539I, locality 20). Site location is accurate to within 3 miles.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
This site repesents gold placer claims located on Pass Creek as indicated on U.S. Bureau of Mines maps in 1973. Pass Creek drains an area consisting of sedimentary rocks of the Jurassic Shelikof and Kialagvik Formations (Detterman and others, 1987).

Alteration:

Age of mineralization:
Quaternary.

Deposit model:
Placer gold-PGE (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:

Gold placer claims were staked on Pass Creek according to 1973 U.S. Bureau of Mines maps.

Production notes:

Reserves:

Additional comments:

This site is on land selected by the Koniag Native Corporation.

References:

U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Detterman and others, 1987; Church and others, 1989 (MF-1539I).

Primary reference: Church and others, 1989 (MF 1539I)

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (on Moore Creek)

Site type: Occurrence

ARDF no.: UG007

Latitude: 57.6 **Quadrangle:** UG C-2

Longitude: 156.5

Location description and accuracy:
This site is located on Moore Creek approximately 8 miles southeast of Upper Ugashik Lake in T. 30 S., R. 44 W. of the Seward Meridian (MacKevett and Holloway, 1977, locality 6; Church and others, 1989: MF-1539I, locality 19). Site location is accurate to within 3 miles.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
This site represents gold placer claims located on Moore Creek as indicated on U.S. Bureau of Mines maps in 1973. Moore Creek drains an area underlain by sedimentary and volcanic units of the Jurassic Naknek Formation (Detterman and others, 1987).

Alteration:

Age of mineralization:
Quaternary.

Deposit model:
Placer gold-PGE (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:

Gold placer claims were staked on Moore Creek according to 1973 U.S. Bureau of Mines maps.

Production notes:

Reserves:

Additional comments:

This site is on land selected by the Koniag Native Corporation.

References:

U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Detterman and others, 1987; Church and others, 1989 (MF-1539I).

Primary reference: Church and others, 1989 (MF-1539I)

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (west of Mount Lee near Burls Pass)

Site type: Occurrence

ARDF no.: UG008

Latitude: 57.6 **Quadrangle:** UG C-1

Longitude: 156.3

Location description and accuracy:
This site is in T. 29 S, R. 43 W., of the Seward Meridan, west of Mount Lee (MacKevett and Holloway, 1977, location 8; Church and others, 1989: MF-1539I, locality 5). Site location is accurate to within 3 miles.

Commodities:

Main: Cu

Other:

Ore minerals:

Gangue minerals:

Geologic description:
This site represents a lode claim for copper as indicated on U.S. Bureau of Mines maps in 1973. The area is underlain by sedimentary units of the Jurassic Naknek Formation (Detterman and others, 1987). It has been suggested that the mineralization may be related to a dike (Church and others, 1989: MF-1539I).

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:
This site is located on land selected by the Koniag Native Corporation.

References:
U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Detterman and others, 1987; Church and others, 1989 (MF-1539I).

Primary reference: Church and others, 1989 (MF-1539I)

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (on David Island)

Site type: Occurrence

ARDF no.: UG009

Latitude: 57.034 **Quadrangle:** UG A-2

Longitude: 156.487

Location description and accuracy:
This occurrence is located on David Island just offshore from Port Wrangell. Site location is accurate to within 1/2 mile.

Commodities:

Main: Fe

Other: As, Bi, Cu, Mo, Pb, Sb

Ore minerals: Pyrite

Gangue minerals:

Geologic description:
This site is underlain by Miocene and Pliocene andesite and basalt flows, lithic tuffs, and breccias (Detterman and others, 1987). The rocks are locally silicified and exhibit other, undetermined alteration. Anomalous values in copper, molybdenum, and lead have been reported in samples of igneous rock (Wilson and O'Leary, 1986). A massive pyritic lode, 10 to 20 feet thick, is exposed at the wave base on the south side of a small point at the east end of the island and along the northeast shore (Church and others, 1989: B-1858). Grab samples of this material are anomalous in arsenic, bismuth, and antimony. Hydrothermal alteration is reportedly widespread along the northeast shore.

Alteration:
Silicification and other, undetermined, 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: None

Site Status: Inactive

Workings/exploration:
The U.S. Geological Survey has geochemically sampled this occurrence (Church abd others, 1989, B-1858).

Production notes:

Reserves:

Additional comments:
This site is on land selected by the Koniag Native Corporation.

References:
Church and others, 1989 (B-1858).

Primary reference: Church and others 1989 (B-1859)

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (Bristol Bay coast north of Ugashik Bay)

Site type: Occurrence

ARDF no.: UG010

Latitude: 57.88 **Quadrangle:** UG D-5

Longitude: 157.64

Location description and accuracy:

This site represents beach placer deposits which extend from 4 miles north of Cape Greig (Ugashik D-5) northward to 4 1/2 miles south of Goose Point (Naknek A-5), a total of 13 miles (MacKevett and Holloway, 1977, locality 9; Church and others, 1989: MF-1539I, locality 21).

Commodities:

Main: Au

Other: Fe, Ti

Ore minerals: Gold, ilmenite, magnetite

Gangue minerals:

Geologic description:

This site represents black sand beach placer deposits tested by the U.S. Bureau of Mines in 1969 (Kimball, 1972). The beach consists of silt to large boulder-sized detritus. The coarser material is mostly of igneous origin, and is thought to have been transported from the Aleutian Range. The finer material consists mostly of quartz and feldspar.

Black sand occurs as a veneer, generally forming thin layers or lenses, that covers wide sections of the upper part of the beach. These layers or lenses rarely exceed 6 inches thick, but one layer measured 14 inches. Buried layers were generally of the same thickness. Some of the black sand lenses are up to a 100 feet long, but most are short and narrow, and rarely cover an acre. A magnetic survey failed to detect any large buried bodies of black sand. Magnetite and ilmenite are abundant in the black sands, however hypersthene is the dominant mineral.

The U.S. Bureau of Mines drilled 21 holes along 13 miles of this beach. Hole depths ranged from 2 to 4 feet. They collected 125 samples, 89 of which contained trace to 0.007 ounce of gold per ton.

Alteration:

Age of mineralization:

Quaternary.

Deposit model:
Placer gold-PGE (Cox and Singer, 1986; model 39a)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
39a

Production Status: None

Site Status: Inactive

Workings/exploration:
The U.S. Bureau of Mines drilled 21 holes in these deposits in 1969 (Kimball, 1972). Of 125 samples, 89 contained trace to 0.007 ounce of gold per ton.

Production notes:

Reserves:

Additional comments:
This occurrence is on state land.

References:
Kimball, 1972; MacKevett and Holloway, 1977; Cobb, 1980 (OFR 80-909); Church and others, 1989 (MF-1539I).

Primary reference: Kimball, 1972

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Salmon Creek

Site type: Occurrence

ARDF no.: UG011

Latitude: 57.646 **Quadrangle:** UG C-1

Longitude: 156.053

Location description and accuracy:
This site represents gold placer claims indicated on U.S. Bureau of Mines maps in 1973. They are located on Salmon Creek in T. 29 S., R. 42 W., of the Seward Meridian, approximately 2 1/2 miles upstream from Becharof Lake. They are part of a group of claims extending to the southeast along Salmon Creek onto the Karluk quadrangle (site KR011in Pilcher, 1999). The site corresponds to locality 7 in MacKevett and Holloway (1977), and to locality 18 in Church and others (1989: MF-1539I). Site location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Mo?, U?

Ore minerals: Gold

Gangue minerals:

Geologic description:
This drainage is underlain by sedimentary rocks of the Jurassic Naknek and Shelikof Formations (Detterman and others, 1987).

Alteration:

Age of mineralization:
Quaternary.

Deposit model:
Placer gold-PGE (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:
This site is located within the Becharof National Wildlife Refuge.

References:
U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Church and others, 1989 (MF-1539I).

Primary reference: MacKevett and Holloway, 1977

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (northwest of Port Wrangell)

Site type: Occurrence

ARDF no.: UG012

Latitude: 57.1 **Quadrangle:** UG A-2

Longitude: 156.6

Location description and accuracy:

This map site is located in T. 36 S., R. 46 W., of the Seward Meridian, approximately 2.5 miles northwest of Port Wrangell (MacKevett and Holloway, 1977, locality 11). The location is accurate to within 3 miles.

Commodities:

Main: Cu?, Mo?

Other:

Ore minerals:

Gangue minerals: Quartz?

Geologic description:

This occurrence is within or near the Agripina Bay batholith of Pliocene and/or Miocene age, and represents numerous altered zones which are said to be in the general vicinity and probably associated with the batholith (MacKevett and Holloway, 1977; Determan and others, 1987). An altered quartz-sericite sample from this area has been dated as Pliocene in age (Wilson and Shew 1992).

Alteration:

Sericitic?

Age of mineralization:

Pliocene?

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:
This site is on land selected by the Koniag Native Corporation.

References:
MacKevett and Holloway, 1977; Detterman and others, 1987.

Primary reference: MacKevett and Holloway, 1977

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

Site name(s): Unnamed (southeast of Mount Kialagvik)

Site type: Occurrence

ARDF no.: UG013

Latitude: 57.2 **Quadrangle:** UG A-3

Longitude: 156.7

Location description and accuracy:
This map site is located about 3 miles south-southeast of Mount Kialagvik (MacKevett and Holloway, 1977, location 12). The location is accurate to within 4 miles.

Commodities:

Main: Cu?

Other:

Ore minerals:

Gangue minerals:

Geologic description:
This site is described as an altered zone probably associated with a Tertiary pluton (MacKevett and Holloway, 1977). Detterman and others (1987) however, indicate no intrusive in the area and that the rocks consist of andesitic rocks of Miocene and Oligocene age and of sedimentary strata of the Jurassic Naknek Formation.

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:
This site is located within the Alaska Peninsula National Wildlife Refuge.

References:
MacKevett and Holloway, 1977; Detterman and others, 1987.

Primary reference: MacKevett and Holloway, 1977

Reporter(s): S.H. Pilcher (Anchorage)

Last report date: 2/1/00

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