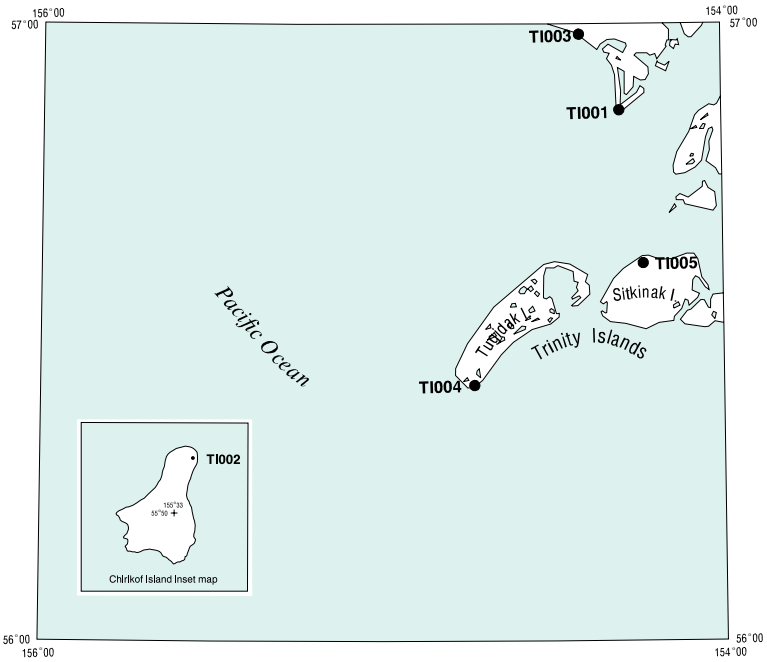
Alaska Resource Data File

U.S. Department of the Interior - U.S. Geological Survey

Trinity Islands 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 Trinity Islands 1:250,000-scale quadrangle, Alaska

This and related reports are accessible through the USGS World Wide Web site http://www-mrs-ak.wr.usgs.gov/ardf. Comments or information regarding corrections or missing data, or requests for digital retrievals should be directed to Donald J. Grybeck, USGS, 4200 Unversity Dr., Anchorage, AK 99508-4667, email dgrybeck@usgs.gov, telephone (907) 786-7424. This compilation is authored by:

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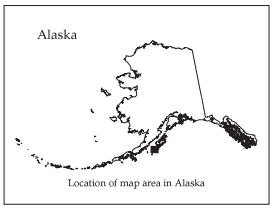

OPEN-FILE REPORT 99-41

Site name(s): Cape Alitak Beach

Site type: Mine

ARDF no.: TI001

Latitude: 56.85 **Quadrangle:** TI D-1

Longitude: 154.3

Location description and accuracy:

This site represents the beach area near Alitak triangulation station located at the southern end of Tanner Head (Cobb, 1972, MF 468, locality 1; Cobb 1973, Bulletin 1374, figure 11, locality 2; MacKevett and Holloway; 1977, locality 1). Site location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

At this site placer gold has been found in beach deposits as well as in sand dunes derived from the beach sands. Magnetite is fairly abundant in the dunes as well as on the beach. Gassaway (1935, p. 4) reports black sand layers on the beach to be up to 2 feet in thickness with a gold content of less than commercial grade. The gold was reported to be extremely fine and difficult to amalgamate.The immediate source of the placer gold is thought to be the nearby bluffs of glacial gravels and tills.

Alteration:

Age of mineralization:

Quaternary

Deposit model:

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

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

39a

Production Status Yes; small

Site Status: Inactive

Workings/exploration:

As reported by Capps (1937), in 1935 a mill was under construction to treat the wind-blown dune sand for its gold content. No further efforts were reported and the endeavor was apparently not sucessful. At this same time some mining of the beach deposits was being carried out with sluice boxes and amalgamation plates.

Production notes:

Reserves:

Additional comments:

This site is located within the Kodiak National Wildlife Refuge.

References:

Gassaway, 1935; Capps, 1937; Cobb, 1972, MF 468; Cobb, 1973, B 1374; Cobb, 1979, OFR 79-860; MacKevett and Holloway, 1977.

Primary reference: Capps, 1937

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

Last report date: 08/13/98

Site name(s): Chirikof Island

Site type: Occurrence

ARDF no.: TI002

Latitude: 55.9 **Quadrangle:** TI

Longitude: 155.56

Location description and accuracy:
This site is the beach area on the north and northeast coast of Chirikof Island (MacKevett and Holloway, 1977, locality 3). The island is shown on an inset on the USGS Trinity Island 1:250,000 scale quadrangle map.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
Black sands occur along the northeast coast and at the extreme north end of the island for a distance of approximately 10 miles (Gassaway, 1935). These sands commonly occur as thin surface crusts on the beaches near high-tide levels. Some crusts were also noted on local sand dunes. On the northern tip of the island a narrow strip of black sand about 6 inches thick and extending about 1/8 mile was noted. The presence of gold in the black sands was found to be very sporadic as indicated in panned samples taken by Gassaway.

Alteration:

Age of mineralization:
Quaternary

Deposit model:
Gold placer (Cox and Singer, 1986; model 39a).

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

Production Status None

Site Status: Inactive

Workings/exploration:

The beach areas had been prospected prior to 1935 (Gassaway). U.S. Bureau of Mines claim map shows no apparent activity after 1950.

Production notes:

Reserves:

Additional comments:

References:

Gassaway, 1935; MacKevett and Holloway, 1977; MacKevett and others, 1978; Cobb, 1979, OFR 79-860.

Primary reference: Gassaway, 1935

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

Last report date: 08/13/98

Site name(s): South Kodiak Island Beaches

Site type: Mine

ARDF no.: TI003

Latitude: 56.98 **Quadrangle:** TI D-2

Longitude: 154.44

Location description and accuracy:

This site is a part of a 30-mile stretch of beach exhibiting patchy, small concentrations of finely-divided placer gold. Approximately 8 miles of this beach is within the Trinity Islands quadrangle, extending from northwest of the Low Cape triangulation station southeast to beyond Gump triangulation station (Cobb, 1972, MF 468, locality 2; Cobb, 1973, Bulletin 1374, figure 11, locality 1; MacKevett and Holloway, 1977, locality 1). Although there has been mining and prospecting activity within this section of beach, most descriptions apply to the more extensive beach to the northwest in the Karluk quadrangle (see ARDF KR030).

Commodities:

Main: Au

Other: Cr, PGE

Ore minerals: Gold

Gangue minerals:

Geologic description:

Placer gold deposits on the west coast of Kodiak Island have been worked since the early 1890's (Becker, 1898, p. 86); however, mining activity has been sporadic at best. The latest reported mining or prospecting work was done by 2 men in 1950-52 (Cobb, 1973, Bulletin 1374). Cobb estimates that total gold production is probably not more than a few thousand ounces. Concentrations of gold and other heavy minerals tend to occur in small, thin patches which appear and disappear according to variability of wave action and tides. No well-defined paystreaks occur. Approximately 95 percent of these beach concentrates is magnetite; the remainder consists of pyrite, chromite, and a little gold and platinum. No estimates of gold values within these patchy zones of heavy minerals have been reported. The immediate source of the gold appears to be the nearby bluffs of glacial gravels and tills, which are constantly being eroded by wave action. The gold content of the glacial deposits is extremely low as shown by the lack of visible gold where they have been prospected.

An analysis of placer PGE concentrate from the beach (Maddren, 1919, p. 316) is as

follows: 26.9 percent iridium-osmium, rhodium; 6.1 percent iridium from part of iridium-osmium; 0.1 percent rhodium from part of iridium-osmium; 55.3 percent platinum; 2.4 percent iridium; 6.4 percent iron; 0.3 percent gold; 0.7 percent rhodium; 0.1 percent palladium; 0.6 percent copper; 0.08 percent nickel; trace silver and zinc.

Alteration:

Age of mineralization:
Quaternary

Deposit model:
Gold-PGE placer (Cox and Singer, 1986; model 39a).

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

Production Status Yes; small

Site Status: Inactive

Workings/exploration:
These deposits have been worked sporadically using small portable rockers and sluice boxes.

Production notes:

Reserves:

Additional comments:
Descriptions of beach placers in the Kodiak region are so generalized that it is difficult to discern which descriptions are pertinent to any given location.

References:
Maddren, 1919; Smith, 1933; Cobb, 1972, MF 468; Cobb, 1973, B 1374; Cobb, 1979, OFR 79-860; McGee, 1972; MacKevett and Holloway, 1977.

Primary reference: Maddren, 1919

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

Last report date: 08/28/92

Site name(s): Tugidak Island

Site type: Mine

ARDF no.: TI004

Latitude: 56.4 **Quadrangle:** TI B-3

Longitude: 154.72

Location description and accuracy:
This site is the general beach area along the southeast coast of Tugidak Island (MacKevett and Holloway, 1977, locality 5).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
Scattered patches of black sand concentrations occur at the high tide mark. They are widely scattered , their volume is small, and their gold content is reported to be very low (Gassaway, 1935).

Alteration:

Age of mineralization:
Quaternary

Deposit model:
Gold placer (Cox and Singer, 1986; model 39a).

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

Production Status Yes; small

Site Status: Active?

Workings/exploration:

Smith (1933) reports that natives have recovered placer gold in amounts valued at a few hundred dollars. In 1996 there were active placer claims on the southern end of the island.

Production notes:

Reserves:

Additional comments:

References:

Smith, 1933; Gassaway, 1935; Cobb, 1972, MF 468; MacKevett and Holloway, 1977; Cobb, 1979, OFR 79-860; Map of general land status with mineral resources and mining claims, Alaska Peninsula, Alaska Division of Natural Resources, 1997.

Primary reference: Gassaway, 1935

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

Last report date: 08/15/98

Site name(s): Sitkanak Island

Site type: Mine

ARDF no.: TI005

Latitude: 56.612 **Quadrangle:** TI C-1

Longitude: 154.234

Location description and accuracy:
This site consists of the beaches along the north, west, and south coasts of Sitkanak Island. Site location is accurate to within a few hundred feet.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The beaches locally contain gold placer deposits.

Alteration:

Age of mineralization:
Quaternary

Deposit model:
Gold placer (Cox and Singer, 1986; model 39a).

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

Production Status Undetermined.

Site Status: Active?

Workings/exploration:
Active placer claims were present along the north, west, and south coasts of the island in 1996.

Production notes:

Reserves:

Additional comments:

References:

Map of general land status with mineral resources and mining claims, Alaska Peninsula, Alaska Division of Natural Resources, 1997.

Primary reference: Map of general land status with mineral resources and mining claims, Alaska Peninsula, Alaska Division of Natural resources, 1997.

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

Last report date: 10/12/98

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