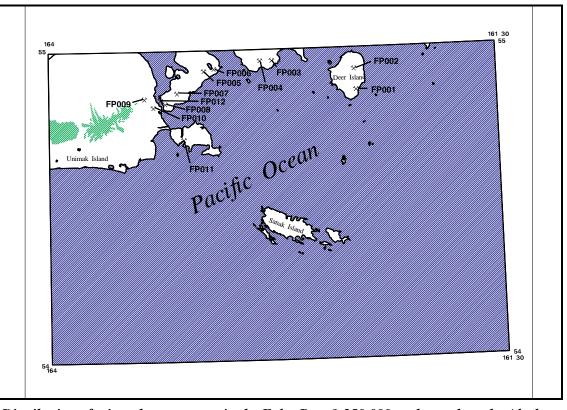
U.S. Department of the Interior — U.S. Geological Survey.

False Pass quadrangle

Description of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for 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 False Pass 1:250,000-scale quadrangle, Alaska Peninsula, Alaska

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



Type: Occurrence **ARDF no.** FP001

Latitude: 54.86670 **Quadrangle:** FP D-1

Longitude: 162.28330

Location description and accuracy:

Approximate location is on southern part of Deer Island. Anomaly no. 65 of Christie (1974) and no. 11 of MacKevett and Holloway (1977, p. 11).

Commodities:

Main: Au Other: Ag

Ore minerals:

Gangue minerals:

Geologic description:

Color anomaly 3,000 ft (900 m) in diameter in volcaniclastic rocks. Disseminated pyrite is source of color anomaly.

Alteration:

Propylitic based on presence of chlorite clots.

Workings/Exploration:

Brief reconnaissance geologic mapping and collection of a silt sample reported by Christie (1974). Sample showed moderate silver (1.4 ppm) and gold to 0.02 ppm. Copper, molybdenum, and zinc were all at low levels.

Age:

Miocene or younger

Deposit model:

Epithermal gold vein

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

25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois, F.H. Wilson

Type: Occurrence ARDF no. FP002

Latitude: 54.93330 **Quadrangle:** FP D-1

Longitude: 162.29160

Location description and accuracy:Approximate location is near the middle of Deer Island. Anomaly no. 64 of Christie (1974) and no. 10 of MacKevett and Holloway (1977, p. 11).

Commodities:

Main: Au Other: Ag

Ore minerals: Gangue minerals:

Geologic description:

Color anomaly 1.0 by 0.5 mi (1,600 by 800 m) elongate in northwest direction. Anomaly is in volcanic and epiclastic rocks intruded by granodiorite. Disseminated pyrite is source of color anomaly.

Alteration:

Propylitic based on presence of chlorite.

Workings/Exploration:

Brief reconnaissance geologic mapping and collection of a few silt samples reported by Christie (1974). Samples showed moderate silver (up to 1.5 ppm) and gold to 0.03 ppm. Copper, molybdenum, and zinc were all at low levels.

Age:

Miocene or younger

Deposit model:

Copper porphyry, epithermal gold vein

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

17, 25

Status: Inactive **Production:** No

Production notes:

Reserves:

Additional comments:

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 Reporter: G.D. DuBois, F.H. Wilson

Site: Sandy Cove

Type: Occurrence **ARDF no.** FP003

Latitude: 54.96700 **Quadrangle:** FP D-3

Longitude: 162.75000

Location description and accuracy:

Approximate location is west of Walrus Peak and northeast of Sandy Cove. Anomaly no. 52 of Christie (1974) and no. 9 of MacKevett and Holloway

(1977, př. 11).

Commodities:

Main: Au? Other:

Ore minerals: Pyrite **Gangue minerals:**

Geologic description:

Christie (1974) briefly examined an irregular oval color anomaly 10,000 by 5,000 ft (3 by 1.5 km) developed within volcanic rocks. Pyrite is disseminated throughout volcanic rocks, some of which are bleached. Volcanic rocks include andesite and basalt, some of which are fragmental. No intrusive rocks were seen in outcrop; description suggests some may have been seen in float. Reported quartz float may indicate veining; however, float was only seen north of creek and was not seen farther upstream.

Alteration:

Not described.

Workings/Exploration:

Brief reconnaissance geologic mapping and collection of a few silt samples. Occurrence apparently has not been adequately examined for epithermal gold vein potential.

Age:

Miocene or younger

Deposit model:

Epithermal gold vein

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

25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois; F.H. Wilson

Type: Occurrence **ARDF no.** FP004

Latitude: 54.96667 **Quadrangle:** FP D-3

Longitude: 162.81670

Location description and accuracy:

Approximate location is south of Walrus Peak. Anomaly no. 54 of Christie (1974) and no. 8 of MacKevett and Holloway (1977, p. 11). See also CB001 in the Cold Pay guadrangle (Wilson, 1997).

the Cold Bay quadrangle (Wilson, 1997).

Commodities:

Main: Ag, Au, Cu Other: Zn

Ore minerals: Pyrite

Gangue minerals: Magnetite

Geologic description:

Christie (1974) briefly examined an east-west oriented color anomaly, 1 by 4 mi (1.6 by 6.4 km). The anomaly occurs in andesitic volcanic rocks, that include flows, pyroclastic rocks and breccia intruded in the center of the anomaly by a medium-grained dioritic pluton, on the east by a feldspar porphyry and on the west by minor diorite dikes. At east end of the color anomaly, a large covered area 1 mi (1.6 km) wide of indeterminate length may expand the occurrence. Volcanic rocks contain disseminated and fracture-controlled pyrite; mineralization does not increase at contact with the diorite. Both the diorite and volcanic rocks are cross-cut by thin breccia zones composed of severely leached and bleached angular wall rocks in a matrix of iron oxide. At western end of anomaly, pyrite concentrations are highest in pyroclastic rock and breccia units.

Alteration:

Propylitic alteration is present to a moderate extent in the diorite and may be more common in the volcanic rocks. Hydrothermal minerals include chlorite, epidote, clay, and locally magnetite.

Workings/Exploration:

Christie (1974) reports brief reconnaissance geologic mapping and the collection of more than 30 soil and silt samples. Copper content typically was less than 50 ppm, although one sample yielded 101 ppm. Zinc ranged as high as 490 ppm, silver to 4.1 ppm and gold to 0.03 ppm.

Age:

Miocene or younger

Deposit model:

Epithermal gold vein

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

25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

No quartz veins are mentioned by Christie (1974). But this does not indicate that they are absent, inasmuch as his focus was mainly on porphyry

mineralization.

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois; F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/06/94

Alaska Resource Data File

Page 6

Site: Bechevin Bay

Type: Occurrence **ARDF no.** FP005

Latitude: 54.93670 **Quadrangle:** FP D-4

Longitude: 163.13170

Location description and accuracy:

Approximate location is on Bechevin Bay between mouth of Morzhovoi Bay and Traders Mountain. Anomaly no. 45 of Christie (1974) and no. 6 of

MacKevett and Holloway (1977, p. 11).

Commodities:

Main: Au? Other: Ag

Ore minerals: Pyrite Gangue minerals: Geologic description:

Christie (1974) reported brief reconnaissance mapping of a color anomaly 2,000 by 3,000 ft (600 by 900 m) covering a variety of volcanic rocks. Color anomaly is apparently due entirely to pervasive pyrite disseminated in all rock types. 99 percent of the pyrite is disseminated at concentrations up to 15 percent of the rock, and only rarely is it seen in fractures.

Alteration:

Propylitic alteration is common, as evidenced by chlorite and epidote. Rare sericitic alteration is locally present. Leaching is moderate and fracturing ranges from slight to intense.

Workings/Exploration:

Brief reconnaissance geologic mapping and geochemical sampling reported by Christie (1974). Geochemical results showed copper typically less than 30 ppm and molybdenum less than 5 ppm; silver ranged from 0.9 to 1.6 ppm and gold was generally less than 0.01 ppm, although one sample yielded 0.02 ppm.

Age:

Miocene or younger

Deposit model:

Epithermal gold vein

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

25?

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

Christie (1974) typically does not mention quartz veins in his descriptions. If they are not present at this occurrence, their absence probably is significant with respect to potential for epithermal gold vein mineralization.

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois, F.H. Wilson

Site: Morzhovoi Bay

Type: Occurrence **ARDF no.** FP006

Latitude: 54.94330 **Quadrangle:** FP D-4

Longitude: 163.07500

Location description and accuracy:

Approximate location is near south end of unnamed lake west of Kenmore Head at the mouth of Morzhovoi Bay. Anomaly no. 44 of Christie (1974) and

no. 7 of MacKevett and Holloway (1977, p. 11).

Commodities:

Main: Ag, Au, Cu Other:

Ore minerals: Chalcopyrite, pyrite **Gangue minerals:** Tourmaline

Geologic description:

Christie (1974) briefly examined a weak color anomaly 1.5 by 3 mi (2.4 by 5 km) in size, trending roughly east-west (110°). He reports finding a variety of rock types, including diorite, feldspar porphyry(?), monzonite, epiclastic rocks, and volcanic flows. His geologic description is scant, but he suggests that the color anomaly may be attributed to multiple systems. He also suggested further work if geochemistry indicated copper mineralization. It didn't, but there still is an unevaluated central covered area, including part of a lake, that is at least 1.5 mi (4 km) square. Fracturing is reported to be strong only locally on the west end of the anomaly. MacKevett and Holloway (1977) reported an altered zone in young volcanic terrane, and that the alteration is associated with a breccia zone that contains tourmaline. Their report was based on an unreferenced industry source thought to be Christie (1974), but Christie (1974) does not mention breccia or tourmaline.

Alteration

Christie (1974) reports minor epidote in southeast corner of occurrence, as well as chlorite, clay, and possibly sericite. This mineral assemblage suggests propylitic, argillic and possibly sericitic alteration. Leaching is partial to locally complete in the anomaly.

Workings/Exploration:

Brief reconnaissance geologic mapping and geochemical sampling reported by Christie (1974). Geochemical results showed copper typically less than 50 ppm and molybdenum less than 5 ppm, whereas silver ranged from 1.2 to 2.1 ppm and gold was as high as 0.03 ppm.

Age:

Miocene or younger

Deposit model:

Copper porphyry, epithermal gold vein

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

17, 25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Type: Occurrence **ARDF no.** FP007

Latitude: 54.86670 **Quadrangle:** FP D-4

Longitude: 163.28330

Location description and accuracy:

Approximate location given as 2 to 3 mi (3.2 to 5 km) southeast of site of village of Morzhovoi at headwaters of creek flowing north into Traders Cove. Anomaly no. 51 of Christie (1974) and no. 5 of MacKevett and Holloway (1977, p. 11).

Commodities:

Main: Au Other:

Ore minerals: Pyrite

Gangue minerals: Tourmaline

Geologic description:

Christie (1974) briefly examined an oval color anomaly (gossan), 8,000 by 6,000 ft (2.4 by 1.8 km) in size developed within volcanic and plutonic rocks. Pyrite is disseminated within discrete 50 to 200 ft (15 to 60 m) wide zones in bleached volcanic rocks at the outer margin of gossan. Pyrite may be more pervasive in rocks underlying the drift covered valley floor, an area covering 1.2 by 0.9 km. A diorite pluton intrudes the volcanic rocks and the sulfide zone is localized within and adjacent to the pluton. Minor amounts of sulfides are localized in fractures and quartz veins fill some fractures in a stockwork. Minor breccia is found in float and is characterized by tourmaline rosettes developed in proximity to pyrite grains.

Alteration:

Propylitic alteration is developed in the diorite as evidenced by the presence of chlorite and epidote. Hydrothermal feldspar and clay is mentioned as present within the color anomaly but not otherwise described.

Workings/Exploration:

Brief reconnaissance geologic mapping and a few silt samples. Two of eight samples had 0.02 ppm gold; it does not appear occurrence has been adequately examined for epithermal gold vein potential.

Age:

Miocene or younger

Deposit model:

Epithermal gold vein

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

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

Quartz veining is briefly mentioned, which supports the potential for epithermal gold veins.

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois; F.H. Wilson

Site: Sentinal Peak

Type: Occurrence **ARDF no.** FP008

Latitude: 54.83300 **Quadrangle:** FP D-5

Longitude: 163.35000

Location description and accuracy:

Approximate location is on the Alaska Peninsula side of Isanotski Strait, west of Sentinal Peak. Anomaly no. 48 of Christie (1974) and no. 4 of MacKevett

and Holloway (1977, p. 11).

Commodities:

Main: Ag Other:

Ore minerals: Pyrite, stilbite

Gangue minerals:

Geologic description:

Christie (1974) briefly examined a 4,000 ft (1.2 km) by 3,000 ft (900 m) color anomaly developed in a basalt-andesite volcanic sequence. Rocks are generally unaltered except where pyrite content is high (about 5 percent); the typical pyrite content in the anomaly is 0.1 to 1 percent. The altered rock forms narrow (+/- 20 ft, 6 m) linear zones. Fracture-controlled pyrite apparently is confined to these altered zones. No mention is made of quartz veining. Minor quartz diorite porphyry and granodiorite were seen in float in the creek on the east side of the ridge but no intrusive rocks were seen in outcrop.

Alteration:

Not described.

Workings/Exploration:

Brief reconnaissance geologic mapping and collection of a few soil and silt samples (Christie, 1974). Copper, molybdenum, zinc, and gold values were not anomalous; silver ranged between 1.3 and 1.9 ppm.

Age:

Miocene or younger

Deposit model:

Epithermal gold vein?

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

25?

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

Altered area examined by W.H. White (USGS, 1990); no significant mineralization found.

References:

Christie, 1974; MacKevett and Holloway, 1977; F.H. Wilson and W.H. White, USGS. unpublished data, 1992

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois; F.H. Wilson

Type: Occurrence **ARDF no.** FP009

Latitude: 54.85000 **Quadrangle:** FP D-5

Longitude: 163.46660

Location description and accuracy:

5 km northwest of False Pass community on Unimak Island. Anomaly no. 50 of Christie (1974) and no. 3 of MacKevett and Holloway (1977, p. 11).

Commodities:

Main: Au? Other:

Ore minerals: Pyrite **Gangue minerals:**

Geologic description:

Christie (1974) briefly examined a northeast-trending elongate color anomaly 4,000 ft (1.2 km) by 1,500 ft (450 m) in size, developed in andesitic volcanic flows and pyroclastic rocks. Diorite was found in creek float but no outcrops were seen. Pyrite is disseminated both in the diorite and the volcanic rocks and its concentration ranges between 2 and 5 percent.

Alteration:

Alteration is not described other than to mention clay and possible local silicification.

Workings/Exploration:

Brief reconnaissance geologic mapping and collection of a few silt samples. One sample had 0.01 ppm gold. Occurrence apparently has not been adequately examined for epithermal gold vein potential.

Age:

Miocene or younger

Deposit model:

Epithermal gold vein

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

25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

Quartz veining is not mentioned by Christie (1974), but this does mean that it is absent, inasmuch as his focus was mainly on porphyry mineralization.

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois; F.H. Wilson

Type: Occurrence **ARDF no.** FP010

Latitude: 54.82170 **Quadrangle:** FP D-5

Longitude: 163.41670

Location description and accuracy:

Approximate location is about 5 km south of False Pass community. Anomaly no. 49 of Christie (1974) and no. 2 of MacKevett and Holloway (1977, p. 11). Location description is poor; however, location apparently is

southwest of Whirl Point on Unimak Island.

Commodities:

Main: Ag, Au? Other:

Ore minerals: Pyrite Gangue minerals:

Geologic description:

Christie (1974) briefly examined a poorly defined color anomaly 2 mi (3.2 km) in diameter developed in andesitic volcanic flows, breccia, and tuff intruded by multiple diorite stocks(?). The diorite contact metamorphoses the volcanic rocks and pyrite is disseminated in both the diorite and the volcanic rocks. The diorite is pervasively propylitically altered.

Alteration:

Pervasive propylitic alteration of diorite within the color anomaly and local(?) silicification. Hydrothermal minerals reported include clay, chlorite, and epidote.

Workings/Exploration:

Brief reconnaissance geologic mapping and a few silt samples. One sample had 0.01 ppm gold. Occurrence apparently has not been adequately examined for epithermal gold vein potential.

Age:

Miocene or younger

Deposit model:

Epithermal gold vein

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

25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

Quartz veining is not mentioned by Christie (1974), but this does not mean that it is absent, inasmuch as his focus was mainly on porphyry

mineralization.

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois; F.H. Wilson

Type: Occurrence **ARDF no.** FP011

Latitude: 54.71670 **Quadrangle:** FP C-4

Longitude: 163.25000

Location description and accuracy:

Approximate location is at head of Dora Harbor on the Ikatan Peninsula. Anomaly no. 53 of Christie (1974) and no. 1 of MacKevett and Holloway

(1977, p. 11).

Commodities:

Main: Cu Other: Au?

Ore minerals: Pyrite Gangue minerals:

Geologic description:

Color anomaly 1,500 by 5,000 ft (450 by 1,500 m) in size in volcanic and epiclastic rocks intruded by diorite and quartz porphyry(?). Anomaly is elongate, oriented N 20°E.

Alteration:

Phyllic, argillic, and propylitic alteration is mentioned by Christie (1974), who also noted chlorite, clay, and possible sericite as hydrothermal phases.

Workings/Exploration:

Brief reconnaissance geologic mapping and one silt sample which was barren. It does not appear occurrence has been adequately examined for epithermal gold vein potential.

Age:

Miocene or younger

Deposit model:

Porphyry copper, epithermal gold vein

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

17, 25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974 **Reporter:** G.D. DuBois; F.H. Wilson

Type: Occurrence **ARDF no.** FP012

Latitude: 54.84500 **Quadrangle:** FP D-5

Longitude: 163.37639

Location description and accuracy:

Southeast of village of False Pass on the Alaska Peninsula side of Isanotski Strait, just south of Nichol Point. Latitude and longitude are accurate; however, vein system is at least 1 km wide across strike and extends south of

location given here.

Commodities:

Main: Ag, Au Other: Hg

Ore minerals: Pyrite

Gangue minerals: Quartz, epidote, chlorite

Geologic description:

Well-developed, vertically oriented reticulated quartz vein system cutting mildly altered volcanic flows, rubble, breccia, and tuffaceous breccia. Zone extends more than 1 km across strike; however, veins are concentrated at northern end of zone. Sulfides are generally not apparent, though some areas have structures (vugs) indicating the removal of pyrite by weathering.

Alteration:

Mild propylitic alteration.

Workings/Exploration:

Zone discovered in 1990 by F.H. Wilson and G.D. DuBois during USGS reconnaissance field work. Sampling conducted in 1990, 1991, and 1992 indicates that a number of the veins are gold or silver bearing having assay values up to 42 ppb Au and 1.9 ppm Ag.

Age:

Deposit model:

Epithermal gold vein

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

25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

No color anomaly; this occurrence does not have an unusual appearance with respect to the local country rock

with respect to the local country rock.

References:

F.H. Wilson, unpublished data, 1992

Primary reference: F.H. Wilson, unpublished data, 1992

Reporter: F.H. Wilson

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