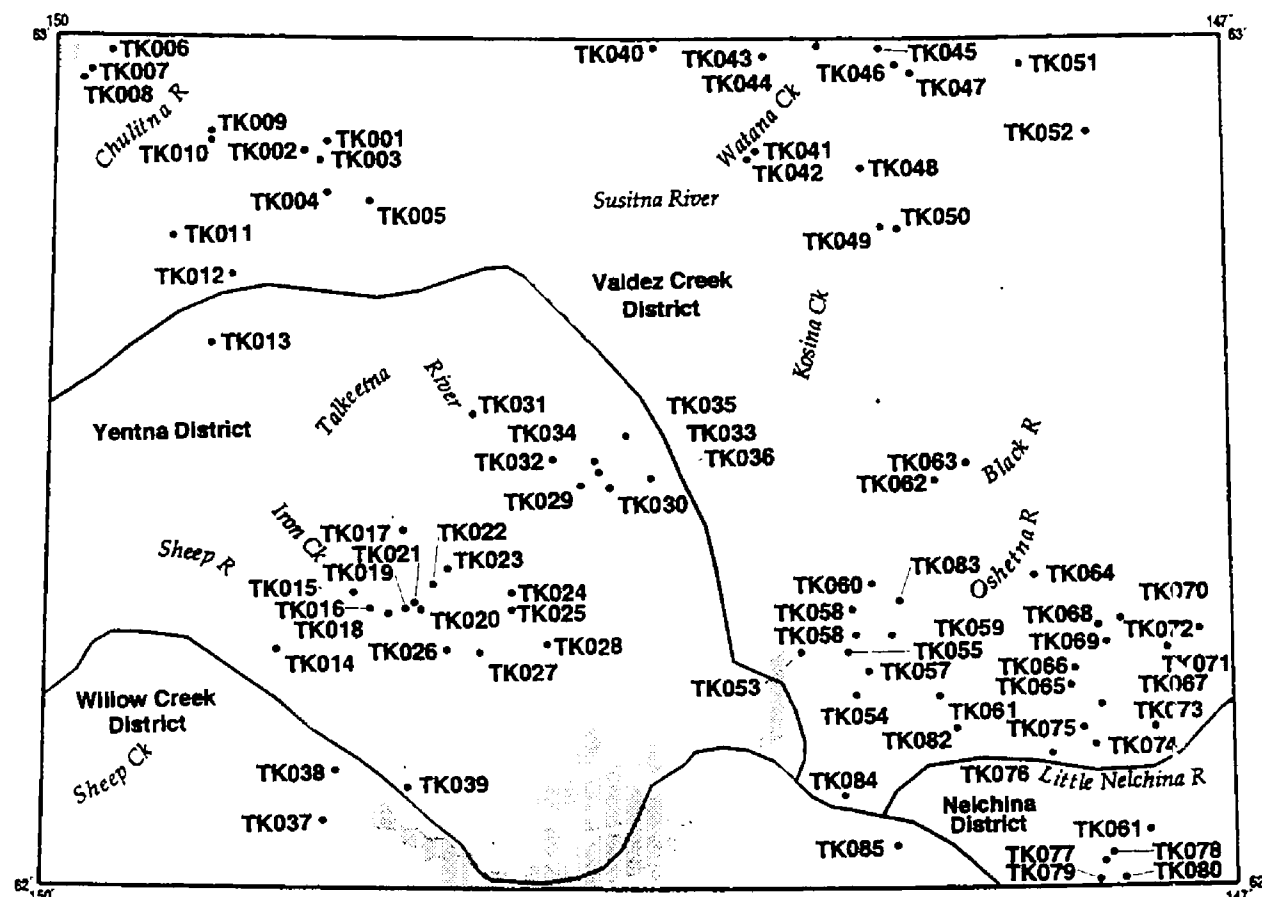


U.S. Department of the Interior - U.S. Geological Survey

Talkeetna Mountains quadrangle

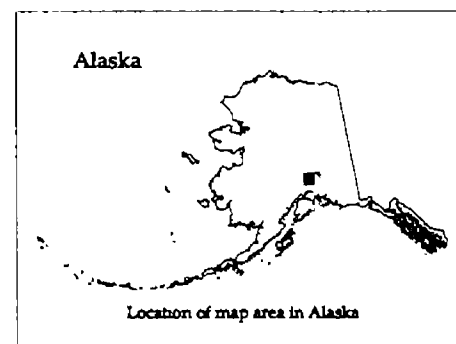
Descriptions of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for a description of the information content of each field in the records. The data presented here are maintained as part of a statewide database on mines, prospects and mineral occurrences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



*Distribution of mineral occurrences in the Talkeetna Mountains
1:250,000-scale quadrangle, southcentral 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 the author:

J.R. Riehle
U.S. Geological Survey
4200 University Drive
Anchorage, AK 99508-4667
phone (907) 786-7423



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): Treasure Creek**Site Type:** Prospect**ARDF no.:** TK001**Latitude:** 62.88**Quadrangle:** TK D-5**Longitude:** 149.3**Location description and accuracy:**

Three mineralized sites within 1 mile (1.6 km) of one another on Treasure Creek, a small tributary of Portage Creek, 4 miles (6.4 km) upstream from confluence with Susitna River (Csejtey and Miller, 1978, loc. 9).

Commodities:**Main:** Cu, Mo**Other:** Au, Zn**Ore minerals:** Arsenopyrite, chalcopyrite, fluorite, molybdenite, sphalerite**Gangue minerals:** Clay, quartz**Geologic description:**

Disseminated sulfides, fluorite, and epidote in silicified and sheared Tertiary granite stock, and in argillite and metagraywacke intruded by the granite. Local intense argillic alteration and limonite staining adjacent to fault and extending irregularly up to 300 ft (100 m) into granite stock. Argillite and metagraywacke part of extensive Lower Cretaceous flysch unit. Granite stock part of the lower Tertiary McKinley plutonic sequence. 0.18 oz/ton Au, 2-3% Zn, 0.1-0.5% Cu, and 0.1-0.5% Mo in analysis of arsenopyrite-rich surface boulder (Richter, 1963); up to 1.0% Mo, 2.65% Zn, 1.7 oz/short ton Ag in rock samples from one of the zones (Kurtak and others, 1992).

Alteration:

Argillic

Age of mineralization:

Early Tertiary

Deposit model:

Porphyry Cu-Mo (Cox and Singer, 1986; model 21a)

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

21a

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

Minor surface workings and shallow drilling. 0.18 oz/ton Au, 2-3% Zn, 0.1-0.5% Cu, and 0.1-0.5% Mo in analysis of arsenopyrite-rich surface boulder (Richter, 1963); up to 1.0% Mo, 2.65% Zn, 1.7 oz/short ton Ag in rock samples from one of the zones (Kurtak and others, 1992).

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

Smith, 1942; Richter, 1963; Berg and Cobb, 1967; Cobb, 1972, MF-370; Karlson and others, 1977; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Nokleberg and others, 1987; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992**Reporter(s):** Nokleberg, W.J. (USGS)**Last report date:** 3/22/94

Site name(s): Mint

Site Type: Mine

ARDF no.: TK002

Latitude: 62.869

Quadrangle: TK D-5

Longitude: 149.358

Location description and accuracy:

Located on Portage Creek about 2 3/4 mi (4.4 km) north of confluence of Susitna River and Portage Creek; 9 mi (14.4 km) east of Chulitna; location accurate to within 1/4 mi (400 m).

Commodities:

Main: Ag, Au, Cu, Pb

Other:

Ore minerals: Arsenopyrite, chalcopyrite, galena, miargyrite, pyrargyrite, pyrite, tennantite

Gangue minerals: Quartz

Geologic description:

Host rocks are andesite, argillite, and graywacke. Age of sedimentary host rock is Cretaceous-Tertiary, age of associated igneous rock is Tertiary. Mineralization consists of quartz-sulfide veinlets and stockworks in brecciated argillite and graywacke that are cut by altered andesite dike; veinlets also in dike.

Alteration:

Altered andesitic dike

Age of mineralization:

Deposit model:

Porphyry Cu-Au or polymetallic vein? (Cox and Singer, 1986; model 20c, or 22c?)

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

20c or 22c?

Production Status: Yes; small

Site Status: Inactive

Workings/exploration:

Two short tunnels and an open cut yielded up to 270 ppm Ag, 3 ppm Au in rock analyses (Kurtak and others, 1992)

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

Brooks, 1925; Capps and Short, 1926; Smith, 1929; Smith, 1930; Smith, 1932; Smith, 1933; Smith, 1937; Smith, 1939; Wedow and others, 1952; Richter, 1963; Berg and Cobb, 1967; Karlson and others, 1977; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Richter, 1963

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK003

Latitude: 62.858

Quadrangle: TK D-5

Longitude: 149.317

Location description and accuracy:

At W end of plateau bounded by Portage Creek, Devil's Canyon & Devil Creek; 2 3/4 mi (4.4 km) NE of confluence of Portage Creek & Susitna River; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 8).

Commodities:

Main: Mo

Other: Cu, Zn

Ore minerals: Chalcopyrite, molybdenite, pyrite, sphalerite

Gangue minerals: Fluorite, quartz

Geologic description:

Host rock is quartz monzonite of Cretaceous or Tertiary age. Silicified shear zones in quartz monzonite contain lenses, vugs, and masses of molybdenite crystals and other sulfides. Molybdenite mineralization appears related to quartz monzonite.

Alteration:

Silicification

Age of mineralization:

Cretaceous or Tertiary?

Deposit model:

Porphyry Cu-Mo (Cox and Singer, 1986; model 21a)

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

21a

Production Status: None

Site Status: Inactive

Workings/exploration:

A bench cut and a short adit were opened. Analysis of channel samples showed up to 0.1% Mo and Zn (Richter, 1963).

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

Further exploration at this locality may be justified but would require heavy equipment or drilling due to poor surface exposure.

References:

Smith, 1942; Richter, 1963; Berg and Cobb, 1967; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Richter, 1963

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Devil's Canyon Dike

Site Type: Occurrence

ARDF no.: TK004

Latitude: 62.82

Quadrangle: TK D-5

Longitude: 149.3

Location description and accuracy:

In Devil's Canyon of the Susitna River, at prominent South-concave bend in river; location accurate to within 1/2 mi (800 m)

Commodities:

Main: Ag

Other:

Ore minerals:

Gangue minerals:

Geologic description:

Gossan area in rhyolitic (?) dike that cuts silicified argillite.

Alteration:

Iron-oxide (gossan); silicification.

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Analyses of selected rock samples yielded 2 ppm Ag and trace amounts of Au, Cu, and Zn (Balén, 1990).

Production notes:

Reserves:

Additional comments:

References:

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Devil's Canyon

Site Type: Occurrence

ARDF no.: TK005

Latitude: 62.81

Quadrangle: TK D-5

Longitude: 149.19

Location description and accuracy:

Several sample sites along 8-mi (12.8-km) section of Talkeetna River in Devil's Canyon; longitude extends from 149.09 to 149.29. Location accurate to within 1/4 mi (400 m)

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au-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:

Analyses of stream-sediment samples collected from several sites along Susitna River yielded up to 0.002 oz/yd³ Au, 120 ppm Ag, 0.2% Cu, 0.2% Zn, 0.86 ppm Pt (Kurtak and others, 1992).

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

Kurtak and others. 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

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

Site Type: Prospect

ARDF no.: TK006

Latitude: 62.983

Quadrangle: TK D-6

Longitude: 149.858

Location description and accuracy:

Area of interest is 1 mile (1.6 km) to N & S of given location; 2 miles E (3.2 km) of Eldridge glacier, on tributary of Coal Creek; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 4).

Commodities:

Main: Sn

Other: Ag, Au, Cu, Mo, W, Zn

Ore minerals: Arsenopyrite, cassiterite, fluorite, pyrite, pyrrhotite, silver, sphalerite

Gangue minerals: Quartz, sericite, topaz, tourmaline

Geologic description:

Host rock is alaskite (albite granite) of Tertiary age. Sulfides and cassiterite occur as disseminated grains and in greisen veinlets and stockworks in the granite. Fluorite occurs in veins in the granite as well. Thin sections indicate the granite in the zones of stockworks and veins has undergone several episodes of hydrothermal brecciation & alteration.

Alteration:

Sericitic alteration; alteration of granite to tourmaline, quartz, topaz (greisen)

Age of mineralization:

Tertiary?

Deposit model:

Porphyry tin (Cox and Singer, 1986; model 20a)

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

20a

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface exploration and drilling.

Production notes:

Reserves:

Additional comments:

200-2000 ppm Sn, 2.9-4.3 oz/ton Ag (Reed, 1978); up to 65 ppm Ag, 0.5 ppm Au, 328 ppm Pb, 720 ppm W, and >1.0% Zn in analyses of selected rock samples (Balén, 1990).

References:

Reed, 1978; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Balén, 1990; Kurtak and others, 1992.

Primary reference: Reed, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK007

Latitude: 62.96

Quadrangle: TK D-6

Longitude: 149.91

Location description and accuracy:

On Partin Creek 4 mi (6.4 km) N of N end of Lucy Lake; location accurate to within 1/2 mi (800 m) (Csejtey and Miller, 1978, loc. 2).

Commodities:

Main: Au, Mo

Other: Ag

Ore minerals: Gold, molybdenite, silver(?)

Gangue minerals:

Geologic description:

Lode claims in Mesozoic argillite.

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:

Type of workings: Surface (?).

Production notes:

Reserves:

Additional comments:

First report is USBM OFR 20-73, which provides few details; all subsequent reports cite that original report.

References:

USBM, 1973; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Kurtak and others, 1992.

Primary reference: USBM, 1973

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Kubek

Site Type: Prospect

ARDF no.: TK008

Latitude: 62.95

Quadrangle: TK D-6

Longitude: 149.93

Location description and accuracy:

1/2 mi (800 m) E of Partin Creek, 3.5 mi (5.6 km) NNW of N end of Lucy Lake; location accurate to within 1/2 mi (800 m) (MacKevett and Holloway, 1977, loc. 58).

Commodities:

Main: Au

Other: Ag

Ore minerals:

Gangue minerals:

Geologic description:

Lode claims in Mesozoic argillite cut by quartz veins.

Alteration:

Age of mineralization:

Deposit model:

Gold-quartz veins? (Cox and Singer, 1986; model 36a?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Analyses of selected rock samples yielded as much as 2 ppm Ag (Balen, 1990). Claims staked during 1968-1983 (Kurtak and others, 1992).

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

MacKevett and Holloway, 1977; Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK009

Latitude: 62.89

Quadrangle: TK D-6

Longitude: 149.6

Location description and accuracy:

Along trail from Chulitna village, 1.2 mi (1.9 km) E of Alaska Railroad; location accurate to within 1/2 mi (800 m) (MacKevett and Holloway, 1977, loc. 55).

Commodities:

Main: Cu

Other: Au

Ore minerals:

Gangue minerals:

Geologic description:

Lode claims, possibly veins, in granite of Tertiary age.

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:

Type of workings: Surface (?).

Production notes:

Reserves:

Additional comments:

See also Indian Mountain prospect ARDF no. TK010.

References:

USBM, 1973; MacKevett and Holloway, 1977.

Primary reference: USBM, 1973

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Indian Mountain**Site Type:** Prospect**ARDF no.:** TK010**Latitude:** 62.88**Quadrangle:** TK D-6**Longitude:** 149.6**Location description and accuracy:**

On ridge on W side of Alaska Railroad, 1/4 mi (400 m) S of Benchmark 1272; location accurate to within 1/2 mi (800 m).

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

Lode claim at contact of Tertiary granite with argillite. Quartz veins occur in the granite. Analysis of rock samples yielded 1 ppm Ag, 8 ppm Mo, 0.01% Cu (Balen, 1990). At least some of these samples were quartz veins.

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

Porphyry Cu-Au or polymetallic vein? (Cox and Singer, 1986; model 20c or 22c?)

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

20c or 22c?

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

Claim staked during 1962-63. Analysis of rock samples yielded 1 ppm Ag, 8 ppm Mo.

0.01% Cu (Balén, 1990). At least some of these samples were quartz veins.

Production notes:

Reserves:

Additional comments:

Available information is not sufficiently detailed to determine whether or not this site is the same as the Unnamed prospect reported in ARDF no. TK009.

References:

Balén, 1990; Kurtak and others, 1992.

Primary reference: Balén, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Susitna River - Gold Creek

Site Type: Mine

ARDF no.: TK011

Latitude: 62.767

Quadrangle: TK D-6

Longitude: 149.694

Location description and accuracy:

E bank of Susitna River, near mile 265 of Alaska Railroad tracks; in sand bars W of gaging station; about 1 mile (1.6 km) N of Gold Creek (town); location accurate to within 1/4 mile (400 m) (Csejtey and Miller, 1978, loc. 33).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Host is alluvial gravels. Minor concentrations of flour gold occur at or near surface of auriferous stream gravel deposits. Source rocks may be lode deposits associated with granodiorite intrusions of Tertiary age drained by Indian River to the NE.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Multiple placer claims, extensively explored. 'Some gold won from time to time' (Capps, 1919). Up to 0.018 oz/yd³ Au in analysis of stream-sediment samples (Kurtak and others, 1992).

Production notes:

Possibly minor production at different times during long period of exploratory work.

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

Brooks, 1911; Capps, 1919; Cobb, 1972, MF-370; Cobb, 1973, B 1374; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Capps, 1919

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Ihly

Site Type: Prospect

ARDF no.: TK012

Latitude: 62.722

Quadrangle: TK C-6

Longitude: 149.539

Location description and accuracy:

Location is on south fork of Gold Creek, 1 mile (1.6 km) N of hill 3645, in extreme NE corner of Talkeetna Mountains C-6 quad; about 5 miles (8.0 km) ESE of Gold Creek (town); location accurate to within 1/4 mile (400 m) (Csejtey and Miller, 1978, loc. 31).

Commodities:

Main: Ag, Pb

Other: Au

Ore minerals: Chalcopyrite, galena, pyrargyrite, pyrite

Gangue minerals: Felspar, quartz

Geologic description:

Fractured felsic dikes in Lower Cretaceous(?) argillite are cut by quartz veins that contain argentiferous galena, pyrite, and chalcopyrite.

Alteration:

Dike rock is altered.

Age of mineralization:

Deposit model:

Polymetallic vein or porphyry Cu-Au? (Cox and Singer, 1986; model 22c or 20c?)

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

22c or 20c?

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface.

Production notes:

Reserves:

Additional comments:

Discovered in 1950.

References:

Berg and Cobb, 1967; Cobb, 1972, MF-370; Karlson and others, 1977; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Ccbb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Berg and Cobb, 1967

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Chunilna Creek

Site Type: Mine

ARDF no.: TK013

Latitude: 62.64

Quadrangle: TK C-6

Longitude: 149.59

Location description and accuracy:

On Chunilna Creek 5 mi (8.0 km) SE of Benchmark 'Chunilna'; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other: Ag

Ore minerals: Gold

Gangue minerals:

Geologic description:

Placer mine in alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Several miles of claims staked in 1989 (Paige and Knopf, 1907). The only placer mine in the Talkeetna Mountains quadrangle that operated during 1975 (Carnes, 1976).

Production notes:

Production reported in 1975.

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

Paige and Knopf, 1907; Brooks, 1911; Carnes, 1976; Cobb and Csejtey, 1980.

Primary reference: Carnes, 1976

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK014

Latitude: 62.283

Quadrangle: TK B-5

Longitude: 149.414

Location description and accuracy:

Small tributary of Sheep River; 1 1/2 mi (2.4 km) S of Sheep River, 5 mi (8.0 km) SW of Rainbow Lake; location accurate to within 1/4 mi (400 m) radius (MacKevett and Holloway, 1977, loc. 25; Csejtey and Miller, 1978, loc. 88).

Commodities:

Main: Cu, Mo

Other: Au, Pb, Zn

Ore minerals: Chalcopyrite, molybdenite

Gangue minerals:

Geologic description:

Host rock is granitic intrusive of Tertiary age. Sulfides disseminated in altered granitic rock near contact with upper Paleozoic metavolcanogenic rocks.

Alteration:

Alteration in granite

Age of mineralization:

Tertiary

Deposit model:

Porphyry Cu-Mo (Cox and Singer, 1986; model 21a)

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

21a

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface.

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

MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978;
Miller and others, 1978; Cobb and Csejtey, 1980.

Primary reference: MacKevett and Holloway, 1977

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Copper Queen

Site Type: Prospect

ARDF no.: TK015

Latitude: 62.35

Quadrangle: TK B-5

Longitude: 149.22

Location description and accuracy:

On Iron Creek; 2 1/2 mi (4.0 km) E of Rainbow Lake; 2 mi (3.2 km) W of confluence of East Fork with Iron Creek; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 83).

Commodities:

Main: Au, Cu

Other:

Ore minerals: Arsenopyrite, chalcopyrite, pyrite

Gangue minerals: Quartz

Geologic description:

Host rock is upper Paleozoic meta-andesite. Sulfides in shear zone cutting amygdaloidal meta-andesite flow.

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:

Type of workings: Surface

Production notes:

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

Capps, 1919, B 692; Capps, 1924; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Capps, 1919

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Copper King

Site Type: Prospect

ARDF no.: TK016

Latitude: 62.331

Quadrangle: TK B-5

Longitude: 149.178

Location description and accuracy:

4 mi (6.4 km) E of Rainbow Lake; 1 1/4 mi (2.0 km) S of Iron Creek; location accurate to within 1/4 mile (400 m) (Csejtey and Miller, 1978, loc. 81).

Commodities:

Main: Ag, Au, Cu

Other:

Ore minerals: Chalcopyrite, pyrite

Gangue minerals: Quartz

Geologic description:

Host rock is upper Paleozoic meta-andesite. Shear zone in host rock is partially replaced by sulfides.

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:

Type of workings: Surface

Production notes:

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

Capps, 1919, B 692; Capps, 1924; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Capps, 1919

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK017

Latitude: 62.422

Quadrangle: TK B-5

Longitude: 149.097

Location description and accuracy:

Near head of creek draining southern flank of Wells Mountain, on Middle Fork of Iron Creek; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 84).

Commodities:

Main: Ag, Cu

Other: Au, Pb, Zn

Ore minerals: Chalcopyrite, malachite, pyrite

Gangue minerals: Quartz

Geologic description:

Sulfide-bearing quartz vein, 24 in. (60 cm) wide, cuts mafic metavolcanic rock of Paleozoic age.

Alteration:

Age of mineralization:

Deposit model:

Gold-quartz vein? (Cox and Singer, 1986; model 36a?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface.

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

Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Copper Wonder

Site Type: Prospect

ARDF no.: TK018

Latitude: 62.325

Quadrangle: TK B-5

Longitude: 149.133

Location description and accuracy:

Claims lie on S side of Iron Creek valley, S of confluence with Middle Fork; 5 and 1/2 mi (8.8 km) E of Rainbow Lake; location accurate to within 1/4 mi radius (400 m).

Commodities:

Main: Cu

Other: Fe

Ore minerals: Azurite, chalcopyrite, hematite, malachite, pyrite

Gangue minerals: Quartz

Geologic description:

Host rock is upper Paleozoic meta-andesite. Hematite and sulfides in shear zone cutting meta-andesite; sulfides disseminated in wall rocks as well.

Alteration:

Alteration of country rock along shear zone

Age of mineralization:

Deposit model:

Gold-quartz veins, or volcanic-hosted copper, or polymetallic veins? (Cox and Singer, 1986; model 36a, or 22a, or 22c?)

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

36a, or 22a, or 22c?

Production Status: None

Site Status: Inactive

Workings/exploration:

Three large open cuts at surface to expose shear zones.

Production notes:

Reserves:

Additional comments:

References:

Capps, 1919, B 692; Capps, 1924; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Capps, 1919

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Phoenix

Site Type: Prospect

ARDF no.: TK019

Latitude: 62.331

Quadrangle: TK B-5

Longitude: 149.089

Location description and accuracy:

In and around Hyphen Gulch, a small tributary of Iron Creek; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 72).

Commodities:

Main: Cu

Other: Fe

Ore minerals: Azurite, bornite, chalcopyrite, hematite, malachite

Gangue minerals: Quartz

Geologic description:

Host rock is andesite of Paleozoic age. Quartz-sulfide veinlets occur in and adjacent to narrow shear zone cutting andesite; narrow veins of hematite are found nearby. Tertiary intrusive bodies occur N and E of given location.

Alteration:

Age of mineralization:

Deposit model:

Porphyry Cu or polymetallic vein?-(Cox and Singer, 1986; model 20c, or 22c?)

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

20c or 22c?

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface (cut excavated to reveal shear zone).

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

Capps, 1919, B 692; Capps, 1924; Cobb, 1972; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Capps, 1919

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Eastview

Site Type: Prospect

ARDF no.: TK020

Latitude: 62.33

Quadrangle: TK B-5

Longitude: 149.05

Location description and accuracy:

At head of Hyphen Gulch, off Iron Creek.; location accurate to within 1/4 mi (400 m)
(Csejtey and Miller, 1978, loc. 71).

Commodities:

Main: Cu

Other: Fe

Ore minerals: Chalcopyrite, hematite, pyrite

Gangue minerals: Quartz

Geologic description:

Host rock is Paleozoic meta-andesite. Sulfides, hematite, & quartz probably from veins,
found in float overlying meta-andesite.

Alteration:

Age of mineralization:

Deposit model:

Volcanic-hosted copper, or polymetallic vein, or gold-quartz vein? (Cox and Singer,
1986; model 22a, or 22c, or 36a?)

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

22a, or 22c, or 36a

Production Status: None

Site Status: Inactive

Workings/exploration:

Three open cuts, did not reach bedrock.

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

Capps, 1919, B 692; Capps, 1924; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Capps, 1919

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Blue Lode

Site Type: Prospect

ARDF no.: TK021

Latitude: 62.338

Quadrangle: TK B-5

Longitude: 149.067

Location description and accuracy:

S side of Middle Fork of Iron Creek, on hill 5066, at about 4200 ft (1260 m) elevation; 1 mi (1.6 km) NE of Phoenix claims; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 73).

Commodities:

Main: Cu

Other:

Ore minerals: Bornite, chalcopyrite

Gangue minerals: Quartz

Geologic description:

Host rock is upper Paleozoic meta-andesite. Shear zone in host rock contains sulfide-bearing quartz. Sulfides have replaced some of wall rocks.

Alteration:

Age of mineralization:

Deposit model:

Polymetallic veins or Gold-quartz veins? (Cox and Singer, 1986; model 22c or 36a?)

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

22c or 36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface (open cut to expose shear zone).

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

Capps, 1919, B 692; Capps, 1924; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Capps, 1919

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Talkeetna

Site Type: Occurrence

ARDF no.: TK022

Latitude: 62.36

Quadrangle: TK B-5

Longitude: 149.02

Location description and accuracy:

At head of Prospect Creek, a tributary of the East Fork of Iron Creek; location accurate to within 1/2 mi (800 m)

Commodities:

Main: Ag, Au, Cu

Other: Fe

Ore minerals: Chalcopyrite, hematite, pyrite

Gangue minerals: Quartz

Geologic description:

Replacement lodes in shear zones and disseminations in adjacent meta-volcanic wall-rock. Conspicuous gossan with copper carbonates.

Alteration:

Iron oxide (gossan)

Age of mineralization:

Deposit model:

Polymetallic veins or gold-quartz veins? (Cox and Singer, 1986; model 22c or 36a?)

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

22c or 36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Minor gold reported in analyses of float samples from the site (Csejtey and Miller,

1978).

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

Near to, if not same as, site reported in Cobb and Csejtey (1980) - (which is the description reported here).

References:

Capps, 1919, B 692; Capps, 1924; Berg and Cobb, 1967; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Capps, 1919

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK023

Latitude: 62.378

Quadrangle: TK B-4

Longitude: 148.983

Location description and accuracy:

On a small tributary 1/2 mile (800 m) S of the East Fork of Iron Creek; location accurate to within 1/4 mi (400 m) radius (Csejtey and Miller, 1978, loc. 77).

Commodities:

Main: Cu, Pb

Other:

Ore minerals: Chalcopyrite

Gangue minerals:

Geologic description:

Small veins or replacement pods of sulfides in altered, mafic metavolcanic rocks of Paleozoic age.

Alteration:

Altered host rocks.

Age of mineralization:

Deposit model:

Gold-quartz vein? (Cox and Singer, 1986; model 36a?)

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

36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface.

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

Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed**Site Type:** Prospect**ARDF no.:** TK024**Latitude:** 62.35**Quadrangle:** TK B-4**Longitude:** 148.82**Location description and accuracy:**

At confluence of a small southwest flowing tributary and East Fork of Iron Creek, 2 miles west-southwest of VABM Sedan. Locality 64 of Csejtey and Miller (1978) and locality 64 of Singer and others (1978). Accurate within 2,000 feet.

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

Float sample of vein quartz contained pyrite, chalcopyrite, and possibly pyrrhotite. Prospect is located at, or near to, a shear zone (possible thrust fault) between upper Paleozoic metavolcaniclastic rocks and Jurassic plutonic and metamorphic rocks. Analysis of the float sample yielded up to 7 ppm Ag, 0.9 ppm Au, and 5,000 ppm Cu (Miller and others, 1978).

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:**

Extent of exploration is apparently only the collection of a surface grab sample. Analysis of the float sample yielded up to 7 ppm Ag, 0.9 ppm Au, and 5,000 ppm Cu (Miller and others, 1978).

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

Miller and others, 1978; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Miller and others, 1978

Reporter(s): Bickerstaff, D. (USGS contractor)

Last report date: 8/5/98

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK025

Latitude: 62.33

Quadrangle: TK B-4

Longitude: 148.82

Location description and accuracy:

1 mile south of the East Fork of Iron Creek, 2.5 miles south-southwest of VABM Sedan. Locality 65 of Csejtey and Miller (1978) and locality 65 of Singer and others (1978). Accurate within 2,000 feet.

Commodities:

Main: Cu

Other: Sn

Ore minerals: Malachite, pyrite

Gangue minerals: Quartz

Geologic description:

Float sample of vein quartz contained pyrite and malachite staining. Bedrock is Tertiary volcanic rocks, felsic and mafic subaerial volcanic rocks and related shallow intrusions. Nearby, at a lower elevation, is a Jurassic plutonic and metamorphic unit consisting of mainly quartz diorite, granodiorite, amphibolite, and greenschist. Analysis of the float sample yielded 1,500 ppm Cu and less than 10 ppm Sn (Miller and others, 1978).

Alteration:

Oxidation of Cu-minerals.

Age of mineralization:

Probably Tertiary or younger, quartz vein cuts Tertiary volcanic rocks (?).

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Extent of exploration is apparently only the collection of a surface grab sample. Analysis of the float sample yielded 1,500 ppm Cu and less than 10 ppm Sn (Miller and others, 1978).

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

Miller and others, 1978; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Miller and others, 1978

Reporter(s): Bickerstaff, D. (USGS contractor)

Last report date: 8/5/98

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK026

Latitude: 62.283

Quadrangle: TK B-4

Longitude: 148.983

Location description and accuracy:

Location given is on a small tributary of Iron Creek in extreme SW quarter of the Talkeetna Mountains B-4 quadrangle; 1 mile (1.6 km) S of Iron Creek; location accurate to within 1/4 mi (400 m) radius (Csejtey and Miller, 1978, loc. 68).

Commodities:

Main: Cu

Other:

Ore minerals: Malachite

Gangue minerals:

Geologic description:

Copper minerals occur in brecciated granitic rocks of Jurassic age.

Alteration:

Minor oxidation (gossan) in breccia zones.

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface (some diamond drilling on claims in area).

Production notes:

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

MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978;
Cobb and Csejtey, 1980.

Primary reference: MacKevett and Holloway, 1977

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK027

Latitude: 62.28

Quadrangle: TK B-4

Longitude: 148.9

Location description and accuracy:

0.5 miles up an unnamed northward flowing tributary of Iron Creek, 2.5 miles northwest of VABM Xylic. Locality 67 of Csejtey and Miller (1978) and locality 67 of Singer and others (1978). Accurate within 2,000 feet.

Commodities:

Main: Cu

Other: Au, Pb

Ore minerals: Malachite, pyrite

Gangue minerals:

Geologic description:

Float sample of altered Jurassic granitic rock contained pyrite and malachite. Analysis of the float sample yielded 0.1 ppm Au, 2,000 ppm Cu, and 10 ppm Pb (Miller and others, 1978).

Alteration:

Altered granitic rock.

Age of mineralization:

Jurassic or younger, mineralization is hosted by altered granitic rocks of Jurassic age.

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Extent of exploration is apparently only the collection of a surface grab sample. Analysis of the float sample yielded 0.1 ppm Au, 2,000 ppm Cu, and 10 ppm Pb (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:

Miller and others, 1978; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Miller and others, 1978

Reporter(s): Bickerstaff, D. (USGS contractor)

Last report date: 8/5/98

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK028

Latitude: 62.29

Quadrangle: TK B-4

Longitude: 148.73

Location description and accuracy:

Cirque on unnamed tributary, 2 mi (3.2 km) NE of Iron Creek; location accurate to within 1/2 mi (800 m) (MacKevett and Holloway, 1977, loc. 41).

Commodities:

Main: Cu

Other: Au

Ore minerals:

Gangue minerals:

Geologic description:

Lode claims in volcanic rocks.

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:

Type of workings: Surface (?).

Production notes:

Reserves:

Additional comments:**References:**

USBM, 1973; MacKevett and Holloway, 1977.

Primary reference: USBM, 1973

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK029

Latitude: 62.475

Quadrangle: TK B-4

Longitude: 148.647

Location description and accuracy:

At confluence of Talkeetna River and unnamed tributary; location accurately known (Csejtey and Miller, 1978, loc. 46).

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite, pyrite

Gangue minerals:

Geologic description:

A 1-ft-wide alteration zone in Paleozoic(?) argillite contains minor amounts of chalcopyrite; zone is nearly parallel to bedding.

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:

Type of workings: Surface.

Production notes:

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

Rose, 1967; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK030

Latitude: 62.472

Quadrangle: TK B-4

Longitude: 148.572

Location description and accuracy:

1 and 3/4 miles (2.8 km) NE of Talkeetna River, 1/2 mi (800 m) E of pond; NE 1/4 of NE 1/4 of Talkeetna Mountains B-4 quadrangle; location accurate to within 1/4 mile (400 m) (Csejtey and Miller, 1978, loc. 49).

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite, pyrrhotite

Gangue minerals:

Geologic description:

Minor sulfides replace schistose greenstone (metabasalt) of probable Jurassic age. Associated quartz veins also contain sulfides.

Alteration:

Age of mineralization:

Deposit model:

Gold-quartz vein? (Cox and Singer, 1986; model 36a?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface.

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

Rose, 1967; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Rose, 1967

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK031

Latitude: 62.558

Quadrangle: TK C-4

Longitude: 148.922

Location description and accuracy:

1/2 mi (800 m) N of lake 2710; 6 1/2 mi (10.4 km) SSE of Daneka Lake; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 43).

Commodities:

Main: Cu

Other: Au, Mo

Ore minerals: Malachite, pyrite

Gangue minerals: Quartz

Geologic description:

Sulfide-bearing quartz veins cut pyritic alteration zone in mafic volcanic rocks of Paleozoic age. Extent of mineralization appears small.

Alteration:

Minor pyritic alteration of mafic rocks.

Age of mineralization:

Deposit model:

Porphyry Cu-Au or polymetallic vein or gold-quartz vein? (Cox and Singer, 1986; model 20c, or 22c, or 36a?)

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

20c, or 22c, or 36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface.

Production notes:

Reserves:

Additional comments:

References:

Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK032

Latitude: 62.505

Quadrangle: TK C-4

Longitude: 148.717

Location description and accuracy:

About 1/2 mi (800 m) W of small unnamed lake in extreme SW corner of SE 1/4 of Talkeetna Mountains C-4 quadrangle; 1 mi (1.6 km) NE of Talkeetna River; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 45).

Commodities:

Main: Ag, Cu

Other:

Ore minerals: Limonite, malachite, pyrite, silver mineral?

Gangue minerals:

Geologic description:

Small Cu-bearing shear zone occurs in mafic meta-volcanic rock of Paleozoic age.

Alteration:

Iron oxide

Age of mineralization:

Deposit model:

Volcanic-hosted Cu-As-Sb, or polymetallic vein, or gold-quartz vein? (Cox and Singer, 1986; model 22a, or 22c, or 36a?)

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

22a, or 22c, or 36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface

Production notes:

Reserves:

Additional comments:

References:

Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Red Ridge 1-82

Site Type: Prospect

ARDF no.: TK033

Latitude: 62.49

Quadrangle: TK C-4

Longitude: 148.6

Location description and accuracy:

South face of ridge, 1 and 1/4 mi (2.0 km) SW of Benchmark 'Jaina', 2 and 1/4 mi (3.6 km) NE of Talkeetna River; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Ag, Au

Other:

Ore minerals: Pyrite

Gangue minerals:

Geologic description:

Traces of Ag and Au in highly altered, pyritic phyllite of Paleozoic age.

Alteration:

Altered (?) pyritic phyllite

Age of mineralization:

Deposit model:

Gold-quartz veins? (Cox and Singer, 1986; model 36a?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Lode claims.

Production notes:

Reserves:

Additional comments:

References:

Rose, 1967

Primary reference: Rose, 1967

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK034

Latitude: 62.503

Quadrangle: TK C-4

Longitude: 148.611

Location description and accuracy:

Extreme southern boundary of SE 1/4 of Talkeetna Mountains C-4 quadrangle; 1 mi (1.6 km) SW of BM 'Jaina'; 4 mi (6.4 km) E of Talkeetna River; location accurate to within 1/4 mi (400 m) radius (Csejtey and Miller, 1978, loc. 48).

Commodities:

Main: Cu

Other:

Ore minerals: Chalcophyrite, malachite, pyrite

Gangue minerals:

Geologic description:

Cu-minerals and associated sulfides in mafic metavolcanic rocks of Paleozoic age. Several occurrences of vein or disseminated Cu in metamorphosed volcanic and sedimentary rocks occur in vicinity.

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:

Type of workings: Surface.

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

MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978;
Cobb and Csejtey, 1980.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK035

Latitude: 62.533

Quadrangle: TK C-4

Longitude: 148.531

Location description and accuracy:

SE 1/4 of SE 1/4 of Talkeetna Mountains C-4 quadrangle; about 4 mi (6.4 km) SW of head of Tsisi Creek; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 52).

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite, pyrrhotite

Gangue minerals:

Geologic description:

Minor sulfides in veinlets or as disseminations in metagabbro of Paleozoic age.

Alteration:

Age of mineralization:

Deposit model:

Mafic copper-nickel association (Cox and Singer, 1986; model 5 or 7?)

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

5 or 7?

Production Status: None

Site Status: Inactive

Workings/exploration:

Nearby, quartz float on meta-volcaniclastic rocks had chalcopyrite and 3 ppm Ag (Anderson, 1969).

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

A lode claim.

References:

Rose, 1967; Anderson, 1969; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Rose, 1967

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK036

Latitude: 62.483

Quadrangle: TK B-3

Longitude: 148.467

Location description and accuracy:

In extreme NW corner of Talkeetna Mountains B-3 quad, NE of Talkeetna River; about 6 1/2 mi (10.4 km) W of head of John Creek; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 50).

Commodities:

Main: Ag, Au, Cu

Other:

Ore minerals: Chalcopyrite, pyrite, pyrrhotite

Gangue minerals:

Geologic description:

Host rock is gneissic quartz diorite of Jurassic age. Sulfides disseminated in inclusions of biotite schist in Fe-stained gneiss.

Alteration:

Age of mineralization:

Deposit model:

Gold-quartz veins? (Cox and Singer, 1986; model 36a?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

190 ppm Cu in stream-sediment sample; rock chips have less than 0.06% Cu and a trace

of Au and Ag (Rose, 1967).

Production notes:

Reserves:

Additional comments:

References:

Rose, 1967; Cobb, 1972; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Rose, 1967

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK037

Latitude: 62.08

Quadrangle: TK A-5

Longitude: 149.29

Location description and accuracy:

South side of Sheep Creek, near divide from head of North Fork of Kashwitna River; location accurate to within 1/2 mi (800 m) (MacKevett and Holloway, 1977, loc. 35).

Commodities:

Main: Cu

Other: Ag, Au

Ore minerals:

Gangue minerals:

Geologic description:

Unnamed claim, possibly a vein deposit, in granitic rocks of Tertiary or Cretaceous age.

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:

Type of workings: Surface (?).

Production notes:

Reserves:

Additional comments:

References:

USBM, 1973; MacKevett and Holloway, 1977.

Primary reference: USBM, 1973

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK038

Latitude: 62.14

Quadrangle: TK A-5

Longitude: 149.26

Location description and accuracy:

Located about 0.5 miles north-northwest of peak 6,319 - north of Sheep Creek. Locality 96 of Csejtey and Miller (1978) and locality 96 of Singer and others (1978). Accurate within 2,000 feet.

Commodities:

Main: Ag, Cu

Other: Au

Ore minerals: Chalcopyrite, malachite, pyrite

Gangue minerals: Quartz

Geologic description:

Float sample of Late Cretaceous and Paleocene tonalite contained vein quartz with pyrite, chalcopyrite, and malachite stains. Analysis of the float sample yielded 20 ppm Ag, 1 ppm Au, and greater than 20,000 ppm Cu (Miller and others, 1978).

Alteration:

Oxidation of Cu-minerals.

Age of mineralization:

Late Cretaceous or younger, quartz vein cuts Late Cretaceous and Paleocene tonalite.

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Extent of exploration is apparently only the collection of a surface grab sample. Analysis of the float sample yielded 20 ppm Ag, 1 ppm Au, and greater than 20,000 ppm Cu (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:

Miller and others, 1978; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Miller and others, 1978

Reporter(s): Bickerstaff, D. (USGS contractor)

Last report date: 8/5/98

Site name(s): Unnamed**Site Type:** Prospect**ARDF no.:** TK039**Latitude:** 62.12**Quadrangle:** TK A-5**Longitude:** 149.08**Location description and accuracy:**

Along the south fork of Sheep River, 4.5 miles upstream from the confluence of the south fork of Sheep River with Sheep River. Locality 98 of Csejtey and Miller (1978) and locality 98 of Singer and others (1978). Accurate within 2,000 feet.

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

Float sample of Late Cretaceous and Paleocene tonalite contained malachite-staining. Analysis of the float sample yielded 10 ppm Ag, 0.35 ppm Au, 5,000 ppm Cu, and 10 ppm Pb (Miller and others, 1978).

Alteration:

Oxidation of Cu-minerals.

Age of mineralization:

Late Cretaceous or younger, based on age of host.

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

Extent of exploration is apparently only the collection of a surface grab sample. Analysis of the float sample yielded 10 ppm Ag, 0.35 ppm Au, 5,000 ppm Cu, and 10 ppm Pb (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:

Miller and others, 1978; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Miller and others, 1978

Reporter(s): Bickerstaff, D. (USGS contractor)

Last report date: 8/5/98

Site name(s): Lake Placid

Site Type: Prospect

ARDF no.: TK040

Latitude: 62.99

Quadrangle: TK D-3

Longitude: 148.46

Location description and accuracy:

Unnamed creek 1.5 mi (2.4 km) NW of lake 3619; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claim staked in 1971. Analysis of stream-sediment samples yielded 0.7 ppm Au (Balén, 1990).

Production notes:

Reserves:

Additional comments:

References:

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Delusion Creek

Site Type: Occurrence

ARDF no.: TK041

Latitude: 62.87

Quadrangle: TK D-3

Longitude: 148.2

Location description and accuracy:

On Delusion Creek 3.7 mi (5.9 km) above confluence with Watana Creek; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au, Pd, Pt

Other:

Ore minerals:

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au-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:

Placer claims staked 1979-1980.

Production notes:

Reserves:**Additional comments:**

Analysis of a stream-sediment sample yielded 0.001 oz/yd³ Au (Kurtak and others, 1992).

References:

Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Watana Creek

Site Type: Prospect

ARDF no.: TK042

Latitude: 62.86

Quadrangle: TK D-3

Longitude: 148.22

Location description and accuracy:

On Watana Creek 1.8 mi (2.9 km) upstream from confluence with Susitna River; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au-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:

Stream placer claims staked during 1979. Analysis of stream-sediment samples yielded 3.5 ppm Au (Balén, 1990).

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

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Big Lake

Site Type: Prospect

ARDF no.: TK043

Latitude: 62.98

Quadrangle: TK D-3

Longitude: 148.18

Location description and accuracy:

1/2 mi (800 m) E of Big Lake near outlet stream to Watana Creek; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claims staked in 1977. Analysis of stream-sediment samples yielded 0.6 ppm Ag, 0.8 ppm Au (Balén, 1990).

Production notes:

Reserves:

Additional comments:

References:

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Occurrence

ARDF no.: TK044

Latitude: 62.992

Quadrangle: TK D-3

Longitude: 148.042

Location description and accuracy:

5 mi (8.0 km) due E of Big Lake; location accurate to within 1/4 mi (400 m) Csejtey and Miller, 1978, loc. 13).

Commodities:

Main: Ag, Zn

Other: Au

Ore minerals: Pyrite

Gangue minerals: Quartz

Geologic description:

Altered, silicified zone in Tertiary granitic intrusive and wallrock.

Alteration:

Altered, silicified granite

Age of mineralization:

Deposit model:

Porphyry Cu or polymetallic vein? (Cox and Singer, 1986; model 20c, or 22c?)

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

20c or 22c?

Production Status: None

Site Status: Inactive

Workings/exploration:

Up to 0.5 ppm Ag, 0.12% Zn in analyses of samples of silicified granite and silicified wallrock (Kurtak and others, 1992,)

Production notes:

Reserves:

Additional comments:

References:

Csejtey and Miller, 1978; Miller and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Grizzly Bear

Site Type: Prospect

ARDF no.: TK045

Latitude: 62.989

Quadrangle: TK D-2

Longitude: 147.881

Location description and accuracy:

2 mi (3.2 km) E of Lake 2695; 4 mi (6.4 km) NW of Watana Creek; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, locs. 16 and 17).

Commodities:

Main: Cu

Other: Au, W

Ore minerals: Chalcopyrite

Gangue minerals:

Geologic description:

Sulfide-bearing felsic dike cuts Triassic metabasalt; also, low-grade, vein or disseminated sulfides occur in silicified, mafic metavolcanic rocks.

Alteration:

Silicification; iron oxide

Age of mineralization:

Deposit model:

Porphyry Cu-Au or gold-quartz vein or polymetallic vein? (Cox and Singer, 1986; model 20c, or 36a, or 22c?)

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

20c, or 36a, or 22c

Production Status: None

Site Status: Inactive

Workings/exploration:

Grab sample of limonitic metabasalt yielded 5.17% Cu, 0.4 ppm Au, 550 ppm W (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

Lode claims held in 1974.

References:

MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): VABM Watana

Site Type: Occurrence

ARDF no.: TK046

Latitude: 62.97

Quadrangle: TK D-2

Longitude: 147.84

Location description and accuracy:

Head of unnamed creek, 1/2 mi (800 m) NNW of Benchmark 'Watana'; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Cu

Other: Ag, Au

Ore minerals:

Gangue minerals:

Geologic description:

Mineralization of metavolcanic and metasedimentary rocks of Mesozoic (?) age, including marble which has been locally silicified. Interpreted as a skarn deposit.

Alteration:

Silicification

Age of mineralization:

Deposit model:

Gold-quartz veins or porphyry-copper skarn? (Cox and Singer, 1986; model 36a or 18a?)

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

36a or 18a

Production Status: None

Site Status: Inactive

Workings/exploration:

Analyses of selected rock samples yielded 3.0 ppm Ag, 0.02 ppm Au, 0.26% Cu (Balén,

1990).

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

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK047

Latitude: 62.96

Quadrangle: TK D-2

Longitude: 147.8

Location description and accuracy:

On S flank of hill 5413, 1 mi (1.6 km) NW of Watana Creek; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 17).

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite?

Gangue minerals:

Geologic description:

Low-grade mineralization in mafic metavolcanic rocks of Triassic age.

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:

Type of workings: Surface.

Production notes:

Reserves:

Additional comments:**References:**

Csejtey and Miller, 1978; Singer and others, 1978, Cobb and Csejtey, 1980.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): August Claims 1-8

Site Type: Prospect

ARDF no.: TK048

Latitude: 62.85

Quadrangle: TK D-2

Longitude: 147.93

Location description and accuracy:

N side of Susitna River, 5 1/2 mi (8.8 km) NW of confluence with Jay Creek; location accurate to within 1/4 mi (400 m) (MacKevett and Holloway, 1977, loc. 28; Csejtey and Miller, 1978, loc. 25).

Commodities:

Main: Cu

Other: Ag

Ore minerals: Azurite, chalcopyrite, malachite

Gangue minerals: Carbonate

Geologic description:

Sulfides in shear zone at contact between brecciated metabasalt of Triassic age and interbedded meta-volcanic rocks, argillite, and marble of Paleozoic age.

Alteration:

Age of mineralization:

Deposit model:

Gold-quartz vein or polymetallic vein? (Cox and Singer, 1986; model 36a or 22c?)

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

36a or 22c?

Production Status: None

Site Status: Inactive

Workings/exploration:

Workings include trenches and drill holes. 1.4% Cu and 1.5 ppm Ag in analyses of rock

samples reported by Balen (1990).

Production notes:

Reserves:

Additional comments:

References:

MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978;
Cobb and Csejtey, 1980; Balen, 1990; Kurtak and others, 1992.

Primary reference: MacKevett and Holloway, 1977

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Jay Creek

Site Type: Mine

ARDF no.: TK049

Latitude: 62.78

Quadrangle: TK D-2

Longitude: 147.88

Location description and accuracy:

On Jay Creek 1/2 mi (800 m) from confluence with Susitna River; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Placer mine in alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Analysis of stream-sediment samples yielded 2 ppm Ag, >10 ppm Au (Balen, 1990).

Production notes:

Minor production during 1920-49 and 1987-88 (Balén, 1990).

Reserves:

Additional comments:

References:

Balén, 1990; Kurtak and others, 1992.

Primary reference: Balén, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK050

Latitude: 62.778

Quadrangle: TK D-2

Longitude: 147.839

Location description and accuracy:

On Susitna River 1 mi (1.6 km) E of confluence with Jay Creek; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 26).

Commodities:

Main: Au, Cu

Other:

Ore minerals: Chalcopyrite, pyrite

Gangue minerals: Quartz

Geologic description:

Small, sulfide-bearing quartz vein cutting meta-volcanic rocks of Paleozoic age.

Alteration:

Age of mineralization:

Deposit model:

Polymetallic vein or gold-quartz vein (Cox and Singer, 1986; model 22c or 36a)

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

22c or 36a

Production Status: None

Site Status: Inactive

Workings/exploration:

Type of workings: Surface.

Production notes:

Reserves:

Additional comments:

References:

Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Csejtey and Miller, 1978

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Sanjo Claims

Site Type: Prospect

ARDF no.: TK051

Latitude: 62.97

Quadrangle: TK D-2

Longitude: 147.52

Location description and accuracy:

On creek 4 mi (6.4 km) NW of Coal Lake; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claims staked in 1980.

Production notes:

Reserves:**Additional comments:**

Analysis of stream-sediment sample yielded 0.001 oz/yd³ Au (Kurtak and others, 1992).

References:

Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Lichen

Site Type: Prospect

ARDF no.: TK052

Latitude: 62.89

Quadrangle: TK D-1

Longitude: 147.35

Location description and accuracy:

6 mi (9.6 km) W of Susitna River; 3 1/2 mi (5.6 km) SE of Coal Lake (Csejtey and Miller, 1978, loc. 18).

Commodities:

Main: Ag, Au, Cu

Other:

Ore minerals: Bornite, chalcopyrite, covellite, digenite, gold, malachite

Gangue minerals: Chlorite, epidote

Geologic description:

Host rocks are meta-volcanics and quartz sandstone of Paleozoic age. Veins and disseminations of sulfides in a zone in a mafic volcanic flow; mineralized zone about 6 ft by 3,000 ft (2 m by 900 m), appears confined to a single flow. Host rocks have undergone greenschist-facies metamorphism.

Alteration:

Some gossan staining bedrock.

Age of mineralization:

Deposit model:

Volcanic-hosted copper, or polymetallic vein, or gold-quartz vein? (Cox and Singer, 1986; model 22a, or 22c, or 36a?)

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

22a, or 22c, or 36a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Two trenches yielding samples showing up to 4.5% Cu, 16 ppm Au, and 68 ppm Ag (Smith and others, 1975).

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

Smith and others, 1975; ; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Smith and others, 1975

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Upper Black River

Site Type: Occurrence

ARDF no.: TK053

Latitude: 62.28

Quadrangle: TK B-3

Longitude: 148.09

Location description and accuracy:

Headwaters area of Black River; location accurate to within 1/2 mi (800 m)

Commodities:

Main: Cu, Mo

Other: Au, W

Ore minerals: Chalcopyrite, molybdenite

Gangue minerals:

Geologic description:

Mineralized float samples collected from a large drainage area underlain by Jurassic granodiorite cut by NE-trending shear zones.

Alteration:

Age of mineralization:

Deposit model:

Porphyry Cu-Au or porphyry Cu-Mo? (Cox and Singer, 1986; model 20c or 21a?)

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

20c or 21a?

Production Status: None

Site Status: Inactive

Workings/exploration:

Analyses of float samples contain up to 0.15 ppm Au, 0.69% Cu, 446 ppm Mo, 180 ppm W; placer samples have anomalous concentrations of Au, Pb, W, and Zn (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

References:

Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Nowhere Creek

Site Type: Prospect

ARDF no.: TK054

Latitude: 62.23

Quadrangle: TK A-2

Longitude: 147.95

Location description and accuracy:

Nowhere Creek 2 mi (3.2 km) upstream from confluence with Oshetna River; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Stream placer claims staked during 1979. Analysis of stream-sediment samples yielded 0.5 ppm Ag, 8.6 ppm Au (Balen, 1990).

Production notes:

Reserves:

Additional comments:

References:

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Prospect

ARDF no.: TK055

Latitude: 62.28

Quadrangle: TK B-2

Longitude: 147.97

Location description and accuracy:

North side of Roaring Creek, 1.5 mi (2.4 km) downstream from its head; location accurate to within 1/2 mi (800 m) (MacKevett and Holloway, 1977, loc. 38).

Commodities:

Main: Cu

Other: Au

Ore minerals:

Gangue minerals:

Geologic description:

Claim, possibly a vein deposit, in granite of Jurassic age.

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:

Type of workings: Surface (?).

Production notes:

Reserves:

Additional comments:**References:**

USBM, 1973; MacKevett and Holloway, 1977.

Primary reference: USBM, 1973

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Occurrence

ARDF no.: TK056

Latitude: 62.3

Quadrangle: TK B-2

Longitude: 147.95

Location description and accuracy:

On S valley wall of Roaring Creek; location accurate to within 1/2 mi (800 m)

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite

Gangue minerals:

Geologic description:

Chalcopyrite in Lower Jurassic Talkeetna Formation near contact with felsite intrusive body.

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:

Analysis of chalcopyrite-bearing sample of Talkeetna Formation yielded >1.0% Cu (Clautice and others, 1990).

Production notes:

Reserves:

Additional comments:

References:

Clautice and others, 1990.

Primary reference: Clautice and others, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Roaring Creek

Site Type: Prospect

ARDF no.: TK057

Latitude: 62.258

Quadrangle: TK B-2

Longitude: 147.917

Location description and accuracy:

1 1/4 mi (2.0 km) up Roaring Creek from confluence with Oshetna River; area of interest is NW of given location; location accurate to within 1/4 mi (400 m) radius (Csejtey and Miller, 1978, loc. 60).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Host is alluvial gravels of Tertiary(?) age. Stream & bench deposits overlie Tertiary volcanic rocks.

Alteration:

Age of mineralization:

Tertiary?

Deposit model:

Placer Au (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:

Multiple placer claims along lower Roaring Creek. 'Encouraging' prospects in 1918 (Chapin, 1918). Analysis of stream-sediment sample yielded 4.5 ppm gold (Balén, 1990).

Production notes:

Reserves:

Additional comments:

References:

Chapin, 1915; Chapin, 1918; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Balén, 1990; Kurtak and others, 1992.

Primary reference: Chapin, 1918

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Occurrence

ARDF no.: TK058

Latitude: 62.33

Quadrangle: TK B-2

Longitude: 147.96

Location description and accuracy:

For 2 mi (3.2 km) along upper Granite Creek; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Ag, Au, Cu, Zn

Other:

Ore minerals: Chalcopyrite, gold, pyrite, sphalerite (?)

Gangue minerals: Clay

Geologic description:

Analyses of mineralized samples from gossans and clay-rich shear zones in tuffs and flows of the Lower Jurassic Talkeetna Formation.

Alteration:

Clay in gouge of shear zone; iron oxide (gossan)

Age of mineralization:

Deposit model:

Polymetallic vein or porphyry Cu-Au? (Cox and Singer, 1986; model 22c or 20c?)

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

22c or 20c?

Production Status: None

Site Status: Inactive

Workings/exploration:

Analyses of rock samples from south valley wall of upper Granite Creek yielded 0.2 ppm Au, 0.8 ppm Ag, >1.0% Zn, >1.0% Cu (Clautice and others, 1997).

Production notes:

Reserves:

Additional comments:

References:

Clautice and others, 1990.

Primary reference: Clautice and others, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Granite Creek

Site Type: Prospect

ARDF no.: TK059

Latitude: 62.3

Quadrangle: TK B-2

Longitude: 147.861

Location description and accuracy:

2 mi (3.2 km) up Granite Creek from confluence with Oshetna River; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 57).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Host is alluvial gravels of Tertiary(?) age. Placer deposits overlie Tertiary volcanic rocks.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Type of workings: Surface.

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

Placer claims on lower Granite Creek. Enough gold found to encourage further prospecting in 1918 (Chapin, 1918).

References:

Chapin, 1915; Chapin, 1918; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Chapin, 1918

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Occurrence

ARDF no.: TK060

Latitude: 62.36

Quadrangle: TK B-2

Longitude: 147.91

Location description and accuracy:

Near head of east fork of unnamed, N-flowing tributary of Black River; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Analyses of pan concentrates yielded >10 ppm Au (Clautice and others, 1990).

Production notes:

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

Clautice and others, 1990.

Primary reference: Clautice and others, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Gold Creek

Site Type: Prospect

ARDF no.: TK061

Latitude: 62.228

Quadrangle: TK B-2

Longitude: 147.742

Location description and accuracy:

Location is on middle fork of Gold Creek; areas of interest generally N of that location; 1 mi (1.6 km) S45W of hill 5105; location accurate to within 1/4 mi (400 m) (Csejtey and Miller, 1978, loc. 56).

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Host is alluvial gravels overlying Jurassic rocks of Talkeetna Formation.

Alteration:

Age of mineralization:

Quaternary

Deposit model:

Placer Au-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:

Several placer claims on Gold Creek, some staked as recently as 1980 (Kurtak and oth-

ers, 1992). Coarse gold reported in 1914 to have been found (Chapin, 1918). Analysis of stream-sediment sample yielded 3.1 ppm Pt and >10 ppm Au (Balén, 1990).

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

Gold Creek flows in the Talkeetna Mountains A-2 and B-2 quadrangles.

References:

Chapin, 1915; Chapin, 1918; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Balén, 1990; Kurtak and others, 1992.

Primary reference: Balén, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Busch Creek

Site Type: Mine

ARDF no.: TK062

Latitude: 62.48

Quadrangle: TK B-2

Longitude: 147.75

Location description and accuracy:

Located on Busch Creek. Previously reported longitude does not plot on Busch Creek and appears to be in error (USBM, 1995, MAS/MILS file).

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Placer mine in alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au-PGE (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:

Analysis of stream-sediment samples yielded >10 ppm Au (Balen, 1990).

Production notes:

Production of 150 oz gold reported in 1988 (Balén, 1990).

Reserves:

Additional comments:

References:

Balén, 1990; Kurtak and others, 1992, USBM, 1995.

Primary reference: Balén, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Goose Creek

Site Type: Occurrence

ARDF no.: TK063

Latitude: 62.5

Quadrangle: TK C-2

Longitude: 147.67

Location description and accuracy:

On Goose Creek, 1/2 mi (800 m) downstream from confluence with Busch Creek; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Analysis of pan concentrates yielded >10 ppm Au (Clautice and others, 1990).

Production notes:

Reserves:

Additional comments:

References:

Clautice and others, 1990.

Primary reference: Clautice and others, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Oshetna River

Site Type: Prospect

ARDF no.: TK064

Latitude: 62.369

Quadrangle: TK B-2

Longitude: 147.5

Location description and accuracy:

Oshetna River on upstream side of confluence with Little Oshetna River; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claims staked in 1973. Analysis of stream-sediment samples yielded 2.2 ppm Au (Balén, 1990).

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

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Joe Creek

Site Type: Prospect

ARDF no.: TK065

Latitude: 62.24

Quadrangle: TK A-1

Longitude: 147.41

Location description and accuracy:

On east fork of Joe Creek 1 mi (1.6 km) downstream from its head; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claims staked during 1980-83. Analysis of stream-sediment samples yielded 1 ppm Ag, >10 ppm Au (Balen, 1990).

Production notes:

Reserves:

Additional comments:

References:

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Red Creek

Site Type: Prospect

ARDF no.: TK066

Latitude: 62.26

Quadrangle: TK B-1

Longitude: 147.4

Location description and accuracy:

On Red Creek 1.5 mi (2.4 km) downstream from its head; location accurate to within 1/2 mi (800 m)

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claims staked in the 1980's. Analysis of stream-sediment samples yielded 0.5 ppm Ag, >10 ppm Au (Balen, 1990).

Production notes:

Reserves:

Additional comments:

References:

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Yacko Creek

Site Type: Mine

ARDF no.: TK067

Latitude: 62.217

Quadrangle: TK B-1

Longitude: 147.333

Location description and accuracy:

Area of interest is N and S of given location along the entire extent of Yacko Creek; location accurately known.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Host is alluvial gravel underlain by Jurassic sedimentary and volcanic rocks.

Alteration:

Age of mineralization:

Quaternary

Deposit model:

Placer Au (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:

Several placer claims along Yacko Creek; coarse gold in gravels reported, in sufficient quantities '...to encourage further work...' (Chapin, 1918).

Production notes:

Estimated 1,000 oz Au produced during 1984; up to 0.003 oz/yd³ Au (Kurtak and others, 1992).

Reserves:**Additional comments:**

Yacko Creek flows in the Talkeetna Mountains A-1 and B-1 quadrangles.

References:

Chapin, 1915; Chapin, 1918; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Chapin, 1918

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Walker Creek

Site Type: Prospect

ARDF no.: TK068

Latitude: 62.31

Quadrangle: TK B-1

Longitude: 147.34

Location description and accuracy:

Located about 2 miles upstream from confluence of Walker Creek with Sanona Creek. Previously reported longitude plots on Red Creek and appears to be in error (USBM, 1995, MAS/MILS file).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claims staked in 1976. Analysis of stream-sediment samples yielded 1 ppm Ag, 5 ppm Au (Balen, 1990).

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

Balen, 1990; Kurtak and others, 1992; USBM, 1995.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Walker Creek

Site Type: Prospect

ARDF no.: TK069

Latitude: 62.29

Quadrangle: TK B-1

Longitude: 147.32

Location description and accuracy:

On tributary of Sanona Creek, between 3300 ft and 4000 ft (1,000 m and 1,200 m) elevation; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other: Pb, W, Zn

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claims staked in 1976. Analysis of stream-sediment samples yielded up to 0.0001 oz/yd³ Au and anomalously high concentrations of Pb, W, and Zn (Kurtak and others, 1992).

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

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Fourth of July Creek

Site Type: Prospect

ARDF no.: TK070

Latitude: 62.317

Quadrangle: TK B-1

Longitude: 147.283

Location description and accuracy:

3 mi (4.8 km) SE of Big Bones Ridge, on Fourth of July Creek; location accurately known.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Host is alluvial gravels which overlie Jurassic volcanic rocks of Talkeetna Formation.

Alteration:

Age of mineralization:

Quaternary

Deposit model:

Placer Au (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:

Type of workings: Surface.

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

Several placer claims on Fourth of July Creek, active in early 1900's.

References:

Chapin, 1915; Chapin, 1918; Cobb, 1972, MF-370; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Chapin, 1918

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Daisy Creek

Site Type: Prospect

ARDF no.: TK071

Latitude: 62.283

Quadrangle: TK B-1

Longitude: 147.167

Location description and accuracy:

Location is on Daisy Creek, 2 miles (3.2 km) W of confluence with Tyone Creek; 5 miles (8.0 km) WNW of S lake; location accurately known (Csejtey and Miller, 1978, loc. 104).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Shallow deposits of gold-bearing, alluvial gravels overlie Jurassic rocks of Talkeetna Formation and Tertiary continental rocks. Up to 0.0009 oz/yd³ Au in stream-sediment samples (Kurtak and others, 1992).

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Up to 0.0009 oz/yd³ Au in stream-sediment samples (Kurtak and others, 1992).

Production notes:

Some claims referred to as '...fair prospects...' (Chapin, 1918) but WORKED ONLY ON A SMALL SCALE BEFORE 1914 (Cobb, 1973). Problems in development due to shallow groundwater. Entire length of Daisy Creek worked.

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

Chapin, 1915; Chapin, 1918; Cobb, 1972, MF-370; Cobb, 1973, B 1374; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Chapin, 1918

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Pumicite

Site Type: Prospect

ARDF no.: TK072

Latitude: 62.304

Quadrangle: TK B-1

Longitude: 147.083

Location description and accuracy:

On Tyone Creek or an unnamed tributary, 2 mi (3.2 km) downstream from confluence with Daisy Creek; location accurate to within 1/2 mi (800 m)

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claim staked in 1955. Analysis of stream-sediment samples yielded 2.6 ppm Au (Balén, 1990).

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

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Nicolie Creek

Site Type: Prospect

ARDF no.: TK073

Latitude: 62.19

Quadrangle: TK A-1

Longitude: 147.2

Location description and accuracy:

Nicolie Creek 1/2 mi (800 m) upstream from confluence with Tyone Creek; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claims staked in 1973 and 1982. Analysis of stream-sediment samples yielded 7 ppm Au (Balén, 1990).

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

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Tyone Creek

Site Type: Mine

ARDF no.: TK074

Latitude: 62.17

Quadrangle: TK A-1

Longitude: 147.35

Location description and accuracy:

On Tyone Creek at confluence with Buchia Creek; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Placer mine in alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au-PGE (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:

Analysis of stream-sediment samples yielded 4 ppm Pt, >10 ppm Au (Balen, 1990).

Production notes:

Minor production reported (Balén, 1990) but probably based on a vague report by prospectors of gold plates worth 1 cent apiece in the headwaters of the Tyonek River (Paige and Knopf, 1907).

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

Paige and Knopf, 1907; Balén, 1990; Kurtak and others, 1992.

Primary reference: Balén, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Red Fox Creek

Site Type: Mine

ARDF no.: TK075

Latitude: 62.19

Quadrangle: TK A-1

Longitude: 147.38

Location description and accuracy:

On Red Fox Creek 1.5 mi (2.4 km) upstream from confluence with Buchia Creek; location accurate to within 1/2 mi (800 m)

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au-PGE (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:

Weakly anomalous concentrations of Ag, Au, and Pt in stream-sediment samples (Balén, 1990).

Production notes:

Estimated 200 oz gold production (Kurtak and others, 1992), possibly in the 1980's.

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

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Buchia Creek**Site Type:** Prospect**ARDF no.:** TK076**Latitude:** 62.16**Quadrangle:** TK A-1**Longitude:** 147.46**Location description and accuracy:**

On tributary of Tyone Creek, 3600 ft to 4200 ft (1100 m to 1200 m) elevation; location accurate to within 1/2 mi (800 m).

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

Alluvial deposits.

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

Placer Au (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:**

Placer claims staked during 1979-1983. Analysis of stream-sediment samples yielded up to 0.0015 oz/yd³ Au (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

References:

Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Horn Mountains

Site Type: Prospect

ARDF no.: TK077

Latitude: 62.03

Quadrangle: TK A-1

Longitude: 147.33

Location description and accuracy:

Area of interest is generally SSW of given location; deposit outcrop extends for more than 7 miles (11.2 km) from North Creek into the Anchorage quadrangle to the S; 3/4 MILE (1.2 km) SE of Cameron Pass in Horn Mountains; location accurate to within 1/2 mile (800 m) (Csejtey and Miller, 1978, loc. 112).

Commodities:

Main: Zeolites

Other:

Ore minerals: Analcime, heulandite, laumonite, mordenite

Gangue minerals: Calcite, feldspar, montmorillonite, quartz

Geologic description:

Host rocks are Lower Jurassic Talkeetna Formation. They consist of flat-lying, normally graded, zeolitized tuff beds interbedded with lava flows.

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:

Type of workings: Surface.

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

This deposit is of economic size and grade and warrants development, according to Hawkins (1976); average mordenite content is 49% (range 26-72%).

References:

Hawkins, 1976; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Hawkins, 1976

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Albert Creek; Crooked Creek

Site Type: Mine

ARDF no.: TK078

Latitude: 62.04

Quadrangle: TK A-1

Longitude: 147.31

Location description and accuracy:

Extends from 62.00 to 62.07 N and 147.21 to 147.33 W; 8 mi (12.8 km) SW of Nelchina.

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Placer deposits

Alteration:

Age of mineralization:

Quaternary

Deposit model:

Placer Au-PGE (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:

Several placer claims on Albert Creek (a tributary of Crooked Creek) and on Crooked Creek. Gold discovered on Albert Creek in 1912, leading to a small stampede; no other

valuable deposits were found, but activity on Albert Creek continued to at least 1961 (Cobb, 1973, B 1374).

Production notes:

One or more claims on Albert Creek produced 150 oz gold during 1914 (Chapin, 1918).

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

Martin and Mertie, 1914; Chapin, 1915; Chapin, 1918; Capps, 1924; Cobb, 1972, MF-370; Cobb, 1973, B 1374; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Chapin, 1918

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): North Creek

Site Type: Mine

ARDF no.: TK079

Latitude: 62.008

Quadrangle: TK A-1

Longitude: 147.344

Location description and accuracy:

Area of interest includes claims on North Creek (also Albert Creek (a tributary of Crooked Creek) and Crooked Creek); SE flank of Horn Mountains; location accurately known (Csejtey and Miller, 1978, loc. 110).

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Host is alluvial gravels of Tertiary(?) age. Gravels overlie Mesozoic volcanic and sedimentary rocks. Fine gold occurs in most glacial & glaciofluvial deposits in the vicinity, but not in mineable quantities (Cobb, 1973). Lode gold deposits not found in the immediate area.

Alteration:

Age of mineralization:

Deposit model:

Placer Au-PGE (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:

Type of workings: Surface. Intermittent, small-scale mining from 1912 to at least 1961.

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

Martin and Mertie, 1914; Chapin, 1918; Cobb, 1972, MF-370; Cobb, 1973, B 1374; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Martin and Mertie, 1914

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Sleigh Creek

Site Type: Prospect

ARDF no.: TK080

Latitude: 62.01

Quadrangle: TK A-1

Longitude: 147.28

Location description and accuracy:

On Sleigh Creek 1/2 mi (800 m) upstream from confluence with Crooked Creek, 1 and 1/4 mi (2.0 km) W of Benchmark 'Albert'; location accurate to within 1/2 mi (800 m).

Commodities:

Main:

Other: Au

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Placer claim. Placer gold reportedly found in 1913 (Martin and Mertie, 1914).

Production notes:

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

Martin and Mertie, 1914; Cobb and Csejtey, 1980.

Primary reference: Martin and Mertie, 1914

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Mine

ARDF no.: TK081

Latitude: 62.067

Quadrangle: TK A-1

Longitude: 147.217

Location description and accuracy:

On Crooked Creek, 1 1/2 mi (2.4 km) downstream from confluence with Willow Creek; about 3 mi (4.8 km) SW OF Nelchina (abandoned); location accurately known.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Host is alluvial gravels. Some colors of gold from a blue-gray gravel bed 9 ft (3 m) thick, about 100 ft (30 m) below surface.

Alteration:

Age of mineralization:

Quaternary

Deposit model:

Placer Au (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:

Type of workings: Surface and underground. Vigorous mining in early 1900's (a shaft

on main stream did not hit bedrock). Several placer claims are included in this site description.

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

Martin and Mertie, 1914; Chapin, 1915; Chapin, 1918; Capps, 1924; Cobb, 1972, MF-370; Cobb, 1973, B 1374; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Chapin, 1918

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Little Oshetna River

Site Type: Prospect

ARDF no.: TK082

Latitude: 62.19

Quadrangle: TK A-2

Longitude: 147.7

Location description and accuracy:

Little Oshetna River 3 mi (4.8 km) upstream from confluence with Conglomerate Creek;
location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au-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:

Placer claims staked in 1976 and 1982. Analysis of stream-sediment samples yielded 1 ppm Ag, 0.8 ppm Pt, >10 ppm Au (Balen, 1990).

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

Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Unnamed

Site Type: Occurrence

ARDF no.: TK083

Latitude: 62.34

Quadrangle: TK A-2

Longitude: 147.84

Location description and accuracy:

Near head of unnamed tributary of Oshetna River; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Analyses of pan concentrates yielded 4.3 ppm gold (Clautice and others, 1990).

Production notes:

Reserves:

Additional comments:

References:

Clautice and others, 1990.

Primary reference: Clautice and others, 1990

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Upper Oshetna River

Site Type: Occurrence

ARDF no.: TK084

Latitude: 62.11

Quadrangle: TK A-2

Longitude: 147.98

Location description and accuracy:

On the Oshetna River, 3.5 mi (5.6 km) N of divide from Chickaloon River; location accurate to within 1/2 mi (800 m).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Alluvial deposits.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Analyses of stream-sediment samples yielded >10 ppm Au and 500-800 ppm Zn (Kurtak and others, 1992).

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

Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

Site name(s): Mazuma Creek

Site Type: Mine

ARDF no.: TK085

Latitude: 62.05

Quadrangle: TK A-2

Longitude: 147.85

Location description and accuracy:

Location is Mazuma Creek, a tributary of Caribou Creek, but site report includes entire length of Mazuma Creek and part of Caribou Creek (Csejtey and Miller, 1978, loc. 99).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Host is alluvial gravels. Gravels overlie Tertiary conglomerate and volcanic rocks.

Alteration:

Age of mineralization:

Deposit model:

Placer Au (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:

Several placer claims on Mazuma and Caribou Creeks.

Production notes:

'...minor production...' reported by Cobb (1973).

Reserves:

Additional comments:

References:

Martin and Mertie, 1914; Chapin, 1918; Cobb, 1972, MF-370; Cobb, 1973, B 1374; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Cobb, 1973, B 1374

Reporter(s): Riehle, J. (USGS)

Last report date: 8/1/96

References Cited

- Anderson, R.E., 1969, Preliminary geochemistry and geology of the Little Falls Creek area, Talkeetna Mountains quadrangle, Alaska: Alaska Division of Mines and Geology, Geochemical Report 19, 16 p., 1 pl., 1:45,000.
- Balen, M.D., 1990, Geochemical sampling results from the Bureau of Mines Investigations in the Valdez Creek mining district, Alaska: U.S. Bureau of Mines Open-File Report 34-90, 218 p., 2 pl., 1:250,000.
- Berg, H.C., and Cobb, E.H., 1967, Metalliferous lode deposits of Alaska: U.S. Geological Survey Bulletin 1246, 254 p., 1 pl.
- Brooks, A.H., 1911, The mining industry in 1910: U.S. Geological Survey Bulletin 480, p. 21-42.
- Brooks, A.H., 1925, Alaska's mineral resources and production, 1923: U.S. Geological Survey Bulletin 773, p. 3-52.
- Capps, S.R., 1919, Mineral resources of the upper Chulitna region: U.S. Geological Survey Bulletin 692, p. 207-232. Capps, S.R., 1919b, Mineral resources of the western Talkeetna Mountains: U.S. Geological Survey Bulletin 692, p. 187-205.
- Capps, S.R., 1924, Geology and mineral resources of the region traversed by the Alaska Railroad: U.S. Geological Survey Bulletin 755, p. 73-150.
- Capps, S.R., and Short, M.N., 1926, A ruby silver prospect in Alaska: U.S. Geological Survey Bulletin 783, p. 89-95.
- Carnes, R.D., 1976, Active Alaskan placer operations: U.S. Bureau of Mines, Open-file Report 98-76, 90 p., 40 pl., 1:250,000.
- Chapin, Theodore, 1915, Auriferous gravels of the Nelchina-Susitna region: U.S. Geological Survey Bulletin 622, p. 118-130.
- Chapin, Theodore, 1918, The Nelchina-Susitna region, Alaska: U.S. Geological Survey Bulletin 668, 67 p.
- Clautice, K.H., Harris, E.E., Liss, S.A., Kline, J.T., Bundtzen, T.K., Gilbert, W.G., and Nye, C.J., 1990, Analytical results for rock, pan concentrate, and stream sediment samples from the Talkeetna Mountains B-2 quadrangle and the northern part of the Talkeetna Mountains A-2 quadrangle: Alaska Division of Geological and Geophysical Surveys, Public Data File 90-31, 23 p., 1 pl., 1:63,360.
- Cobb, E.H., 1972, Metallic mineral resources map of the Talkeetna Mountains quadrangle, Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-370, 1 sheet, scale 1:250,000.
- Cobb, E.H., 1973, Placer deposits of Alaska: U.S. Geological Survey Bulletin 1374, 213 p.
- Cobb, E.H., and Csejtey, Bela, Jr., 1980, Summaries of data on and lists of references to metallic and selected nonmetallic mineral deposits in the Talkeetna Mountains quadrangle, Alaska: U.S. Geological Survey Open-File Report 80-716, 63 p.
- Csejtey, Bela, Jr., and Miller, R.J., 1978, Map and table describing metalliferous and selected nonmetalliferous mineral deposits in the Talkeetna Mountains quadrangle, Alaska: U.S. Geological Survey Open-File Report 78-558B, 1 pl. (1:250,000), 20 p.
- Hawkins, D.B., 1976, Mordenite deposits and zeolite zonation in the Horn Mountains area, south-central

- Alaska: Alaska Division of Geological and Geophysical Surveys Special Report 11, 9 p.
- Karlson, R.C., Curtin, G.C., Cooley, E.F., and Garnezy, Larry, 1977, Geochemical maps of selected elements and results of spectrographic analyses for heavy-mineral concentrates from the western half of the Talkeetna Mountains quadrangle, Alaska: U.S. Geological Survey Open-File Report 77-530, 7 p., 1 table, 5 pl., 1:250,000.
- Kurtak, J.M., Southworth, D.D., Balen, M.D., and Clautice, K.H., 1992, Mineral investigations in the Valdez Creek mining district, south-central Alaska: U.S. Bureau of Mines Open-File Report 1-92, 659 p., 2 pl., 1:250,000.
- MacKevett, E.M., Jr., and Holloway, C.D., 1977, Map showing metalliferous and selected nonmetalliferous mineral deposits in eastern southern Alaska: U.S. Geological Survey Open-File Report 77-169A, 1 pl. (1:1,000,000), 99 p.
- Martin, G.C., and Mertie, J.B., Jr., 1914, Mineral resources of the upper Matanuska and Nelchina valleys: U.S. Geological Survey Bulletin 592, p. 273-299.
- Miller, R.J., Cooley, E.F., O'Leary, R.M., Garnezy, Larry, Csejtey, Bela, Jr., Smith, T.E., and Cleveland, M.N., 1978, Analysis of geochemical samples from the Talkeetna Mountains quadrangle, Alaska: U.S. Geological Survey Open-file Report 78-1052, 279 p.
- Nokleberg, W.J., Bundtzen, T.K., Berg, H.C., Brew, D.A., Grybeck, Donald, Robinson, M.S., Smith, T.E., and Yeend, Warren, 1987, Significant metalliferous lode deposits and placer districts of Alaska: U.S. Geological Survey Bulletin 1786, 104 p., 2 pl., scale 1:5,000,000.
- Paige, Sidney, and Knopf, Adolph, 1907, Geologic reconnaissance in the Matanuska and Talkeetna basins Alaska: U.S. Geological Survey Bulletin 327, 71 p.
- Ransome, A.L., and Kerns, W.H., 1954, Names and definitions of regions, districts, and subdistricts in Alaska: U.S. Bureau of Mines Information Circular 7679, 91 p.
- Reed, B.L., 1978, A disseminated tin occurrence near Coal Creek, Talkeetna Mountains D-6 quadrangle, Alaska: U.S. Geological Survey Open-File Report 78-77, 8 p.
- Richter, D.H., 1963, Geology of the Portage Creek-Susitna River area, Alaska: Alaska Division of Mines and Minerals Geologic Report 3, 2 pl., 1:24,000.
- Smith, T.E., Bundtzen, T.K., and Tribble, T.C., 1975, Stratabound copper-gold occurrence, northern Talkeetna Mountains, Alaska: Alaska Division of Geological and Geophysical Surveys Miscellaneous Paper 3, 7 p.
- Rose, A.W., 1967, Geology of an area on the upper Talkeetna River, Talkeetna Mountains quadrangle, Alaska: Alaska Division of Mines and Minerals Geologic Report 32, 7 p., 1 pl., 1:63,360.
- Singer, D.A., Csejtey, Bela, Jr., and Miller, R.J., 1978, Map and discussion of the metalliferous and selected nonmetalliferous mineral resources of the Talkeetna Mountains quadrangle, Alaska: U.S. Geological Survey Open-file Report 78-588Q, 1 pl. (1:250,000), 33 p.
- Smith, P.S., 1929, Mineral industry of Alaska in 1926: U.S. Geological Survey Bulletin 797, p. 1-50.
- Smith, P.S., 1930, Mineral industry of Alaska in 1927: U.S. Geological Survey Bulletin 810, p. 1-64.
- Smith, P.S., 1932, Mineral industry of Alaska in 1929: U.S. Geological Survey Bulletin 824, p. 1-81.
- Smith, P.S., 1933, Mineral industry of Alaska in 1930: U.S. Geological Survey Bulletin 835, p. 1-83.

- Smith, P.S., 1937, Mineral industry of Alaska in 1935: U.S. Geological Survey Bulletin 880-A, p. 1-95.
- Smith, P.S., 1939, Mineral industry of Alaska in 1937: U.S. Geological Survey Bulletin 910-A, p. 1-113.
- Smith, P.S., 1942, Occurrences of molybdenum minerals in Alaska: U.S. Geological Survey Bulletin 926-C, p. 161-210.
- Smith, T.E., Bundtzen, T.K., and Tribble, T.C., 1975, Stratabound copper-gold occurrence, northern Talkeetna Mountains, Alaska: Alaska Division of Geological and Geophysical Surveys Miscellaneous Paper 3, 7 p.
- Swainbank, R.C., Bundtzen, T.K., Clough, A.H., Henning, M.W., and Hansen, E.W., 1994, Alaska's Mineral Industry 1994: Alaska Division of Geological and Geophysical Surveys Special Report 49, 77 p.
- U.S. Bureau of Mines, 1973, Alaska 1:250,000 scale quadrangle map overlays showing mineral deposit locations, principal minerals, and number and type of claims: U.S. Bureau of Mines Open-File Report 20-73, 153 overlays (updated).
- U.S. Bureau of Mines, 1995, A CD-ROM of spatial data extracted from the Minerals Availability System/ Minerals Industry Location System (MAS/MILS): U.S. Bureau of Mines Special Publication 12-95.
- U.S. Geological Survey, 1996, Explanation of fields used in the Alaska Resource Data File of mines, prospects, and mineral occurrences in Alaska: U.S. Geological Survey Open-File Report 96-79, 4 p.
- Wedow, Helmuth, Jr., White, M.G., and Moxham, R.M., 1952, Interim report on an appraisal of the uranium possibilities of Alaska: U.S. Geological Survey Open-file Report 51, 123 p.