Alaska Resource Data File, Talkeetna Mountains quadrangle, Alaska

By Robert K. Rogers and Jeanine M. Schmidt[1]

Open-File Report 03–457

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[1] Anchorage, Alaska

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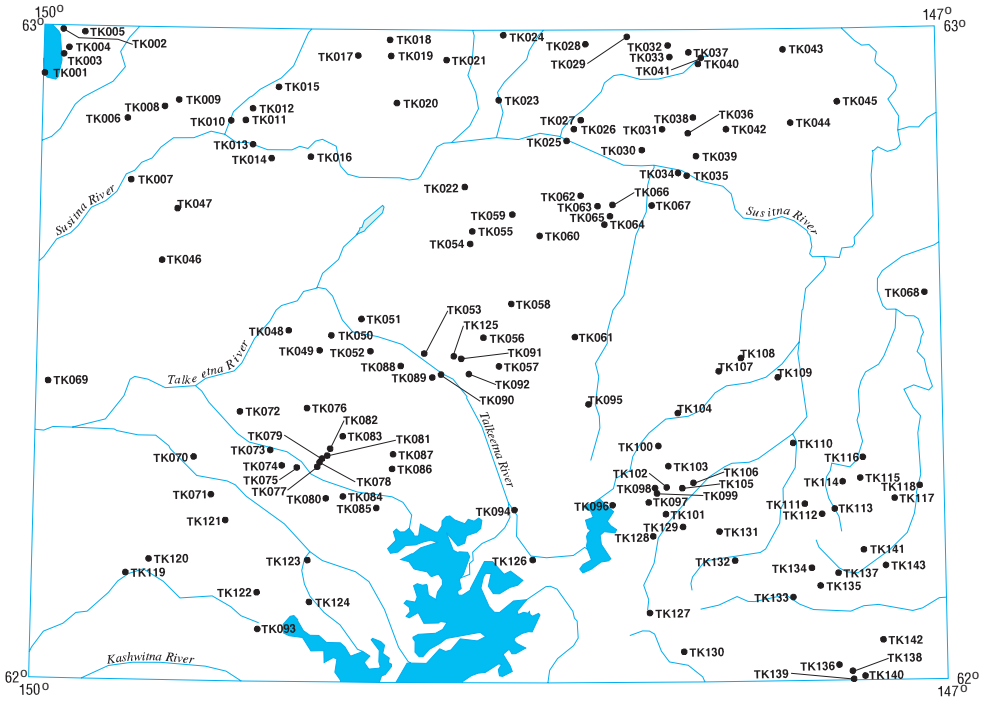
Alaska Resource Data File

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, Alaska

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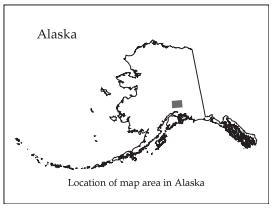
Robert K. Rogers and Jeanine M. Schmidt
Anchorage, AK



U.S. DEPARTMENT OF THE INTERIOR · MARCH 3, 1849 ·

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Site name(s): Unnamed (near Eldridge Glacier)

Site type: Occurrence

ARDF no.: TK001

Latitude: 62.9264 **Quadrangle:** TK D-6

Longitude: 149.9962

Location description and accuracy:

This occurrence is at an elevation of about 1800 feet, on the west side of the Eldridge Glacier, approximately 4 1/2 miles northwest of the north end of Lucy Lake. It is in the NE1/4 sec. 22, T. 33 N., R. 4 W., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Au

Other: Mo

Ore minerals: Pyrite

Gangue minerals:

Geologic description:

This occurrence consists of a small, pyrite-bearing mineralized zone in brecciated chert and argillite (Csejtey and Miller, 1978). A U.S. Geological Survey sample of breccia contains detectable gold and 30 parts per million molybdenum (Miller and others, 1978). There are no workings. The Eldridge 1-3 lode claims were held by A.W. Smith from 1970 to 1978 (Kurtak and others, 1992).

Alteration:

Age of mineralization:

Deposit model:

Low-sulfide 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:

There are no workings. Surface sampling by the U.S. Geological Survey (miller and others, 1978). The Eldridge 1-3 lode claims were held by A.W. Smith from 1970 to 1978 (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760111.

References:

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

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (between Eldridge Glacier and Partin Creek)

Site type: Prospect

ARDF no.: TK002

Latitude: 62.9944 **Quadrangle:** TK D-6

Longitude: 149.9363

Location description and accuracy:
This prospect is at an elevation of about 3,000 feet on a spur between Eldridge Glacier and Partin Creek. It is in the NW1/4SW1/4 sec. 19, T. 22 S., R. 12 W., Fairbanks Meridian. The location is accurate to within 1/2 mile. This is locality 3 of Csejtey and Miller (1978).

Commodities:

Main: Ag, Au

Other:

Ore minerals:

Gangue minerals: Quartz

Geologic description:
This prospect consists of quartz veins(?) in chert and argillite (Csejtey and Miller, 1978). Lode claims were staked for gold and silver.

Alteration:

Age of mineralization:

Deposit model:
Low-sulfide 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: Probably inactive

Workings/exploration:
Lode claims were staked for gold and silver. Work is limited to surface examinations

only. No sample results are known.

Production notes:

Reserves:

Additional comments:

References:

Csejtey and Miller, 1978; Csejtey and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

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

Site type: Prospect

ARDF no.: TK003

Latitude: 62.9563 **Quadrangle:** TK D-6

Longitude: 149.9332

Location description and accuracy:

This prospect is at an elevation of about 1,600 feet on the east, valley wall of Partin Creek, adjacent to lower Eldridge Glacier. It is in the NE1/4 sec. 13, T. 33 N., R. 4 W., Seward Meridian. The location is accurate to within 1/2 mile. It is locality 2 of Csejtey and Miller (1978).

Commodities:

Main: Au, Mo

Other: Ag

Ore minerals:

Gangue minerals:

Geologic description:

Lode claims have been staked in Mesozoic argillite and chert (Csejtey and others, 1978). According to the U.S. Bureau of Mines records (1973), the prospect has been staked for gold, molybdenum, and possibly silver. No other information about the deposit has been made public.

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:

The first public record of this prospect is in U.S. Bureau of Mines OFR 20-73, which provides few details other than claims were staked for gold, molybdenum, and silver All subsequent reports cite that original report.

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760114.

References:

U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Kurtak and others, 1992.

Primary reference: U.S. Bureau of Mines, 1973

Reporter(s): J. Riehle (U.S. Geological Survey)

Last report date: 09/30/2002

Site name(s): Kubek

Site type: Prospect

ARDF no.: TK004

Latitude: 62.9665 **Quadrangle:** TK D-6

Longitude: 149.9159

Location description and accuracy:
The Kubek prospect is located at an elevation of about 2,000 feet on the east valley wall of Partin Creek, adjacent to lower Eldridge Glacier. It is just east of the center of sec. 31, T. 22 S., R. 12 W., Fairbanks Meridian The location is accurate to within 1/2 mile. It is locality 58 of MacKevett and Holloway (1977).

Commodities:

Main: Au

Other: Ag

Ore minerals: Pyrite

Gangue minerals: Quartz

Geologic description:
Gold and silver lode claims have been staked in Mesozoic argillite and chert cut by minor quartz veins. Pyrite occurs in the chert and in fault gouge (Kurtak and others, 1992). Selected rock samples contain up to 2 parts per million silver and 105 parts per billion gold (Balen, 1990).

Alteration:
Silicification.

Age of mineralization:
Veins cut Mesozoic argillite and chert.

Deposit model:
Low sulfide 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:

Mining claims were staked from 1868 to 1983 (Kurtak and others, 1992). Rock samples collected by U.S. Bureau of Mines (Balen, 1990). The claims are the Fennimore, Betz, Partin Creek 1 and 2, AG 1, Gayboy 1, and Eldridge Glacier (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760062.

References:

MacKevett and Holloway, 1977; Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Balen, 1990

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 09/30/2002

Site name(s): Coal Creek

Site type: Prospect

ARDF no.: TK005

Latitude: 62.9909 **Quadrangle:** TK D-6

Longitude: 149.8633

Location description and accuracy:

This prospect is at an elevation of about 2,800 feet, approximately 2 miles east of lower Eldridge Glacier. It is near the head of an unnamed, small south- flowing tributary of Coal Creek, in the SW1/4 sec. 21, T. 22 S., R. 12 W., Fairbanks Meridian. The location is accurate to within 1/4 mile. The area of interest extends 1 mile north and south of this location. This is locality 4 of Csejtey and Miller (1978).

Commodities:

Main: Sn

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

Ore minerals: Arsenopyrite, cassiterite, chalcopyrite(?), pyrite, pyrrhotite, sphalerite

Gangue minerals: Fluorite, quartz, sericite, topaz, tourmaline

Geologic description:

This deposit consists chiefly of disseminated grains and locally high concentrations of cassiterite in a sheeted vein system; there is also minor disseminated cassiterite. The deposit is within and above an apical dome of greisenized lower Tertiary granite that intrudes older, probably cogenetic, granite (Nokleberg and others, 1987). Cassiterite also occurs in thin quartz-topaz-sulfide veinlets that postdate alteration and in stockwork veinlets. The veins vary in width from hairline to 1 cm, are nearly vertical, and reach a density of 10 veins per meter in the most intensely fractured zones. The veins form a stockwork along a fracture(?) zone in granite in an area of about 4,000 square meters (Gregory Thurow, written commun., 1984). The cassiterite is accompanied by sulfides including arsenopyrite, pyrite, pyrrhotite, and sphalerite. The granite adjacent to the veinlets is pervasively altered to quartz, tourmaline, topaz, sericite, and minor fluorite. The granite intrudes and contact-metamorphoses Devonian argillite, graywacke, and minor limestone. The granite is probably part of the 55 Ma McKinley plutonic suite (Nokleberg and others, 1987). A bulk sample collected by the U.S. Bureau of Mines averaged 0.31 percent tin (Kurtak and others, 1992). Grab samples contain up to 1.5 percent tin (Nokleberg and others, 1987). Samples collected by Reed (1978) contain up to 4.3 ounces of silver per ton. Selected samples collected by Balen (1990) have up to 65 parts per million silver,

0.5 parts per million gold, 328 parts per million lead, 720 parts per million tungsten, and 4.86 percent zinc.

Exploration includes surface trenching and extensive diamond drilling by Houston Oil and Minerals, Inc. As of January 1, 2000, a block of 4 state claims covered this prospect (Northern Associates Inc., written commun., 2001).

Alteration:

Sericitization and greisenization of granite (Nokleberg and others, 1987).

Age of mineralization:

Probably genetically related to Tertiary granite.

Deposit model:

Tin greisen (Cox and Singer, 1986; model 15c)

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

15c

Production Status: None

Site Status: Inactive

Workings/exploration:

Exploration includes surface trenching and extensive diamond drilling by Houston Oil and Minerals, Inc. A bulk sample collected by the U.S. Bureau of Mines averaged 0.31 percent tin (Kurtak and others, 1992). Grab samples contain up to 1.5 percent tin (Nokleberg and others, 1987). Samples collected by Reed (1978) assayed up to 4.3 ounces of silver per ton. Rock Selected samples collected by Balen (1990) assayed up to 65 parts per million silver, 0.5 parts per million gold, 328 parts per million lead, 720 parts per million tungsten, and 4.86 percent zinc. As of January 1, 2000, a block of 4 state claims covered this prospect (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

The deposit is estimated to contain a resource of 5 million tons of material that contain 0.28 percent tin and about 0.5 percent copper (Gregory Thurow, written commun., 1984; Nokleberg and others, 1987).

Additional comments:

MAS/MIL number 20760063.

References:

Reed, 1978; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Warner and Dahlin, 1989; Nokleberg and others, 1987; Balen, 1990; Kurtak and others, 1992.

Primary reference: Nokleberg and others,1987

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 09/30/2002

Site name(s): Unnamed (west-southwest of VABM Indian)

Site type: Occurrence

ARDF no.: TK006

Latitude: 62.8602 **Quadrangle:** TK D-6

Longitude: 149.7142

Location description and accuracy:

This occurrence is at an elevation of about 3,600 feet, 1.8 miles west-southwest of VABM Indian. It is about midway between the Parks Highway and the Alaska Railroad tracks, about 0.4 mile south-southeast of the center of sec. 18, T. 32 N., R. 2 W. of the Fairbanks Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Cu, Ni

Other: Cr

Ore minerals: Pyrite

Gangue minerals:

Geologic description:

This occurrence consists of disseminated pyrite in altered, contact-metamorphosed argillite and graywacke, adjacent to a Tertiary granitic intrusion (Csejtey and Miller, 1978). A sample of graywacke contains 500 parts per million copper, 100 parts per million nickel, and 300 parts per million chromium (Miller and others, 1978).

Alteration:

Argillite and graywacke are altered and contact-metamorphosed.

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Susitna River (near Gold Creek)

Site type: Mine

ARDF no.: TK007

Latitude: 62.7658 **Quadrangle:** TK D-6

Longitude: 149.6984

Location description and accuracy:

This placer mine is on sand bars along the east bank of the Susitna River, near mile 265 of the Alaska Railroad It is about 0.2 mile west of the gaging station near the mouth of Gold Creek and about 0.7 mile north of the Gold Creek townsite. This location is accurate to within 1/4 mile. It is locality 33 of Csejtey and Miller (1978).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

The rocks in the area are Cretaceous or Jurassic argillite, lithic graywacke, and conglomerate, with thin beds of chert and limestone (Kurtak and others, 1992). Minor concentrations of flour gold occur at, or near, the surface of gravel bars on the Susitna River. Kurtak and others (1992) report up to 0.018 ounce of gold per cubic yard in stream-sediment samples. The source of the gold may be lode deposits associated with granodiorite intrusions of Tertiary age to the northeast (also see and TK006, TK008, and TK009).

Claim staking began in 1909. According to Capps (1919 [B 692, p. 231]) multiple placer claims were extensively explored and 'some gold was won from time to time.' Possible minor production from 1909 on.

Alteration:

Age of mineralization:

Quaternary placer.

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:
Claim staking began in 1909. According to Capps (1919 [B 692, p. 231]) multiple placer claims were extensively explored and 'some gold was won from time to time.' Samples collected by U.S. Bureau of Mines (Kurtak and others,1992). As of January 1, 2000, a block of state mining claims covered the prospect (Northern Associates Inc., Written Commun., 2001).

Production notes:
Possible minor production from 1909 on.

Reserves:

Additional comments:
MAS/MIL number 20760018 and 20760032.

References:
Brooks, 1911; Capps, 1919 (B 692); Cobb, 1972 (MF 370); Cobb, 1973 (B 1374); MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Capps, 1919 (B 692, p. 231)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 09/30/2002

Site name(s): Unnamed (near Indian Mountain)

Site type: Prospect

ARDF no.: TK008

Latitude: 62.8791 **Quadrangle:** TK D-6

Longitude: 149.5901

Location description and accuracy:
The Indian Mountain claims are just west of the Alaska Railroad tracks, about 0.7 mile south of Chulitna station. This location is accurate to within 1/2 mile. It may be the same as TK009.

Commodities:

Main: Ag

Other: Bi, Cu, Mo, Pb

Ore minerals: Chalcopyrite

Gangue minerals: Quartz

Geologic description:
The Indian Mountain lode claims are at the contact between argillite and Tertiary granite (Kurtak and others, 1992). Quartz veins, with trace chalcopyrite, and pegmatite dikes cut the granite and extend into the argillite. Rock samples contain 1 part per million silver, 8 parts per million molybdenum, 6 parts per million bismuth, 20 parts per million lead, and 0.01 percent copper (Balen, 1990). At least some of these samples were quartz veins.

Alteration:

Age of mineralization:
Probably related to Tertiary granite.

Deposit model:
Polymetallic vein? (Cox and Singer, 1986; model 22c?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
22c?

Production Status: None

Site Status: Inactive

Workings/exploration:

The Indian Mountain 1 to 6 claims were staked in 1962 and 1963. Rock samples collected by U.S. Bureau of Mines (Balen, 1990). At least some of these samples were quartz veins.

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760069.

References:

Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 09/30/2002

Site name(s): Unnamed (east of Chulitna Station)

Site type: Prospect

ARDF no.: TK009

Latitude: 62.8893 **Quadrangle:** TK D-6

Longitude: 149.5428

Location description and accuracy:
This prospect is about 1.2 mile east of the Alaska Railroad on the trail from Chulitna station. It is at an elevation of about 1,500 feet near the southeast corner of sec. 1, T. 32 N., R. 2 W., Seward Meridian. The location is accurate to within 1/2 mile. It is locality 55 of MacKevett and Holloway (1977).

Commodities:

Main: Cu

Other: Au

Ore minerals:

Gangue minerals: Quartz

Geologic description:
Copper and gold lode claims were staked, possibly over quartz veins, in Tertiary granite (U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977).

Alteration:

Age of mineralization:
Veins in Tertiary granite.

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Lode claims were staked.

Production notes:

Reserves:

Additional comments:
Also see Indian Mountain prospect (TK008).

References:
U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Csejtey and others, 1978.

Primary reference: U.S. Bureau of Mines, 1973

Reporter(s): J. Riehle (U.S. Geological Survey)

Last report date: 09/30/2002

Site name(s): Mint

Site type: Mine

ARDF no.: TK010

Latitude: 62.8586 **Quadrangle:** TK D-5

Longitude: 149.3669

Location description and accuracy:

The Mint Mine is located on the west side of Portage Creek, about 2.8 miles north of its mouth on the Susitna River. The mine workings extend from the creek for about 230 feet above it. The mine is in the SE1/4 sec. 13, T. 32 N., R. 1 W., Seward Meridian. The location is accurate to within 1/4 mile. The property was also called the Portage Creek mine. The Cheechako Moose 1-5 and 7-30 claims were staked here.

Commodities:

Main: Ag, Cu, Pb

Other: Au

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

Gangue minerals: Quartz, sericite

Geologic description:

The rocks at the Mint mine are blocky slate that strikes North to N30E and dips 20-80W (Richter, 1963; Kurtak and others, 1992). The slate is cut by a 5- to 12-foot-thick andesite dike that strikes N20W and dips 75SW. The dike contains sericitized orthoclase phenocrysts in a groundmass of altered feldspar laths.

The dike and country rocks are cut by quartz veinlets containing small amounts of pyrargyrite, miargyrite, arsenopyrite, chalcopyrite, galena, tennantite, and pyrite (Richter, 1963). The working consist of adits 15 feet, 17 feet, and 240 feet long. and an open cut . Rock samples contain up to 7.8 ounces of silver per ton, and 3 parts per million gold (Kurtak and others, 1992). A 40-pound sample selected in 1926 contains 117.9 ounces of silver per ton (Capps and Short, 1926). No details are available but Capps and Short (1926) indicate that a small amount of ore was shipped.

Alteration:

An altered andesitic dike contains sericitized orthoclase phenocrysts in a groundmass of altered plagioclase.

Age of mineralization:

Deposit model:
Polymetallic vein? (Cox and Singer, 1986; model 22c?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
22c?

Production Status: Yes; small

Site Status: Inactive

Workings/exploration:
The working consist of adits 15 feet, 17 feet, and 240 feet long and an open cut . Rock samples contain up to 7.8 ounces of silver per ton, and 3 parts per million gold (Kurtak and others, 1992). A 40-pound sample selected in 1926 contains 117.9 ounces of silver per ton (Capps and Short, 1926).

Production notes:
No details are available but Capps and Short (1926) indicate that a small amount of ore was shipped.

Reserves:

Additional comments:
MAS/MIL number 20760002.

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

Primary reference: Richter, 1963

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 09/30/2002

Site name(s): Unnamed

Site type: Prospect

ARDF no.: TK011

Latitude: 62.8597 **Quadrangle:** TK D-5

Longitude: 149.3179

Location description and accuracy:

This prospect which has been located as the Caribou 1-59 claims is at an elevation of about 2,250 feet, at the west end of a plateau bounded by Portage Creek, Devils Canyon, and Devil Creek It is 2.8 miles north-northeast of the junction of Portage Creek and the Susitna River in the SW1/4 sec. 17, T. 32 N., R. 1 E., Seward Meridian. The location is accurate to within 1/4 mile. It is locality 8 of Csejtey and Miller (1978).

Commodities:

Main: Mo

Other: Cu, Zn

Ore minerals: Chalcopyrite, molybdenite, pyrite, sphalerite

Gangue minerals: Fluorite, quartz

Geologic description:

The host rock of this prospect is quartz monzonite of Cretaceous or Tertiary age (Richter, 1963) Silicified, fluorite-bearing, shear zones in the quartz monzonite contain lenses, vugs and masses of molybdenite crystals and other sulfides, chiefly pyrite, chalcopyrite, and sphalerite. Channel samples contain up to 0.1 percent molybdenum and 0.1% zinc (Richter, 1963). The mineralization is probably a quartz-monzonite-related porphyry deposit.

Alteration:

Silicification along shear zones.

Age of mineralization:

In Cretaceous or Tertiary rocks.

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:

Workings consist of a bench cut and a short adit. Channel samples contain up to 0.1 percent molybdenum and 0.1 percent zinc (Richter, 1963). Further exploration at this locality may be justified but would require heavy equipment or drilling due to poor surface exposure (Richter, 1963).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760004.

References:

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

Primary reference: Richter, 1963

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 09/30/2002

Site name(s): Treasure Creek

Site type: Prospect

ARDF no.: TK012

Latitude: 62.8777 **Quadrangle:** TK D-5

Longitude: 149.2943

Location description and accuracy:

Three mineralized sites are on or near Treasure Creek, a small informally named, east tributary of Portage Creek. The mouth of Treasure Creek is 4 miles upstream from the mouth of Portage Creek on the Susitna River The sites are within a mile of each other in an area centered in the NE1/4SE1/4 sec. 8, T. 32 N., R. 1 E., Seward Meridian. This is locality 9 of Csejtey and Miller, (1978).

Commodities:

Main: Cu, Mo

Other: Au, Zn

Ore minerals: Arsenopyrite, chalcopyrite, molybdenite, sphalerite

Gangue minerals: Clay, epidote, fluorite, quartz

Geologic description:

The three mineralized sites of the prospect have disseminated arsenopyrite, chalcopyrite, molybdenite, and sphalerite, quartz, fluorite, and epidote in a silicified and sheared Tertiary granite stock, and in argillite and metagraywacke intruded by the granite (Richter, 1963). There is local intense argillic alteration and limonite staining that extends irregularly up to 300 feet into the granite from a fault. The argillite and metagraywacke are part of an extensive Lower Cretaceous flysch unit. The stock is part of the lower Tertiary McKinley plutonic sequence. Samples of an arsenopyrite-rich boulder found on the surface contain 0.18 ounce of gold per ton, 2-3 percent zinc, 0.1-0.5 percent copper, and 0.1-0.5 percent molybdenum (Richter, 1963). Rock samples from one of the sites contain contain up to 1.0 percent molybdenum, 2.65 percent zinc, and 1.7 ounces of silver per ton (Kurtak and others, 1992).

This prospect was explored by minor surface workings and shallow drilling. A caved adit is 500 feet south of the creek, near the east boundary of section 8 at an elevation of about 1,400 feet. Silver Dome Mining Company staked the Molly 1 to 18 claims, the Caribou 1 to 59 claims, and the Cheechako Moose 1 to 21 claims.

Alteration:

Silicification, argillic and epidote alteration, with iron staining.

Age of mineralization:
In Early Tertiary rocks.

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:
This prospect was explored by minor surface workings and shallow drilling. A caved adit is 500 feet south of the creek, near the east boundary of section 8 at an elevation of about 1,400 feet. Rock sampling by the U.S. Geological Survey and U.S. Bureau of Mines (Richter, 1963; Kurtak and others, 1992). Silver Dome Mining Company staked the Molly 1 to 18 claims, the Caribou 1 to 59 claims, and the Cheechako Moose 1 to 21 claims.

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760005.

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; Csejtey and others, 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): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 09/26/2002

Site name(s): Unnamed (near Devils Canyon)

Site type: Occurrence

ARDF no.: TK013

Latitude: 62.8226 **Quadrangle:** TK D-5

Longitude: 149.2926

Location description and accuracy:

This occurrence is at an elevation of about 1,200 feet in Devils Canyon of the Susitna River. It is on the north wall of the canyon near the tip of a prominent bend in the river in the NE1/4 sec. 32, T. 32 N., R. 1 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Ag

Other: Cu, Zn

Ore minerals: Pyrite

Gangue minerals:

Geologic description:

This rocks in the area are dark gray to black argillite, lithic graywacke, and polymictic pebble conglomerate, with a few thin beds of chert and limestone (Kurtak and others, 1992). An iron-stained rhyolite dike cuts silicified and pyrite-bearing argillite. Selected samples contain up to 2 parts per million silver, 209 parts per million copper, and 205 parts per million zinc (Balen, 1990).

Alteration:

Iron-oxides and silicification.

Age of mineralization:

Deposit model:

Polymetallic vein? (Cox and Singer, 1986; model 22c?)

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

22c?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only rock sampling by U.S. Bureau of Mines (Balen, 1990).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760107.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 09/30/2002

Site name(s): Unnamed (at east end of Devils Canyon)

Site type: Occurrence

ARDF no.: TK014

Latitude: 62.8016 **Quadrangle:** TK D-5

Longitude: 149.2295

Location description and accuracy:

This occurrence represents several sites where placer samples were collected in north-flowing tributaries along an 8-mile-long section of the Susitna River in Devils Canyon. The sites extend upstream from the west edge of sec. 31; the midpoint of these sites is in the SW1/4 sec. 2, T. 31 N., R. 1 E., Seward Meridian.

Commodities:

Main: Au, Pt

Other: Ag, Cu, Sn, Zn

Ore minerals: Gold

Gangue minerals:

Geologic description:

Gold and platinum occur in alluvial gravel deposits in north-flowing tributaries to the Susitna River in Devils Canyon (Kurtak and others, 1992). Stream-sediment samples collected from several sites along the Susitna River contain up to 0.002 ounce of gold per cubic yard, 120 parts per million silver, 0.2 percent copper, 0.2 percent zinc, 180 parts per million tin, and 0.86 part per million platinum. The rocks in the area consist of Tertiary granodiorite (Csejtey and others, 1978).

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:
Sampling of alluvial gravel by U.S. Bureau of Mines (Kurtak and others, 1991).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760083.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 09/30/2002

Site name(s): Portage Creek

Site type: Occurrence

ARDF no.: TK015

Latitude: 62.9110 **Quadrangle:** TK D-5

Longitude: 149.2080

Location description and accuracy:

This placer occurrence is located on Portage Creek just below its junction with Thoroughfare Creek The placer extends for about 2 miles, from the SE1/4 sec. 25 to the the SE1/4 sec. 34, T. 33 N., R. 1 E., Seward Meridian. The coordinates are near the midpoint of the occurrence and is accurate to within 1/2 mile. This is locality D18 of Kurtak and others (1992).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Bedrock in the area of this occurrence consists of Jurassic to Cretaceous flysch and argillite, lithic graywacke, conglomerate, with minor chert and limestone (Csejtey and others, 1978). Tertiary intrusions also occur in the drainage area. The upper Portage Creek area is marked by up to 3-mile-wide alluvial deposits and by widespread glacial cover (Kurtak and others, 1992). Gold occurs locally in the alluvial gravel. Placer samples collected in 1988 by the U.S. Bureau of Mines contain up to 0.002 ounce of gold per cubic yard (Kurtak and others, 1992).

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: None

Site Status: Inactive

Workings/exploration:
Placer sampling by U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760108.

References:
Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (near Susitna River east of Devils Canyon)

Site type: Occurrence

ARDF no.: TK016

Latitude: 62.8046 **Quadrangle:** TK D-5

Longitude: 149.0981

Location description and accuracy:

This occurrence is on the south wall of the Susitna River at an elevation of about 1,700 feet. It is about 2 miles southwest of the junction of Devil Creek and the Susitna River, about 0.3 mile west-southwest of the center of sec. 4, T. 31 N., R. 2 E., Seward Meridian. The location is accurate.

Commodities:

Main: Ag, Cu, Zn

Other: As, Pb

Ore minerals:

Gangue minerals:

Geologic description:

The rocks in the vicinity of this occurrence are granodiorite, migmatite, gneiss, and schist (Csejtey and others, 1978). An eroded dike cuts the gneiss at one location (Kurtak and others, 1992). A sample of quartz-rich gneiss contains 13.5 parts per million silver, 2,882 parts per million copper, and 302 parts per million zinc (Balen, 1990). A float sample of sulfide-bearing schist contains 10.5 parts per million silver, 180 parts per million arsenic, 264 parts per million lead, and 2,121 parts per million zinc.

Alteration:

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:
Limited surface sampling by the U.S. Bureau of Mines (Balen, 1990).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (southeast of upper Portage Creek)

Site type: Occurrence

ARDF no.: TK017

Latitude: 62.9604 **Quadrangle:** TK D-4

Longitude: 148.9425

Location description and accuracy:

This occurrence is at an elevation of about 3,400 feet on a northwest-flowing tributary to upper Portage Creek. It is approximately 0.9 mile east-northeast of hill 4285 and about 0.6 mile southwest of the center of sec. 32, T. 22 S., R. 7 W., Fairbanks Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Au, Cu

Other: Bi, Ti

Ore minerals: Chalcopyrite, pyrite

Gangue minerals: Quartz

Geologic description:

This occurrence consists of pyrite and chalcopyrite in Cretaceous or Jurassic slate near a granite contact, and of small quartz veins in argillite (Miller and others, 1978; J. Schmidt, written commun., 2001). U.S. Geological Survey samples of the quartz veins contain 0.8 part per million gold and 100 parts per million bismuth (Miller and others, 1978). Sulfide-bearing slate samples contain 244 parts per million copper and 2.26 percent titanium (J. Schmidt, written commun., 2001).

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:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978; Miller and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (upper Portage Creek)

Site type: Occurrences

ARDF no.: TK018

Latitude: 62.9848 **Quadrangle:** TK D-4

Longitude: 148.8355

Location description and accuracy:

This site is a 1.5-mile-long, northeast-trending area of mineral occurrences near the headwaters of Portage Creek. The center of the area is at an elevation of about 3,700 feet, in the NE1/4NW1/4 sec. 26, T. 22 S., R. 7 W., Fairbanks Meridian. The location is accurate.

Commodities:

Main: Ag, Au, Cu

Other: Hg

Ore minerals:

Gangue minerals: Quartz

Geologic description:

The occurrences at the southwest end of the area are quartz-veined, mafic(?), aphanitic and hornfelsed volcanic rocks and rusty weathering argillite; at the northeast end, they are brecciated tuffs(?) (J. Schmidt, written commun., 2001). Samples of the hornfelsed volcanic rocks contain 260 parts per million copper, 0.5 part per million gold, 0.4 part per million silver, and 0.27 part per million mercury. Argillite samples contain 1 part per million silver; and the breccia contains 0.4 part per million silver and 215 parts per million copper. (The 0.5-part-per-million gold value is an ICP analysis from XRAL Laboratories; a fire assay of the same sample gives less than 0.005 part per million gold. The cause of the discrepancy is not known.)

Alteration:

Iron-oxide 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:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760109.

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (at the head of Devil Creek)

Site type: Occurrence

ARDF no.: TK019

Latitude: 62.9600 **Quadrangle:** TK D-4

Longitude: 148.8315

Location description and accuracy:

This occurrence is above the head of Devil Creek, at an elevation of about 4,500 feet on the southwest flank of hill 5374 (which is locally called U Mountain). It is about 0.4 mile south of the center of sec. 35, T. 22 S., R. 7 W. of the Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Au

Other: Hg, Sb, Zn

Ore minerals:

Gangue minerals:

Geologic description:

This occurrence is in altered felsic volcanic rocks. It includes gossan zones and chalky zones marked by iron- and manganese-oxide(?) banding (J. Schmidt, written commun., 2001). U.S. Geological Survey rock samples contain up to 2 parts per million gold, 228 parts per million zinc, 3 parts per million antimony, and 0.42 part per million mercury. (The 2-parts-per-million gold value is from an ICP analysis done by XRAL Laboratories; a fire assay of the same sample shows less than 0.005 part per million gold. The cause of the discrepancy is not known.)

Alteration:

Argillic(?) alteration of felsic volcanic rocks. Iron- and manganese-oxide(?) alteration.

Age of mineralization:

Deposit model:

Hot spring Au-Ag? (Cox and Singer, 1986; model 25a?)

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

25a?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (southeast of upper Devil Creek)

Site type: Occurrence

ARDF no.: TK020

Latitude: 62.8879 **Quadrangle:** TK D-4

Longitude: 148.8111

Location description and accuracy:

This occurrence is at an elevation of about 3,950 feet in the saddle west of elevation 3972; it is near the center of the SW1/4 sec. 1, T. 32 N., R. 3 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Cu, Zn

Other:

Ore minerals: Pyrite

Gangue minerals:

Geologic description:

This occurrence consists of disseminated pyrite in fine-grained schist, adjacent to a Tertiary granitic intrusion (Kurtak and others, 1992). A sample of the schist contains 200 parts per million copper and 100 parts per million zinc (Miller and others, 1978). Four U. S. Bureau of Mines samples contain up to 56 parts per million copper (Kurtak and others, 1992).

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:

Surface sampling by U.S. Geological Survey and U.S. Bureau of Mines (Miller and others, 1978; Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

References:

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

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

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

Site type: Occurrence

ARDF no.: TK021

Latitude: 62.9542 **Quadrangle:** TK D-4

Longitude: 148.6446

Location description and accuracy:

This occurrence is at an elevation of about 4,500 feet on the northeast side of Clark Creek; it is about 0.4 mile northwest of the top of hill 4823 and about 0.4 mile north of the center of sec. 14, T. 33 N., R. 6 W. of the Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Ag, Cu, Pb, Zn

Other: Au, Bi, Cd

Ore minerals: Pyrite

Gangue minerals: Quartz

Geologic description:

This occurrence is a gossan of orange soil that consists of silicified and quartz-pyrite-veined aplite with iron- and manganese-oxide staining; chalky, altered leucogranodiorite; and biotite granodiorite with iron-oxide-coated fractures (J. Schmidt, written commun., 2001). U.S. Geological Survey samples of the aplite contain up to 26.6 parts per million silver, 18,900 parts per million zinc, 1,660 parts per million lead, 1,480 parts per million copper, 126 parts per million cadmium, 15 parts per million bismuth, and 0.2 part per million gold. (The 0.2-part-per-million gold value is from an ICP analysis done by XRAL Laboratories; a fire assay of the same sample shows 0.020 part per million gold. The cause of the discrepancy is not known.)

Alteration:

The leucogranodiorite is altered to clay and the aplite is silicified. Local iron- and manganese-oxide staining.

Age of mineralization:

Deposit model:

Polymetallic veins? (Cox and Singer, 1986; model 22c?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
22c?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

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

Site type: Occurrence

ARDF no.: TK022

Latitude: 62.7597 **Quadrangle:** TK D-4

Longitude: 148.5824

Location description and accuracy:

This occurrence is at an elevation of about 1,500 feet on the north bank of Fog Creek, 1.4 miles south-southeast of hill 2630. The location is accurate to within 1/4 mile.

Commodities:

Main: Au, Zn

Other: Ag, Ni

Ore minerals: Pyrite

Gangue minerals:

Geologic description:

The rocks in the area of this occurrence are Triassic(?) limestone, siltstone and chert, with very fine grained, crossbedded, dark gray limestone and gray argillite interlayered with dark red weathering, gray-green chert (J. Schmidt, written commun., 2001). Locally, yellow-green-weathered material occurs below limestone horizons and red-weathering, altered material occurs in limestone- siltstone outcrops. Chert and shale are marked by yellow efflorescence, and interlayered gray argillite and chert are marked by white efflorescence. Iron-stained, silicified argillite contains 2-3 percent fine-grained pyrite. Samples of altered sedimentary rocks contain up to 1,110 parts per million zinc, 0.4 part per million gold, 1.1 parts per million silver, and 205 parts per million nickel (J. Schmidt, written commun., 2001).

Alteration:

Zones of red or yellow-green weathering or alteration; yellow and white efflorescence; and iron staining (J. Schmidt, written commun., 2001).

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Deadman Creek

Site type: Occurrence

ARDF no.: TK023

Latitude: 62.8928 **Quadrangle:** TK D-3

Longitude: 148.4694

Location description and accuracy:
This placer occurrence is at an elevation of about 2,400 feet along about a mile of Deadman Creek. It is about 6 1/2 miles upstream from its mouth on the Susitna River, in the NW1/4 sec. 2, T. 32 N., R. 5 E., Seward Meridian. The location is accurate. This is locality D8 of Kurtak and others (1991).

Commodities:

Main: Au

Other:

Ore minerals:

Gangue minerals:

Geologic description:
The rocks in the vicinity of this placer occurrence are schist, migmatite, and granite and Upper Paleocene biotite granodiorite (Csejtey and others, 1978). Placer samples collected by the U.S. Bureau of Mines contain up to 400 parts per billion gold (Kurtak and others, 1992).

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: None

Site Status: Inactive

Workings/exploration:
Placer sampling by U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760105.

References:
Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (near Lake Placid)

Site type: Prospect

ARDF no.: TK024

Latitude: 62.9925 **Quadrangle:** TK D-3

Longitude: 148.4541

Location description and accuracy:
This placer prospect is on an unnamed creek, 1 1/2 miles northwest of lake 3619 that is informally called Lake Placid. The location is at an elevation of about 4,000 feet, about 0.2 mile west of the center of sec. 23, T. 22 S., R. 5 W., Fairbanks Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
Quaternary alluvial deposits are underlain by Tertiary or Cretaceous intrusive rocks at this placer (Csejtey and others, 1978). Placer claims were staked in 1971 by Lela Lloyd, Mary Carey, and Carl Gleason (Kurtak and others, 1992). Stream sediment samples contain up to 0.7 part per million gold (Kurtak and others, 1992).

Alteration:

Age of mineralization:
Quaternary placer.

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 were staked in 1971 by Lela Lloyd, Mary Carey, and Carl Gleason (Kurtak and others, 1992). Limited placer sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760060.

References:

Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Graben

Site type: Occurrence

ARDF no.: TK025

Latitude: 62.8304 **Quadrangle:** TK D-3

Longitude: 148.2411

Location description and accuracy:
The Graben occurrence is on the north bank of the Susitna River, about 0.2 mile east of the mouth of Watana Creek. The location is accurate.

Commodities:

Main: Co, Cu, Ni

Other: Au, Hg, Ti

Ore minerals:

Gangue minerals:

Geologic description:
This occurrence is in basalt of the Triassic, Nikolai Greenstone. Fractures in the amygdaloidal basalt are marked by orange-red to orange-brown coatings, locally accompanied by yellow-green coatings and white and yellow efflorescence (J. Schmidt, written commun., 2001). Rock samples collected by the U.S. Geological Survey contain up to 2,120 parts per million copper, 110 parts per million nickel, 226 parts per million cobalt, 0.2 part per million gold, and 1.05 percent titanium; one sample contains 1.56 parts per million mercury (J. Schmidt, written commun., 2001). (The 0.2-part-per- million gold value is an ICP analysis done by XRAL Laboratories; a fire assay shows less than 0.005 ppm gold. The cause of the discrepancy is not known.)

Alteration:
Iron-oxide(?) and undetermined secondary minerals.

Age of mineralization:
Occurs in Triassic basalt.

Deposit model:
Basaltic copper? (Cox and Singer, 1986; model 23?)

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

23?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Watana Creek

Site type: Prospect

ARDF no.: TK026

Latitude: 62.8485 **Quadrangle:** TK D-3

Longitude: 148.2168

Location description and accuracy:
This placer prospect is located on Watana Creek, 1.8 miles upstream from it mouth on the Susitna River. It is in the NW1/4 sec. 19, T. 32 N., R. 7 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Pd, Pt

Ore minerals: Gold, magnetite

Gangue minerals:

Geologic description:
Gold occurs in alluvial gravel in Watana Creek which drains a variety of rock types. The lower part of the creek drains an area of Tertiary fluvial conglomerate, sandstone and claystone; the upper parts drain Triassic basalt, Lower Cretaceous argillite and lithic graywacke, and some Tertiary granodiorite (Kurtak and others, 1992). Tertiary conglomerate two miles upstream from the Susitna River is similar to gold- and platinum-bearing conglomerate in the Tyone River area, 55 miles to the southeast; it is a possible source of the gold and platiinum-group metal in this placer(Kurtak and others, 1992). A sediment sample collected near the conglomerate on Watana Creek contains 20 parts per billion (ppb) platinum and 8 ppb palladium (Balen, 1990). The richest sediment sample from the upper part of Watana Creek contains 0.0016 ounce of gold per cubic yard; a placer sample from the west fork of the creek, 11 miles above the Susitna River, contains 4 ppb palladium and 25 ppb platinum (Balen, 1990). Other stream-sediment samples contain up to 8.5 parts per million gold. Placer concentrates contain abundant magnetite. Placer claims were staked in 1979 and abandoned in 1981.

Alteration:

Age of mineralization:
Quaternary placer.

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 were staked in 1979 and abandoned in 1981. Stream sampling by the U.S. Bureau of Mines (Balen, 1990).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760089.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Delusion Creek

Site type: Occurrence

ARDF no.: TK027

Latitude: 62.8622 **Quadrangle:** TK D-3

Longitude: 148.1937

Location description and accuracy:
This placer occurrence is located on Delusion Creek, just above its junction with Watana Creek. It is near the center of the eastern side of sec. 18, T. 32 N., R. 7 E. of the Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au, Pd

Other: W

Ore minerals: Gold

Gangue minerals:

Geologic description:
Placer claims were staked in 1979 but were abandoned in 1981 (Kurtak and others, 1992). The alluvial deposits at this placer occurrence are underlain by schist, migmatite, and granite (Kurtak and others, 1992). A stream sediment sample contains 0.002 ounce of gold per cubic yard, 160 parts per million tungsten, and 4 parts per billion palladium.

Alteration:

Age of mineralization:
Quaternary placer.

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 were staked in 1979 but were abandoned in 1981 (Kurtak and others, 1992). Limited stream sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760088.

References:

Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Big Lake

Site type: Prospect

ARDF no.: TK028

Latitude: 62.9786 **Quadrangle:** TK D-3

Longitude: 148.1772

Location description and accuracy:
This placer prospect is 1/2 mile east of Big Lake. It is on the outlet stream that drains to Watana Creek, about 0.4 mile east of the center of sec. 30, T. 22 S., R. 3 W., Fairbanks Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Ag

Ore minerals: Gold

Gangue minerals:

Geologic description:
Alluvial deposits at this prospect are underlain by Lower Cretaceous (?) argillite and lithic graywacke (Csejtey and others, 1978). Stream sediment samples contain up to 0.6 part per million silver and 0.8 ppm gold (Kurtak and others, 1992). Two placer claims were staked in 1977.

Alteration:

Age of mineralization:
Quaternary placer.

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:

Two placer claims were staked in 1977. Stream sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760050.

References:

Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (east of Big Lake)

Site type: Occurrence

ARDF no.: TK029

Latitude: 62.9897 **Quadrangle:** TK D-3

Longitude: 148.0376

Location description and accuracy:

This occurrence is at an elevation of about 3,300 feet, 5 miles east of Big Lake. The occurrence is in the SW1/4 sec. 24, T. 22 S., R. 3 W., Fairbanks Meridian. The location is accurate to within 1/4 mile. This occurrence has also been called the Watana Creek lode. This is locality 13 of Csejtey and Miller (1978).

Commodities:

Main: Ag, Au, Zn

Other:

Ore minerals: Pyrite

Gangue minerals: Quartz

Geologic description:

This occurrence consists of pyrite in a silicified zone in a Tertiary granitic pluton that intrudes metabasalt and Lower Cretaceous argillite and lithic graywacke (Csejtey and others, 1978). The metabasalt next to the pluton is also silicified. A sample of felsic intrusive rock collected by the U.S. Geological Survey contains 2.5 parts per million gold and 0.5 parts per million silver (Miller and others, 1978). Samples of silicified granite and silicified wall rock collected by the U.S. Bureau of Mines contain up to 0.5 parts per million silver and 0.12 percent zinc; a placer sample contains 1,500 parts per billion gold (Kurtak and others, 1992).

Alteration:

Granite and metabasalt are silicified.

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:

Limited sampling by the U.S. Geological Survey and U.S. Bureau of Mines (Miller and others, 1978; Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760112.

References:

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

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Second Creek

Site type: Prospect

ARDF no.: TK030

Latitude: 62.8160 **Quadrangle:** TK D-2

Longitude: 147.9894

Location description and accuracy:

This placer prospect is on Second Creek, an informally named feature that is a north tributary to the Susitna River, whose mouth is about 6 miles downstream from Jay Creek. A placer claim is at about the 2,500-foot elevation on Second Creek; the upper end is accurately located in the SW1/4 sec. 32, T. 32 N., R. 8 E., Seward Meridian. This is locality B27 of Kurtak and others, (1992).

Commodities:

Main: Au

Other: Ba

Ore minerals: Gold, magnetite

Gangue minerals: Garnet

Geologic description:

The prospect is in Quaternary glacial and alluvial deposits (Kurtak and others, 1992). In 1976, a placer claim was staked and assessment work was done through 1983 (Kurtak and others, 1992). Placer samples collected by the U.S. Bureau of Mines contain up to 0.0002 ounce of gold per cubic yard and 1 percent barium (Balen, 1990). The placer concentrates also contain abundant garnet and magnetite.

Alteration:

Age of mineralization:

Quaternary placer.

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:

In 1976, a placer claim was staked and assessment work was done through 1983 (Kurtak and others, 1992). Placer samples collected by the U.S. Bureau of Mines (Balen, 1990).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760077.

References:

Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): August

Site type: Prospect

ARDF no.: TK031

Latitude: 62.8477 **Quadrangle:** TK D-2

Longitude: 147.9209

Location description and accuracy:

The August prospect is at an elevation of about 3,800 feet on the east side of a north tributary of the Susitna River. The prospect is in the SW1/4NE1/4 sec. 22, T. 32 N., R. 8 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 28 of MacKevett and Holloway (1977) and locality 25 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other: Ag

Ore minerals: Azurite, chalcopyrite, malachite

Gangue minerals:

Geologic description:

The rocks in the area are Upper Triassic basaltic metavolcanic rocks interbedded with argillite and limestone or marble (Csejtey and others, 1978). The deposit consists of chalcopyrite, azurite, and malachite in a breccia zone in metabasalt near a contact with fossiliferous limestone (Kurtak and others, 1992). U.S. Bureau of Mines samples of mineralized metabasalt contain 1.4 percent copper and 1.5 parts per million silver (Kurtak and others, 1992). Exploration in the 1970's, by Cities Service Minerals Co. Inc., included the collection of 46 rock samples, 80 soil samples, and 7 stream-sediment samples; IP, VLF and ground magnetics surveys; excavating 3 trenches; and drilling 4 diamond drill holes (Don Stevens, written commun., 1992).

Alteration:

Oxidation of copper minerals.

Age of mineralization:

Deposit model:

Basaltic copper (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:
Surface sampling by U.S. Bureau of Mines (Balen, 1990; Kurtak and others, 1992). Exploration in the 1970's, by Cities Service Minerals Co. Inc., included the collection of 46 rock samples, 80 soil samples, and 7 stream-sediment samples; IP, VLF and ground magnetics surveys; excavating 3 trenches; and drilling 4 diamond drill holes (Don Stevens, written commun., 1992). The August 1-8 claims were staked by Cities Service Minerals in the 1970's. No mining claims were present as of January 1, 2000 (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760049.

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

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Grizzly Bear, Grizzly

Site type: Prospect

ARDF no.: TK032

Latitude: 62.9760 **Quadrangle:** TK D-2

Longitude: 147.9000

Location description and accuracy:

This prospect is at an elevation of about 3,850 feet, about 1.2 miles southeast of lake 2695. The prospect is near the center of sec. 27, T. 22 S., R. 2 W., Fairbanks Meridian. The location is accurate to within 1/4 mile. This is locality 15 and 16 of Csejtey and Miller (1978).

Commodities:

Main: Au, Cu

Other: Ag, W

Ore minerals: Bornite, chalcopyrite, pyrite, pyrrhotite

Gangue minerals:

Geologic description:

At the Grizzly Bear prospect, a sulfide-bearing felsic dike cuts Triassic metabasalt (Csejtey and others, 1978). The sulfide minerals are bornite, chalcopyrite, pyrite, and pyrrhotite. Low-grade sulfide veins and disseminated sulfides also occur in silicified metabasalt. A U.S. Geological Survey sample of mineralized volcanic rock contains 0.5 part per million gold; a sample of felsic intrusive rock contained 3 parts per million silver and 350 parts per million copper (Miller and others, 1978). A U.S. Bureau of Mines grab sample of limonitic metabasalt contains 5.17 percent copper, 0.4 parts per million gold, and 550 parts per million tungsten (Kurtak and others, 1992). Private industry has collected 315 soil samples (Don Stevens, written commun., 1992).

Cities Service Minerals Company held 96 claims in 1972-73. Northland Mines held 18 lode claims in 1974. Other claims at the prospect include Fox 1-2, Moraine 1-2, Greenstone 1-4, and Shadow Mountain 1-10. As of January 1, 2000, a block of approximately 96 state mining claims covered this and adjacent prospects (Northern Associates Inc., written commun., 2001).

Alteration:

Silicified mafic metavolcanic rocks; iron oxide alteration.

Age of mineralization:

Deposit model:
Porphyry Cu-Au, Basaltic copper, or Polymetallic vein? (Cox and Singer, 1986; model 20c, 23, or 22c?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
20c, 23, or 22c?

Production Status: None

Site Status: Inactive

Workings/exploration:
Surface sampling by U.S. Geological Survey and U.S. Bureau of Mines (Miller and others, 1977; Kurtak and others, 1992). Private industry has collected 315 soil samples (Don Stevens, written commun., 1992). Cities Service Minerals Company held 96 claims in 1972-73. Northland Mines held 18 lode claims in 1974. Other claims at the prospect include Fox 1-2, Moraine 1-2, Greenstone 1-4, and Shadow Mountain 1-10. As of January 1, 2000, a block of approximately 96 state mining claims covered this and adjacent prospects (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760051.

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

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (near VABM West Watana)

Site type: Occurrence

ARDF no.: TK033

Latitude: 62.9583 **Quadrangle:** TK D-2

Longitude: 147.8945

Location description and accuracy:

This occurrence is at an elevation of about 5,000 feet,on a north-trending ridge about 1 3/4 miles west of VABM Watana. The occurrence is near the center of the SE1/4 sec. 34, T. 22 S., R. 2 W., Fairbanks Meridian. The location is accurate to within 1/4 mile. This is locality B18 of Kurtak and others (1992).

Commodities:

Main: Cu, Mo

Other:

Ore minerals: Arsenopyrite, malachite, pyrite

Gangue minerals: Quartz

Geologic description:

The rocks in the vicinity of this occurrence are Triassic metabasalt (Csejtey and others, 1978). Immediately to the west, the metabasalt is in fault contact with Upper Jurassic sedimentary and volcanic rocks. The metabasalt is iron stained and contains quartz veins and disseminated pyrite and arsenopyrite (Kurtak and others, 1992). Malachite locally coats the outcrop. Rock samples collected by the U.S. Geological Survey contain 20 parts per million molybdenum (Miller and others, 1978). Samples collected by the U.S. Bureau of Mines contain up to 765 parts per million arsenic and 193 parts per mission copper, but no molybdenum (Balen, 1990). As of January 1, 2000, a block of approximately 96 state mining claims covered this and adjacent prospects (Northern Associates Inc., written commun., 2001).

Alteration:

Oxidation of copper mineral; iron oxides.

Age of mineralization:

Occurs in Triassic metabasalt.

Deposit model:

Basaltic copper? (Cox and Singer, 1986; model 23?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23?

Production Status: None

Site Status: Inactive

Workings/exploration:
Sampling by the U.S. Bureau of Mines and U.S. Geological Survey (Miller and others, 1978; Balen, 1990). As of January 1, 2000, a block of approximately 96 state mining claims covered this and adjacent prospects (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760087.

References:
Csejtey and others, 1978; Miller and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Jay Creek

Site type: Mine

ARDF no.: TK034

Latitude: 62.7805 **Quadrangle:** TK D-2

Longitude: 147.8686

Location description and accuracy:

This placer mine is located on lower Jay Creek; it extends for about 1 mile upstream from the mouth of the creek on the Susitna River. The mine is centered in NW1/4NW1/4 sec. 13, T. 31 N., R. 8 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Ti, V, W

Ore minerals: Gold

Gangue minerals:

Geologic description:

The Jay Creek placer deposit extends for a mile above the mouth of the creek, in alluvium estimated to be 12 feet thick (Kurtak and others, 1992). The lower part of the creek is underlain by Triassic metabasalt (Schmidt, 2002). The upper portion of the drainage is underlain by Cretaceous-Tertiary granodiorite and tonalite (Csejtey and others, 1978). The Jay Creek mine workings consist of placer tailings and test pits that extend from the mouth upstream for 1 mile. Stream-sediment samples collected with a backhoe by the U. S. Bureau of Mines from the mouth to the head of the creek contain up to 0.001 ounce of gold per cubic yard ; surface samples contain up to 3,300 parts per billion gold and 2 parts per million silver. Suction dredge concentrates contain 1,025 parts per million vanadium and 5.16 percent titanium; samples of alluvium contain up to 80 parts per million tungsten (Balen, 1990; Kurtak and others, 1992).

Minor production was reported during 1920-49 and 1987-88 (Balen, 1990). A total of 14 state mining claims were valid as of January 1, 2000 (Northern Associates Inc., written communication , 2001).

Alteration:

Age of mineralization:

Quaternary placer.

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:
The Jay Creek mine workings consist of placer tailings and test pits that extend from the mouth upstream for 1 mile. Extensive sampling by U.S. Bureau of Mines (Balen, 1990; Kurtak and others, 1992). The mine includes the Rainbow 1-7 claims staked by Black Creek Mining Company(?). A total of 14 state mining claims were valid as of January 1, 2000 (Northern Associates Inc., written communication, 2001).

Production notes:
Minor production was reported during 1920-49 and 1987-88 (Balen, 1990).

Reserves:

Additional comments:
MAS/MIL number 20760048.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992; Schmidt and others, 2002.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Su

Site type: Occurrence

ARDF no.: TK035

Latitude: 62.7763 **Quadrangle:** TK D-2

Longitude: 147.8396

Location description and accuracy:
This occurrence is at an elevation of about 2,000 feet on the north bank of the Susitna River, 1 mile east of the mouth of Jay Creek. The location is accurate to within 1/4 mile. This is locality 26 of Csejtey and Miller (1978).

Commodities:

Main: Au, Cu

Other:

Ore minerals: Chalcopyrite, pyrite

Gangue minerals: Quartz

Geologic description:
The Su occurrence consists of minor chalcopyrite and pyrite in a small quartz vein that cuts mafic metavolcanic rocks of Paleozoic age (Csejtey and Miller, 1978). A sample of the vein contains 1,000 parts per million copper and 0.05 parts per million gold (Miller and others, 1978).

Alteration:

Age of mineralization:

Deposit model:
Basaltic Cu, Polymetallic vein, or Gold-quartz vein (Cox and Singer, 1986; model 23, 22c, or 36a)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23, 22c, or 36a

Production Status: None

Site Status: Inactive

Workings/exploration:
Limited sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760092.

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

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (northwest of lower Jay Creek)

Site type: Occurrence

ARDF no.: TK036

Latitude: 62.8412 **Quadrangle:** TK D-2

Longitude: 147.8345

Location description and accuracy:

This occurrence is at an elevation of about 3,680 feet, northwest of lower Jay Creek. It is 0.6 mile north of hill 4008, in the SW1/4 sec. 19, T. 32 N., R. 9 E., Seward Meridian. The location is accurate to within 1/4 mile. The occurrence is locality B30 of Kurtak and others (1992).

Commodities:

Main: Au, Cu

Other: Ag

Ore minerals: Hematite, pyrite, pyrrhotite

Gangue minerals: Quartz

Geologic description:

The rocks in the vicinity of this occurrence are felsic(?) and intermediate to mafic metavolcanic rocks, chlorite schist, and sericite schist (Csejtey and others, 1978; Kurtak and others, 1992). The rocks are cut by quartz veins, locally stained tan-orange, that contain finely disseminated hematite, pyrrhotite, and pyrite (Kurtak and others, 1992). The U. S. Bureau of Mines sampled the stained areas in 1988 (Kurtak and others, 1992). Pyritic schist contains up to 212 parts per million zinc, and hematite-rich rock contains up to 124 parts per million copper. Gold values vary up to 10 parts per billion and silver values to 0.5 parts per million . Intermediate intrusive rocks in the area sampled by the U.S. Geological Survey contain up to 550 parts per million copper, 1 part per million silver, and 200 parts per million arsenic (Miller and others, 1978).

Alteration:

Local bleaching and iron staining (Kurtak and others, 1992).

Age of mineralization:

Deposit model:

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

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
20c?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by the U.S. Bureau of Mines (Kurtak and others, 1992) and the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760113.

References:
Csejtey and others, 1978; Miller and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (northeast of VABM Watana)

Site type: Occurrence

ARDF no.: TK037

Latitude: 62.9652 **Quadrangle:** TK D-2

Longitude: 147.8307

Location description and accuracy:

This occurrence is at an elevation of about 5,000 feet, 0.5 mile north-northeast of VABM Watana. It is near the center of the NE1/4 sec. 36, T. 22 S., R. 2 W., Fairbanks Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Cu

Other: Ag, Au

Ore minerals: Bornite, chalcopyrite, covellite

Gangue minerals: Epidote, garnet, quartz

Geologic description:

This occurrence consists of bornite, covellite, and chalcopyrite in garnet-epidote-quartz skarn and hornfels (Kurtak and others, 1992). The skarn grades into marble that is part of a sequence of Triassic metabasalt, argillite, metachert, and marble (Csejtey and others, 1978). Selected samples of the mineralized skarn contain 3.5 parts per million silver, 0.2 parts per million gold, and up to 0.26 percent copper (Balen, 1990). As of January 1, 2000, a block of approximately 96 state mining claims covered this and adjacent prospects (Northern Associates Inc., written commun., 2001).

Alteration:

Silicification and development of garnet-epidote skarn.

Age of mineralization:

Deposit model:

Copper skarn (Cox and Singer, 1986; model 18b)

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

18b

Production Status: None

Site Status: Inactive

Workings/exploration:

Limited sampling by U.S. Bureau of Mines (Balen, 1990). As of January 1, 2000, a block of approximately 96 state mining claims covered this and adjacent prospects (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760086.

References:

Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (northwest of lower Jay Creek)

Site type: Prospect

ARDF no.: TK038

Latitude: 62.8653 **Quadrangle:** TK D-2

Longitude: 147.8169

Location description and accuracy:
This prospect is at an elevation of about 4,200 feet, 0.6 mile southeast of hill 5483, in the NW1/4NW1/4 sec. 17, T. 32 N., R. 9 E., Seward Meridian The location is accurate to within 1/4 mile. This is locality B29 of Kurtak and others (1992).

Commodities:

Main: Cu

Other: As, Bi

Ore minerals: Malachite, pyrite, pyrrhotite

Gangue minerals: Quartz

Geologic description:
This prospect consists of disseminated pyrite and pyrrhotite in Pennsylvanian to Lower Permian mafic metavolcanic rocks (Csejtey and others, 1978; Kurtak and others, 1992). Workings consist of a 3-foot-deep prospect pit. Malachite-bearing quartz veins cut the metavolcanic rocks. A U.S. Bureau of Mines sample of a malachite-stained quartz vein contains 596 parts per million copper and 130 parts per million arsenic (Kurtak and others, 1992). A sample of intermediate volcanic rock contains 200 parts per million arsenic and 10 parts per million bismuth (Miller and others, 1978). Workings consist of a 3-foot-deep prospect pit.

Alteration:
Oxidation of copper mineral.

Age of mineralization:

Deposit model:
Basaltic copper? (Cox and Singer, 1986; model 23?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23?

Production Status: None

Site Status: Inactive

Workings/exploration:

Workings consist of a 3-foot-deep prospect pit. Limited sampling by the Bureau of Mines (Kurtak and others, 1992) and the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760091.

References:

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

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (east of lower Jay Creek)

Site type: Occurrence

ARDF no.: TK039

Latitude: 62.8061 **Quadrangle:** TK D-2

Longitude: 147.8079

Location description and accuracy:

This occurrence is at an elevation of about 3,150 feet on the southeast, valley wall of Jay Creek, about 3 miles northeast of its mouth on the Susitna River. The occurrence is near the center of the NW1/4 sec. 5, T. 31 N., R. 9 E., Seward Meridian. The location is accurate to within 1/8 mile. This is locality B33 of Kurtak and others (1992).

Commodities:

Main: Cu

Other: Au, W

Ore minerals: Bornite, pyrite, pyrrhotite

Gangue minerals:

Geologic description:

This deposit at this prospect consists of randomly oriented, pyrite-, pyrrhotite-, and bornite-bearing shear zones up to 7 feet wide, in andesitic metavolcanic rocks (Kurtak and others, 1992). The shear zones are exposed for about 50 feet. Samples of iron-stained rock collected by the U.S. Bureau of Mines contain up to 104 parts per million copper, 25 parts per billion gold, and 80 parts per million tungsten (Kurtak and others, 1992).

Alteration:

Silicification and iron staining in the shear zones (Kurtak and others, 1992).

Age of mineralization:

Deposit model:

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

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

20c?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760093.

References:
Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (northwest of upper Watana Creek)

Site type: Occurrence

ARDF no.: TK040

Latitude: 62.9472 **Quadrangle:** TK D-2

Longitude: 147.7985

Location description and accuracy:

This occurrence is at an elevation of about 3,700 feet on the northwest side of upper Watana Creek. It is approximately 1.5 miles southeast of VABM Watana, in the NE1/4SE1/4 sec. 18, T. 33 N., R. 9 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Au

Other: Ag, Cu, Sb

Ore minerals:

Gangue minerals:

Geologic description:

This occurrence is a small gossan zone at the contact of maroon amygdaloidal basalt and overlying, buff-weathering dolomitic limestone. Upper Triassic fossils occur in the limestone, 1,000 feet north of the gossan (Csejtey and others, 1978; J. Schmidt, written commun., 2001). A U.S. Geological Survey sample contains 3.3 parts per million gold, 1.0 part per million silver, 293 parts per million copper, and 115 parts per million antimony. (The 3.3-ppm gold value is from an ICP analysis by XRAL Laboratories; a fire assay on the sample gives 0.024 ppm gold. The cause of this discrepancy is not known.)

Alteration:

The basalt is oxidized.

Age of mineralization:

Deposit model:

Basaltic copper? (Cox and Singer, 1986; model 23?)

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

23?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (east-southeast of VABM Watana)

Site type: Occurrence

ARDF no.: TK041

Latitude: 62.9565 **Quadrangle:** TK D-2

Longitude: 147.7890

Location description and accuracy:
This occurrence is at an elevation of about 5,000 feet, about 1.6 miles east-southeast of VABM Watana. The occurrence is the SE1/4 sec. 31, T. 22 S., R. 1 W., Fairbanks Meridian. The location is accurate to within 1/4 mile. This is locality 17 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite(?)

Gangue minerals:

Geologic description:
This occurrence consists of low-grade copper mineralization in Triassic mafic metavolcanic rocks (Csejtey and Miller, 1978). Rock samples collected by the U.S. Geological Survey contain up to 2,500 parts per million copper (Miller and others, 1978).

Alteration:

Age of mineralization:

Deposit model:
Basaltic copper (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:

Limited surface sampling by U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:

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

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (north of upper Jay Creek)

Site type: Occurrence

ARDF no.: TK042

Latitude: 62.8470 **Quadrangle:** TK D-2

Longitude: 147.7066

Location description and accuracy:
This occurrence is at an elevation of about 3,800 feet, about 3.5 miles west-northwest of the low pass between Jay Creek and Coal Creek It is near the center of sec. 23, T. 32 N., R. 9 E., Seward Meridian. The location is accurate. This is locality B34 of Kurtak and others (1992).

Commodities:

Main: Cu

Other:

Ore minerals: Malachite

Gangue minerals: Epidote, fluorite, quartz

Geologic description:
The rocks in the vicinity of this occurrence are chlorite schist, greenstone, and foliated granite (Kurtak and others, 1992). The greenstone is silicified and iron-stained; the chlorite schist is iron-stained. The occurrence consists of quartz float that contains malachite, fluorite, and epidote (Kurtak and others, 1992). A sample of malachite-bearing quartz contains 161 parts per million copper.

Alteration:
Oxidation of copper mineral. The greenstone is silicified and iron-stained; the chlorite schist is iron-stained.

Age of mineralization:

Deposit model:
Porphyry Cu-Au? or Basaltic Cu? (Cox and Singer, 1986; model 20c? or 23?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
20c? or 23?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited surface sampling by U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760094.

References:
Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Sanjo; Seven Sisters

Site type: Prospect

ARDF no.: TK043

Latitude: 62.9683 **Quadrangle:** TK D-2

Longitude: 147.5131

Location description and accuracy:
This prospect consists of about a mile of placer claims on an unnamed creek about 2.5 miles west of the Susitna River. It is near the northeast corner of sec. 34, T. 22 S., R. 1 E, Fairbanks Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Pd

Ore minerals: Gold

Gangue minerals:

Geologic description:
Gold occurs in alluvial gravel deposits in an unnamed creek that drains Pennsylvanian to Lower Permian basaltic and andesitic metavolcanic rocks (Csejtey and others, 1978). A stream-sediment sample contains 0.001 ounce of gold per cubic yard and 4 parts per billion palladium (Kurtak and others, 1992). Placer claims were staked in 1980. No mining claims were active as of January 1, 2000 (Northern Associates Inc., written communication, 2001).

Alteration:

Age of mineralization:
Quaternary placer.

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 were staked in 1980. Limited stream sampling by the U.S. Bureau of Mines (Kurtak and others, 1992). No mining claims were active as of January 1, 2000 (Northern Associates Inc., written communication, 2001).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760085.

References:

Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Coal Creek

Site type: Occurrence

ARDF no.: TK044

Latitude: 62.8558 **Quadrangle:** TK D-2

Longitude: 147.4909

Location description and accuracy:
This placer gold occurrence is on Coal Creek about 1.7 miles southwest of Coal Lake. The placer claims extend along the creek for about three miles; the coordinates are at about the center of the claims in the SW1/4 sec. 13, T. 32 N., R. 10 E., Seward Meridian. The location is accurate.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the drainage of Upper Coal Creek are Cretaceous and Tertiary granitic rocks (Kurtak and others, (1992). Gold occurs in the alluvial gravel deposits. A placer sample collected by the U.S. Bureau of Mines from the south fork of Coal Creek contains 0.0008 ounce of gold per cubic yard (Kurtak and others, (1992).

Alteration:

Age of mineralization:
Quaternary placer.

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:
Only limited placer sampling by U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760095.

References:
Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Lichen; Rush

Site type: Prospect

ARDF no.: TK045

Latitude: 62.8875 **Quadrangle:** TK D-1

Longitude: 147.3330

Location description and accuracy:

This prospect is at an elevation of about 3,150 feet, about 6 miles west of the Susitna River and 4.0 miles southeast of the center of Coal Lake. The prospect is about 0.15 mile west of the center of sec. 2, T. 32 N., R. 11 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 18 of Csejtey and Miller (1978).

Commodities:

Main: Ag, Au, Cu

Other:

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

Gangue minerals: Epidote, feldspar, quartz

Geologic description:

This prospect is a stratabound copper deposit in Triassic(?) metavolcanic rocks. Veins and disseminated sulfides occur in a mafic, volcanic flow (Smith and others, 1975; Schmidt and others, 2002). The ore minerals are confined to a single flow, and consist of disseminations and veinlets of bornite, chalcopyrite, covellite, digenite, and malachite. Veinlets average less than 0.4 inches thick and contain quartz, feldspar, and epidote as well as sulfides. The mineralized zone is about 6 feet by 3,000 feet in size; it strikes N60W and dips nearly vertically. The host rock has undergone greenschist-grade regional metamorphism and is coated with secondary iron and copper minerals. Samples of mineralized rock contain up to 4.5 percent copper, 16 parts per million gold, and 68 parts per million silver (Smith and others, 1975).

The prospect was explored in the 1970's by Cities Service Minerals using soil geochemical sampling, ground magnetic and EM surveys, and excavation of 2 trenches. Seraphim Engineering and Cities Service Minerals Company staked 145 claims in 1975-1976. The Amphitheater 1-25 claims were staked by Cominco American in 1988. As of January 1, 2000 a large block of state mining claims and prospecting sites covered the prospect (Northern Associates Inc., written commun., 2001).

Alteration:

The volcanic host rock is altered to chlorite and epidote and stained with secondary iron and copper minerals.

Age of mineralization:
Occurs in Triassic(?) metavolcanic rocks.

Deposit model:
Basaltic copper (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:
The prospect was explored in the 1970's by Cities Service Minerals using soil geochemical sampling, ground magnetic and EM surveys, and excavation of 2 trenches. Seraphim Engineering and Cities Service Minerals Company staked 145 claims in 1975-1976. The Amphitheater 1-25 claims were staked by Cominco American in 1988. As of January 1, 2000 a large block of state mining claims and prospecting sites covered the prospect (Northern Associates Inc., written communication, 2001).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20700053.

References:
Smith and others, 1975; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992; Schmidt and others, 2002.

Primary reference: Smith and others, 1975

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Chunilna Creek

Site type: Mine

ARDF no.: TK046

Latitude: 62.6435 **Quadrangle:** TK C-6

Longitude: 149.5903

Location description and accuracy:

Several miles of placer claims were staked in 1889 along Chunilna Creek and a north fork of it. The claims extend more or less continuously from sec. 23, T. 30 N., R. 2 W. to sec. 21, T. 29 N., R. 2 W., Seward Meridian. The coordinates are near the center of these claims in the SE1/4 sec. 35, T.30N., R. 2W., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Ag

Ore minerals: Gold

Gangue minerals:

Geologic description:

Gold occurs in alluvial gravel deposits along Chunilna Creek and a north fork of it (Paige and Knopf, 1907; Carnes, 1976). The rocks along the creek are tightly folded Lower Cretaceous(?) argillite and lithic graywacke intruded by Tertiary biotite granodiorite (Csejtey and others, 1978).

Several miles of placer claims were staked in 1889 (Paige and Knopf, 1907). This is the only placer mine in the Talkeetna Mountains quadrangle that operated during 1975 (Carnes, 1976). As of January 1, 2000, the mine was inactive but still covered by placer claims (Northern Associates, Inc., written commun., 2001). Minor production reported in 1975 (Carnes, 1976).

Alteration:

Age of mineralization:

Quaternary placer.

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 placer claims were staked in 1889 (Paige and Knopf, 1907). This is the only placer mine in the Talkeetna Mountains quadrangle that operated during 1975 (Carnes, 1976). As of January 1, 2000, the mine was inactive but still covered by placer claims (Northern Associates, Inc., written commun., 2001).

Production notes:
Minor production reported in 1975 (Carnes, 1976).

Reserves:

Additional comments:
MAS/MIL number 20760003 and 20760074.

References:
Paige and Knopf, 1907; Brooks, 1911; Carnes, 1976; Csejtey and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Carnes, 1976

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Ihly

Site type: Prospect

ARDF no.: TK047

Latitude: 62.7228 **Quadrangle:** TK C-6

Longitude: 149.5415

Location description and accuracy:

The Ihly prospect is at an elevation of about 3,400 feet on El Dorado Creek, an informally named, south tributary to Gold Creek. It is 0.9 mile north of the top of hill 3645, about 0.6 mile northeast of the center of sec. 1, T. 30 N., R. 2 W., Seward Meridian. The location is accurate to within 1/4 mile This is locality 31 of Csejtey and Miller (1978).

Commodities:

Main: Ag, Au

Other: Pb

Ore minerals: Chalcopyrite, galena, pyrargyrite, pyrite

Gangue minerals: Quartz

Geologic description:

The Ihly prospect consists of near-vertical, north-striking felsic dikes that cut Jurassic or Cretaceous flysch; the dikes are cut by mineralized quartz veins (Kurtak and others, 1992). One dike is 5 feet wide and conformable to bedding, which strikes N20E and dips steeply to the northwest. Another dike is 7 feet wide, strikes north and dips steeply east. Fractures in the dikes vary from 0.5 inch to 8 inches wide and are filled with quartz with galena, pyrite, pyrargyrite, and chalcopyrite. Rock samples collected by the State of Alaska contain up to 0.5 ounce of silver per ton and 0.49 percent lead. In 1952, the claim owners reported assays of 0.02 to 0.06 ounce of gold per ton and 0.28 to 1.98 ounces of silver per ton (Kurtak and others, 1992).

The mineralization was reportedly discovered in 1950 (Berg and Cobb, 1967). The lode claims were initially staked over the prospect by R. Pankey and J. Callahan. As of January 1, 2000, 2 state prospecting sites covered this prospect (Northern Associates Inc., Written Commun., 2001).

Alteration:

The dike rock is described as altered but the type of alteration is not specified (Berg and Cobb, 1967).

Age of mineralization:

Deposit model:
Polymetallic vein? (Cox and Singer, 1986; model 22c?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
22c?

Production Status: None

Site Status: Inactive

Workings/exploration:
The mineralization was reportedly discovered in 1950 (Berg and Cobb, 1967). The lode claims were initially staked over the prospect by R. Pankey and J. Callahan. As of January 1, 2000, 2 state prospecting sites covered this prospect (Northern Associates Inc., Written Commun., 2001). Rock samples collected by the State of Alaska (Kurtak and others, 1992). In 1952, the claim owners reported assays of 0.02 to 0.06 ounce of gold per ton and 0.28 to 1.98 ounces of silver per ton.

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760001.

References:
Berg and Cobb, 1967; Cobb, 1972 (MF 370); Karlson and others, 1977; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (southeast of Talkeetna River-Cache Creek junction)

Site type: Occurrence

ARDF no.: TK048

Latitude: 62.5382 **Quadrangle:** TK C-5

Longitude: 149.1653

Location description and accuracy:

This occurrence is at an elevation of about 2,700 feet on the lake-strewn plateau on the southeast side of the Talkeetna River. It is approximately 4 1/2 miles southwest of the junction of the Talkeetna River with Cache Creek, near the southwest corner of sec. 6, T. 28 N., R. 2 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Ag, Au

Other:

Ore minerals: Pyrite

Gangue minerals:

Geologic description:

This occurrence consists of iron-stained, very fine grained gossan with disseminated pyrite; the gossan is associated with a shear zone in mafic metavolcanic rocks of Paleozoic age (Csejtey and Miller, 1978). A sample of the pyritic gossan contains 1 part per million silver and 0.05 part per million gold (Miller and others, 1978).

Alteration:

Iron-oxide gossan.

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Limited surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (south of Talkeetna River-Cache Creek junction)

Site type: Occurrence

ARDF no.: TK049

Latitude: 62.5082 **Quadrangle:** TK C-5

Longitude: 149.0620

Location description and accuracy:

This occurrence is at an elevation of about 4,050 feet. It is about 6 miles south of the junction of the Talkeetna River and Cache Creek at about the midpoint of the north boundary of sec. 22, T. 28 N., R. 2 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Zn

Other: Cu, Pb

Ore minerals: Pyrite

Gangue minerals:

Geologic description:

This occurrence consists of pyrite-bearing gossan in sheared, Paleozoic meta-andesite (Csejtey and Miller, 1978). A sample of iron-stained volcanic rock contains 500 parts per million zinc, 10 parts per million lead, and 10 parts per million copper (Miller and others, 1978).

Alteration:

Iron-oxide 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:

Limited surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (near head of Talkeetna River)

Site type: Occurrence

ARDF no.: TK050

Latitude: 62.5312 **Quadrangle:** TK C-5

Longitude: 149.0235

Location description and accuracy:

This occurrence is at an elevation of about 2,900 feet on a west tributary of the Talkeetna River, about 4.9 miles south-southeast of the junction of the Talkeetna River and Cache Creek. It is the SE1/4NE1/4 sec. 11, T. 28 N., R. 2 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Ag, Mo

Other: As

Ore minerals: Pyrite

Gangue minerals:

Geologic description:

This occurrence consists of an extensive deep-red to light-brown, pyritic gossan in aphanitic intermediate metavolcanic rocks of Paleozoic age (Csejtey and Miller, 1978). Granitic rocks are also reported in the area (Miller and others, 1978). Samples of the granitic rocks contain up to 300 parts per million molybdenum; samples of the iron-stained volcanic rocks contain up to 1 part per million silver and 700 parts per million arsenic (Miller and others, 1978).

Alteration:

The volcanic rocks are iron-stained.

Age of mineralization:

Deposit model:

Porphyry molybdenum? (Cox and Singer, 1986; model 21b?)

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

21b?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (west of lake 2710)

Site type: Occurrence

ARDF no.: TK051

Latitude: 62.5567 **Quadrangle:** TK C-4

Longitude: 148.9242

Location description and accuracy:
This occurrence is at an elevation of about 3,400 feet, 1/2 mile west of the north end of lake 2710. The occurrence is in the SE1/4 sec. 32, T. 29 N., R. 3 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 43 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other: Au, Mo

Ore minerals: Malachite, pyrite

Gangue minerals: Quartz

Geologic description:
This occurrence consists of pyrite-bearing quartz veinlets that cut pyritic, malachite-stained, alteration zones in mafic metavolcanic rocks. Samples collected by the U.S. Geological Survey contain up to 1,000 parts per million copper, 10 parts per million molybdenum, and 0.05 part per million gold (Miller and others, 1978).

Alteration:
The mafic metavolcanic rocks are altered, but the type of alteration is not specified (Csejtey and Miller, 1978). Oxidation of copper mineral.

Age of mineralization:

Deposit model:
Basaltic Cu? (Cox and Singer, 1986; model 23?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only samples collected by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

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

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (south of Talkeetna River)

Site type: Occurrence

ARDF no.: TK052

Latitude: 62.5075 **Quadrangle:** TK C-4

Longitude: 148.8938

Location description and accuracy:
This occurrence is at an elevation of about 2,350 feet; it is 1/2 mile south of the Talkeetna River, and 2.6 miles south of the south end of lake 2710,in the NE1/4NE1/4 sec. 21, T. 28 N., R. 3 E., Seward Meridian. The location is accurate.

Commodities:

Main: Cu, Zn

Other: Ni

Ore minerals:

Gangue minerals:

Geologic description:
This occurrence consists of altered Paleozoic(?) greenstone. No sulfide minerals are visible (Csejtey and Miller, 1978). Samples of the altered greenstone contain 1,000 parts per million copper, 300 parts per million zinc, and 100 parts per million nickel (Miller and others, 1978).

Alteration:
The greenstone is altered but the type of alteration is not specified (Csejtey and Miller, 1978).

Age of mineralization:

Deposit model:
Basaltic copper (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:
Limited sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (north of Talkeetna River)

Site type: Occurrence

ARDF no.: TK053

Latitude: 62.5043 **Quadrangle:** TK C-4

Longitude: 148.7151

Location description and accuracy:

This occurrence is at an elevation of about 2,800 feet, 1 mile north of the Talkeetna River, near the center of the NE1/4 sec. 21, T. 28 N., R. 4 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 45 of Csejtey and Miller (1978).

Commodities:

Main: Ag, Cu

Other: Co, Ni

Ore minerals: Limonite, malachite, pyrite

Gangue minerals:

Geologic description:

This occurrence consists of a small brecciated shear zone with pyrite, limonite, and malachite, in mafic metavolcanic rock (Csejtey and Miller, 1978). U.S. Geological Survey samples contain up to 10 parts per million silver, 70 parts per million nickel, 30 parts per million cobalt, and more than 20,000 parts per million copper (Miller and others, 1978).

Alteration:

Oxidation of iron and copper minerals.

Age of mineralization:

Deposit model:

Basaltic Cu? (Cox and Singer, 1986; model 23?)

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

23?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only rock samples collected by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

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

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (east of south tributary of Fog Creek)

Site type: Occurrence

ARDF no.: TK054

Latitude: 62.6726 **Quadrangle:** TK C-4

Longitude: 148.5637

Location description and accuracy:

This occurrence is at an elevation of about 3,100 feet on the east, valley wall of a south tributary of Fog Creek. It is approximately 1.2 miles southwest of the top of hill 4960, near the center of the SW1/4 sec. 20, T. 30 N., R. 5 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Cu

Other: As, Bi, Zn

Ore minerals:

Gangue minerals:

Geologic description:

This occurrence consists of a copper-stained, 30-cm-thick section of silicified gossan in Paleozoic sedimentary rocks (J. Schmidt, written commun., 2001). A U.S. Geological Survey rock sample contains 4.69 percent copper, 123 parts per million bismuth, 353 parts per million zinc, and 74 parts per million arsenic.

Alteration:

Gossan is silicified and copper-stained.

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (east of south tributary of Fog Creek)

Site type: Occurrence

ARDF no.: TK055

Latitude: 62.6917 **Quadrangle:** TK C-4

Longitude: 148.5569

Location description and accuracy:

This occurrence is at an elevation of about 3,000 feet on the east, valley wall of a south tributary of upper Fog Creek. It is approximately 1 mile west of hill 4704, about 0.2 mile north of the center of sec. 17, T. 30 N., R. 5 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Co, Cu, Ni

Other: Ti

Ore minerals:

Gangue minerals:

Geologic description:

This occurrence consists of boxwork, quartz veins in orange-weathering Triassic(?) greenstone breccia. A sample of the breccia contains 206 parts per million copper, 91 parts per million nickel, 55 parts per million cobalt, and 1.15 percent titanium (J. Schmidt, written commun., 2001).

Alteration:

Iron-oxide staining.

Age of mineralization:

Occurs in Triassic(?) greenstone breccia.

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (head of Ocher Creek)

Site type: Occurrence

ARDF no.: TK056

Latitude: 62.5290 **Quadrangle:** TK C-4

Longitude: 148.5188

Location description and accuracy:

This occurrence is at an elevation of about 3,800 feet at the head of Ocher Creek, an informal name. It is 1.2 miles southwest of VABM Jaina and 2.5 miles northeast of the Talkeetna River, near the center of the E1/2 sec. 24, T. 28 N., R. 4 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 48 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other: Ag, Au

Ore minerals: Chalcopyrite, malachite, pyrite

Gangue minerals:

Geologic description:

This prospect consists of pyrite, chalcopyrite, and malachite in Triassic(?) greenstone interlayered with phyllite and argillite (Anderson, 1969). In places the phyllite is pyritic and gossanous, with botryoidal crusts of limonite and local brown boxworks formed by the leaching of sulfides. Sulfide-bearing quartz samples contain up to 3 parts per million silver, 0.22 part per million gold, and 750 parts per million copper.

Alteration:

Iron and copper staining.

Age of mineralization:

Deposit model:

Basaltic Cu? (Cox and Singer, 1986; model 23?)

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

23?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited surface sampling (Anderson, 1969).

Production notes:

Reserves:

Additional comments:

References:
Anderson, 1969; MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Anderson, 1969

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (east-southeast of hill 6575)

Site type: Occurrence

ARDF no.: TK057

Latitude: 62.4851 **Quadrangle:** TK C-4

Longitude: 148.4671

Location description and accuracy:
This occurrence is at an elevation of about 5,000 feet, 0.5 mile east-southeast of the top of hill 6575. The occurrence is in the SW1/4NW1/4 sec. 10, T. 28 N., R. 5 E., Seward Meridian. The location is accurate to within 1/4-mile. This is locality 52 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other: Ag

Ore minerals: Chalcopyrite, pyrrhotite

Gangue minerals: Quartz

Geologic description:
This occurrence consists of small amounts of chalcopyrite and pyrrhotite in quartz veinlets or as disseminations in highly iron-stained Triassic(?) metagabbro (Rose, 1967). A lode claim covers the prospect.

Alteration:
Conspicuous iron-oxide alteration.

Age of mineralization:

Deposit model:
Basaltic Cu? (Cox and Singer, 1986; model 23?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23?

Production Status: None

Site Status: Inactive

Workings/exploration:

Only limited surface sampling (Anderson, 1969).

Production notes:

Reserves:

Additional comments:

References:

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

Primary reference: Rose, 1967

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (west of upper Tsisi Creek)

Site type: Occurrence

ARDF no.: TK058

Latitude: 62.5808 **Quadrangle:** TK C-3

Longitude: 148.4262

Location description and accuracy:
This occurrence is at an elevation of about 6,200 feet, about 1.1 mile northwest of hill 5370 and about 0.6 mile south-southeast of the center of sec. 24, T. 29 N., R. 5 E. of the Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Ag, Cu

Other: Au, Hg

Ore minerals: Malachite

Gangue minerals: Quartz

Geologic description:
This occurrence consists of coxcomb, quartz veins that contain minor malachite, in a sill(?) of Triassic, Nikolai Greenstone. The veins are nearly vertical and trend northeasterly. Adjacent rocks include pale gray-green, schistose, tuffaceous chert(?) and medium gray, schistose, meta-igneous rock containing relict plagioclase phenocrysts (J. Schmidt, written commun., 2001). A U.S. Geological Survey rock sample contains 2,110 parts per million copper, 81 parts per million silver, 0.17 part per million mercury, and 0.2 part per million gold. (An ICP analysis by XRAL Laboratory of one sample showed 0.2 part per million gold, whereas a fire assay showed 0.046 part per million gold. The cause of the discrepancy is not known.)

Alteration:

Age of mineralization:

Deposit model:
Basaltic copper (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (in upper Fog Creek)

Site type: Occurrences

ARDF no.: TK059

Latitude: 62.7177 **Quadrangle:** TK C-3

Longitude: 148.4231

Location description and accuracy:

Several occurrences are along a two-mile segment of a ridge, informally called Grizzly Ridge, that is on the west side of upper Fog Creek. The site is centered at an elevation of about 5,000 feet, 0.2 mile east of the center of sec. 1, T. 30 N., R. 5 E., Seward Meridian.

Commodities:

Main: Au

Other: Ag, Bi

Ore minerals: Pyrite

Gangue minerals: Calcite, epidote, quartz

Geologic description:

The rocks in the vicinity of these occurrences are mostly Paleozoic crystal-lithic tuff cut by diabase and gabbro dikes and by other very fine grained, gray, intermediate(?), biotite-bearing intrusions (Csejtey and others, 1978). Cretaceous or Jurassic argillite also occurs in the area. U.S. Geological Survey samples of epidotized tuff contain 0.4 part per million gold; the diabase and gabbro dikes contain 1 percent pyrite and up to 0.3 parts per million gold, with 2 parts per million bismuth (J. Schmidt, written commun., 2001). The very fine grained, gray intrusive rocks are pyritic and contain up to 0.3 parts per million gold and 0.4 parts per million silver. A float sample of quartz-calcite vein breccia contains 0.2 parts per million silver. The argillite locally is pyritic and contains up to 0.5 parts per million silver. (Six samples analyzed by ICP methods by XRAL Laboratories give values that vary from 0.2 to 0.4 part per million gold; fire assays of the samples give values of less than 0.005 part per million gold. The cause of this discrepancy is not known.)

Alteration:

The fragmental plagioclase crystal/lithic tuff is epidotized (J. Schmidt, written commun., 2001).

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (southeast of upper Fog Creek)

Site type: Occurrence

ARDF no.: TK060

Latitude: 62.6850 **Quadrangle:** TK C-3

Longitude: 148.3320

Location description and accuracy:
This occurrence is about 0.15 mile northwest of the top of Hill 5023, on the east side of upper Fog Creek. It is near the center of the SW1/4 sec. 16, T. 30 N., R. 6 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Au, Cu, Ni

Other: Hg

Ore minerals:

Gangue minerals: Quartz

Geologic description:
This occurrence consists of quartz veins in silicified Paleozoic argillite, interbedded with fine-grained sandstone (J. Schmidt, written commun., 2001). A U.S. Geological Survey sample contains 159 parts per million copper, 106 parts per million nickel, 0.014 part per million gold, and 0.1 part per million mercury.

Alteration:
The argillite is silicified.

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (southeast of upper Terrace Creek)

Site type: Occurrence

ARDF no.: TK061

Latitude: 62.5298 **Quadrangle:** TK C-3

Longitude: 148.2152

Location description and accuracy:

This occurrence is at an elevation of about 5,700 feet, about 0.3 mile south of the top of hill 5945 and about 1.1 mile east of lake 4247 at the head of Terrace Creek. The location is accurate to within 1/4 mile.

Commodities:

Main: Au, Cu

Other: Co

Ore minerals:

Gangue minerals:

Geologic description:

This occurrence consists of rusty-weathering, biotite-rich, semischist cut by Jurassic granodiorite (J. Schmidt, written commun., 2001). A U.S. Geological Survey rock sample contains 607 parts per million copper, 0.027 part per million gold, and 55 parts per million cobalt. (The 0.027-part-per-million gold value is based on a fire assay that may be low.)

Alteration:

Iron-oxides.

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:

Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (near 'Nik Hill')

Site type: Occurrence

ARDF no.: TK062

Latitude: 62.7464 **Quadrangle:** TK C-3

Longitude: 148.1948

Location description and accuracy:
This occurrence is at an elevation of about 5,620 feet, about 0.2 mile east of the top of hill 5896 (which is informally called Nik Hill). It is approximately 3 miles northwest of Mt. Watana and 5 miles west-northwest of the north end of Watana Lake. The location is accurate to within 1/4 mile.

Commodities:

Main: Ag, Cu

Other:

Ore minerals: Malachite

Gangue minerals: Quartz

Geologic description:
This occurrence is in metabasalt of the Triassic, Nikolai Greenstone; it consists of quartz veins that contain malachite. U.S. Geological Survey rock samples contain up to 33,550 parts per million copper and 16.2 parts per million silver (J. Schmidt, written commun., 2001).

Alteration:
Oxidation of copper mineral.

Age of mineralization:
Occurs in Triassic metabasalt.

Deposit model:
Basaltic copper (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Waterfall

Site type: Occurrence

ARDF no.: TK063

Latitude: 62.7304 **Quadrangle:** TK C-3

Longitude: 148.1383

Location description and accuracy:

The Waterfall occurrence is between an elevation of about 4,000 to 4,500 feet on the upper part of a north-flowing tributary to the Susitna River. It is approximately 1 mile northwest of Mount Watana and 2 3/4 miles west of Watana Lake in the east 1/2 of sec. 33, T. 31 N., R. 7 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Ag, Cu

Other: Ba

Ore minerals: Chalcopyrite, pyrite

Gangue minerals: Calcite, garnet, pyroxene

Geologic description:

The rocks are this occurrence are upper Paleozoic sedimentary rocks that are altered to garnet-pyroxene-chalcopyrite-calcite-pyrite skarn; locally there is intercalated very-dark-red-weathering pyritic chert (J. Schmidt, written commun., 2001). U.S. Geological Survey samples of the skarn contain up to 568 parts per million copper, 1.8 parts per million silver, and 3,800 parts per million barium (J. Schmidt, written commun., 2001).

Alteration:

The skarn, host rock contains garnet, pyroxene, calcite, and pyrite (J. Schmidt, written commun., 2001). Pyritic chert weathers dark red.

Age of mineralization:

Deposit model:

Cu Skarn (Cox and Singer, 1986; model 18b)

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

18b

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (south flank of Mount Watana)

Site type: Occurrence

ARDF no.: TK064

Latitude: 62.7021 **Quadrangle:** TK C-3

Longitude: 148.1157

Location description and accuracy:
This occurrence is at an elevation of about 4,100 feet, approximately 1.4 miles south of the summit of Mt. Watana, near the center of sec. 10, T. 30 N., R. 7 E. of the Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Cu, Ni

Other: Cr

Ore minerals: Chalcopyrite(?), pyrite

Gangue minerals: Epidote

Geologic description:
At this occurrence, epidotized Triassic microgabbro contains pyrite and chalcopyrite(?). A U.S. Geological Survey rock sample contains 245 parts per million copper, 303 parts per million chromium, and 156 parts per million nickel (J. Schmidt, written commun., 2001).

Alteration:
The gabbro is epidotized.

Age of mineralization:
In Triassic metagabbro.

Deposit model:
Komatiitic Ni-Cu (Cox and Singer, 1986; model 6a)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
6a

Production Status: None

Site Status: Inactive

Workings/exploration:
Surface sampling only.

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

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

Site type: Occurrence

ARDF no.: TK065

Latitude: 62.7148 **Quadrangle:** TK C-3

Longitude: 148.0970

Location description and accuracy:

This occurrence is 0.6 mile southeast of the summit of Mount Watana at an elevation of about 5,300 feet. The location is accurate to within 1/2 mile.

Commodities:

Main: Ag, Au, Cu

Other: Ba, Ni

Ore minerals: Arsenopyrite, asbestos, malachite, pyrite, pyrrhotite

Gangue minerals: Calcite, quartz, serpentine

Geologic description:

The rocks in the Mount Watana area are mostly by Pennsylvanian to Lower Permian basaltic to andesitic metavolcanic rocks, with local ultramafic rocks, chert, and marble (Csejtey and others, 1978). Pyrite and pyrrhotite are disseminated in mafic dikes; pyrite and arsenopyrite occur in andesitic metatuff. Quartz-carbonate veins cut the metabasalt and malachite coats some outcrops. Serpentinized ultramafic rocks, locally cut by asbestos veins, occur in float (Kurtak and others, 1992). Samples of metabasalt contain up to 0.23 percent copper, 203 parts per million nickel, 1 part per million silver, and 220 parts per billion gold; a sample of podiform ultramafic(?) float contains 15 parts per million silver (Kurtak and others, 1992). A sample of mudstone contains 1 part per million silver and 3000 parts per million barium (Miller and others, 1978).

Alteration:

Oxidation of copper mineral.

Age of mineralization:

Deposit model:

Basaltic copper, Serpentine-hosted asbestos, Layered mafic intrusion? (Cox and Singer, 1986; model 23, 8d, 5a?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23, 8d, 5a?

Production Status: None

Site Status: Inactive

Workings/exploration:
Surface sampling by the U.S. Geological Survey and U.S. Bureau of Mines (Miller and others, 1978; Kurtak and others, 1991).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760090.

References:
Csejtey and others, 1978; Miller and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (west of Watana Lake)

Site type: Occurrence

ARDF no.: TK066

Latitude: 62.7322 **Quadrangle:** TK C-3

Longitude: 148.0885

Location description and accuracy:
This occurrence is at an elevation of about 5,200 feet on the northeast flank of Mt. Watana; it is about 1.0 mile northeast of Mt. Watana and approximately 1.5 miles west-southwest of the north end of Watana Lake. The location is accurate to within 1/4 mile.

Commodities:

Main: Ba

Other:

Ore minerals: Barite(?)

Gangue minerals:

Geologic description:
This occurrence is in Paleozoic iron-stained, siliceous argillite. A U.S. Geological Survey rock sample contains 13,480 parts per million barium (J. Schmidt, written commun., 2001).

Alteration:
The argillite is silicified and iron-stained.

Age of mineralization:

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by U.S. Geological Survey (J. Schmidt, written commun.,

2001).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

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

Site type: Prospect

ARDF no.: TK067

Latitude: 62.7309 **Quadrangle:** TK C-2

Longitude: 147.9573

Location description and accuracy:
This placer prospect is at an elevation of about 2,200 feet on Kosina Creek below the junction with Gilbert Creek. The location is accurate to within 1/4 mile. This is locality B26 of Kurtak and others (1992). Also known as the Watana Rainbow prospect.

Commodities:

Main: Au

Other:

Ore minerals: Gold, magnetite

Gangue minerals:

Geologic description:
This gold placer prospect is in alluvial gravel deposits that conceal a fault contact between Lower to Middle Jurassic amphibolite and Pennsylvanian(?) and Lower Permian basaltic and andesitic metavolcanic rocks (Csejtey and others, 1978). The gravel contains many large granitic boulders; this makes sampling and mining potentially difficult (Kurtak and others, 1992). Placer samples, which contain abundant magnetite, contain up to 0.0006 ounce of gold per cubic yard.

Alteration:

Age of mineralization:
Quaternary placer.

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 sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760047.

References:
Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (south of lower Tyone Creek)

Site type: Occurrence

ARDF no.: TK068

Latitude: 62.5932 **Quadrangle:** TK C-1

Longitude: 147.0519

Location description and accuracy:
This occurrence is at an elevation of about 2,700 feet, approximately 1/2 mile west of hill 3105, in the SE 1/4 sec. 34, T. 10 N., R. 10 W., Copper River Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Zn

Other:

Ore minerals: Pyrite

Gangue minerals:

Geologic description:
This occurrence consists of pyrite in Jurassic greenstone cut by small felsic dikes (Kurtak and others, 1992). A sample of dacite (dike?) contains 500 parts per million zinc (Miller and others, 1978).

Alteration:

Age of mineralization:

Deposit model:
Volcanogenic massive sulfide?

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited surface sampling by U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760096.

References:
Csejtey and others, 1978; Kurtak and others, 1992; Miller and others, 1978.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Chunilna Creek

Site type: Prospects

ARDF no.: TK069

Latitude: 62.4553 **Quadrangle:** TK B-6

Longitude: 149.9602

Location description and accuracy:

This site is a cluster of placer claims over an area of about 10 square miles on Chunilna Creek and its tributaries in the northwest corner of the Talkeetna Mountains B-6 topographic quadrangle. The center of the claims is in sec. 2, T. 27 N., R. 4 W., Seward Meridian.

Commodities:

Main: Au

Other:

Ore minerals:

Gangue minerals:

Geologic description:

At least five groups of placer claims cover the middle part of Chunilna Creek and adjacent tributaries. As of January 1, 2000, a block of state and federal placer claims covered these prospects (Northern Associates Inc., Written Commun., 2001). The rocks in the vicinity of these claims is mainly flysch-like Lower Cretaceous argillite and lithic graywacke, and Paleocene granodiorite (Csejtey and others, 1978). Gold occurs in Quaternary alluvial gravels.

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: None

Site Status: Probably inactive

Workings/exploration:

At least five groups of placer claims cover the middle part of Chunilna Creek and adjacent tributaries. As of January 1, 2000, a block of state and federal placer claims covered these prospects (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and Miller, 1978; Csejtey and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (southwest of VABM Iron)

Site type: Occurrence

ARDF no.: TK070

Latitude: 62.3428 **Quadrangle:** TK B-5

Longitude: 149.4740

Location description and accuracy:
This occurrence is at an elevation of about 3,000 feet on a hillside northeast of Sheep Creek. It is 5 miles west of Rainbow Lake and 1.9 miles southwest of VABM Iron. The location is accurate to within 1/2 mile.

Commodities:

Main: Ag, Co, Cu, Ni

Other: As

Ore minerals: Iron oxides, pyrite

Gangue minerals:

Geologic description:
This occurrence consists of dark red to yellow, pyrite-bearing gossan in Paleozoic(?) mafic metavolcanic rocks. No ore minerals other than pyrite are visible (Csejtey and Miller, 1978). Rock samples contain up to 7,000 parts per million copper, 2,000 parts per million arsenic, 700 parts per million cobalt, 700 parts per million nickel, and 3 parts per million silver (Miller and others, 1978).

Alteration:
Iron-oxide alteration.

Age of mineralization:

Deposit model:
Basaltic copper (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:
Limited surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Bear Gulch

Site type: Prospect

ARDF no.: TK071

Latitude: 62.2854 **Quadrangle:** TK B-5

Longitude: 149.4151

Location description and accuracy:

The Bear Gulch prospect is at an elevation of about 2,100 feet on a south tributary of Sheep River, about 5 miles southwest of Rainbow Lake. It is in the NW1/4 sec. 2, T. 25 N., R. 1 W., Seward Meridian. The location is accurate to within a 1/4 mile radius. This is locality 25 of MacKevett and Holloway (1977) and locality 88 of Csejtey and Miller (1978). The BG 1 to 32 claims were staked in the 1970's by Cities Service Minerals Company.

Commodities:

Main: Cu, Mo

Other: Pb, Zn

Ore minerals: Chalcopyrite, molybdenite

Gangue minerals:

Geologic description:

This prospect consists of chalcopyrite and molybdenite disseminated in altered Tertiary granitic rock near its contact with upper Paleozoic metavolcanic rocks (MacKevett and Holloway, 1977). U.S. Geological Survey rock samples contain up to 15,000 parts per million copper, 150 parts per million molybdenum, 100 parts per million lead, and 130 parts per million zinc (Miller and others, 1978). This prospect has been explored by IP and ground magnetics surveys and one diamond drill hole (Don Stevens, written commun., 2001).

Alteration:

The granite reportedly is altered but the type of alteration is not specified (Csejtey and Miller, 1978).

Age of mineralization:

Probably related to Tertiary granite.

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:
This prospect has been explored by IP and ground magnetics surveys and one diamond drill hole (Don Stevens, written commun., 2001). Rock samples collected by U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760061.

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

Primary reference: MacKevett and Holloway, 1977

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Wells Mountain

Site type: Prospect

ARDF no.: TK072

Latitude: 62.4130 **Quadrangle:** TK B-5

Longitude: 149.3233

Location description and accuracy:
This prospect is at an elevation of about 3,150 feet on the west flank of Wells Mountain, approximately 2.8 miles west-southwest of VABM Wells and 1.1 mile north-northwest of hill 4035. The prospect is in the NW1/4SW1/4 sec. 20, T. 27 N., R. 1 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 86 of Csejtey and Miller (1978).

Commodities:

Main: Mo

Other: Cu

Ore minerals: Pyrite

Gangue minerals:

Geologic description:
This prospect is in altered granodiorite that contains disseminated pyrite (Csejtey and Miller, 1978). Samples collected by the U.S. Geological Survey contain up to 70 parts per million molybdenum and 100 parts per million copper (Miller and others, 1978). Cities Service Minerals Co collected 75 soil samples and 25 rock samples here (Don Stevens, written commun., 1992).

Alteration:
The granodiorite is altered but the type of alteration is not specified (Csejtey and Miller, 1978).

Age of mineralization:

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:

Cities Service Minerals Co collected 75 soil samples and 25 rock samples here (Don Stevens, written commun., 1992). Limited surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Copper Queen

Site type: Prospect

ARDF no.: TK073

Latitude: 62.3546 **Quadrangle:** TK B-5

Longitude: 149.2217

Location description and accuracy:
The Copper Queen prospect is at an elevation of about 1,600 feet on the north side of Iron Creek, about 2 1/2 miles east of Rainbow Lake and 2 miles west of the junction of East Fork with Iron Creek The location is accurate to within 1/4 mile. This is locality 83 of Csejtey and Miller (1978).

Commodities:

Main: Au, Cu

Other:

Ore minerals: Arsenopyrite, chalcopyrite, pyrite

Gangue minerals: Epidote, quartz

Geologic description:
This prospect occurs in greenstone that contains epidote-filled amygdules. The deposit consists of pyrite, arsenopyrite, and chalcopyrite in steeply-dipping shear zones. The principal zone is 21 feet wide and strikes N10E. The sulfides occur mostly as replacement bands of ore minerals parallel to shearing or as intergrowths of several minerals in the sheared greenstone. Minor quartz is associated with the sulfides. Sulfide disseminations also occur in greenstone lenses in the shear zone and in the country rock extending some distance from the shear zone (Capps, 1919 [B 592]). The claim owners reported samples assaying 'several dollars a ton in gold'.

Alteration:
Epidote and quartz (propylitic?).

Age of mineralization:

Deposit model:
Basaltic Cu (Cox and Singer, 1986; model 23)

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

23

Production Status: None

Site Status: Inactive

Workings/exploration:
Shallow open cuts exposed the mineralization. The claim owners reported samples assaying 'several dollars a ton in gold' (Capps, 1919 [B 692]).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760006.

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

Primary reference: Capps, 1919 (B 692)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Copper King

Site type: Prospect

ARDF no.: TK074

Latitude: 62.3312 **Quadrangle:** TK B-5

Longitude: 149.1831

Location description and accuracy:

The Copper King prospect is at an elevation of about 3,600 feet on the south valley wall of Iron Creek. It is about 1.2 miles south-southeast of the junction of the East Fork and Iron Creek and 4 miles east of Rainbow Lake, in the NE1/4 sec. 24, T. 26 N., R. 1 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 81 of Csejtey and Miller(1978).

Commodities:

Main: Ag, Au, Cu

Other: Fe

Ore minerals: Chalcopyrite, hematite, pyrite

Gangue minerals: Quartz

Geologic description:

The prospect is in greenstone cut by a shear zone that strikes NE, dips 60 E, and varies from 6 to 20 feet wide (Capps, 1919 [B 692]). Replacement bands within the shear zone consist of massive chalcopyrite, specular hematite intergrown with quartz, and pyrite. Other replacement mineralization varies considerably and contains minor values of gold and silver. A number of trenches and open cuts have been excavated (Capps, 1919 [B 692]).

Alteration:

Silicification.

Age of mineralization:

Deposit model:

Basaltic Cu (Cox and Singer, 1986; model 23)

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

23

Production Status: None

Site Status: Inactive

Workings/exploration:
A number of trenches and open cuts have been excavated (Capps, 1919 [B 692]).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760007.

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

Primary reference: Capps, 1919 (B 692)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Copper Wonder

Site type: Prospect

ARDF no.: TK075

Latitude: 62.3283 **Quadrangle:** TK B-5

Longitude: 149.1335

Location description and accuracy:

The Copper Wonder claims are at an elevation of about 2,900 feet on the south side of the Iron Creek valley, south of the junction of Iron Creek with the Middle Fork. The prospect is in the SW1/4 sec. 20, T. 26 N., R. 2 E., Seward Meridian. The location is accurate to within a 1/4 mile radius.

Commodities:

Main: Cu

Other: Fe

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

Gangue minerals: Quartz

Geologic description:

The Copper Wonder prospect is in a strongly sheared basalt (Schmidt and others, 2002). A 2- to 3-foot-thick layer of specular hematite is exposed over a vertical distance of 20 feet in a shear zone. Chalcopyrite with minor pyrite and quartz, occurs as clots up to 4 inches wide. Malachite and azurite coatings are prominent in the altered, shear zone. Scattered specks of sulfides occur in the greenstone away from the shear zone (Capps, 1919 [692]). Three large open cuts expose the shear zone.

Alteration:

The shear zone material as well as the greenstone adjacent to the shear zone is described as altered, but the type of alteration is not specified (Capps, 1919 [B 692]). Local oxidation of chalcopyrite to azurite and malachite.

Age of mineralization:

Deposit model:

Basaltic Cu (Cox and Singer, 1986; model 23)

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

23

Production Status: None

Site Status: Inactive

Workings/exploration:
Three large open cuts expose the shear zone.

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760008 and 20760034.

References:
Capps, 1919 (B 692); Capps, 1924; Cobb, 1972 (MF 370); MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Schmidt and others, 2002.

Primary reference: Capps, 1919 (B 692)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (southeast of Wells Mountain)

Site type: Prospect

ARDF no.: TK076

Latitude: 62.4193 **Quadrangle:** TK B-5

Longitude: 149.1018

Location description and accuracy:
This prospect is at an elevation of about 3,600 feet, near the head of a unnamed creek draining the southern flank of Wells Mountain. It is in the NE1/4NW1/4 sec. 21, T. 27 N., R. 2 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 84 of Csejtey and Miller (1978).

Commodities:

Main: Ag, Cu

Other: Au

Ore minerals: Chalcopyrite, malachite, pyrite

Gangue minerals: Quartz

Geologic description:
This prospect consists of a 24-inch-thick quartz vein that cuts mafic metavolcanic rock; the vein contains chalcopyrite, pyrite, and malachite (Csejtey and Miller, 1978). U.S. Geological Survey samples of the vein contain up to 1.5 parts per million gold, 15,000 parts per million copper, and 3 parts per million silver (Miller and others, 1978).

Alteration:

Age of mineralization:

Deposit model:
Basaltic Cu? (Cox and Singer, 1986; model 23?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23?

Production Status: None

Site Status: Inactive

Workings/exploration:

Only surface examination and sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:

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

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Phoenix

Site type: Prospect

ARDF no.: TK077

Latitude: 62.3296 **Quadrangle:** TK B-5

Longitude: 149.0660

Location description and accuracy:
The Phoenix prospect is on Hyphen Gulch, a small tributary of Iron Creek, at about an elevation of about 3,600 feet. The prospect is near the center of sec. 22, T. 26 N., R. 2 E., Seward Meridian The location is accurate to within 1/4 mile. This is locality 72 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other: Fe

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

Gangue minerals: Quartz

Geologic description:
The Phoenix prospect is in copper-stained basalt which is locally replaced by chalcopyrite, specular hematite, minor bornite, and quartz. Hematite and minor amounts of the sulfides also occurs in several narrow veins (Capps, 1919 [B 692]; Schmidt and others, 2002). A small shear zone, 2 to 3 inches wide, trends northeasterly, dips to the northwest, and contains minor quartz and copper staining (Capps, 1919 [B 692]). A 0.6-foot chip sample collected by the U.S. Bureau of Mines contains 900 parts per million copper (Fechner, 1986). Mineralization is exposed in a surface cut.

Alteration:
Oxidation of copper sulfides to azurite and malachite.

Age of mineralization:

Deposit model:
Basaltic Cu (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:

Mineralization is exposed in a surface cut (Capps, 1919, p. 202). A 0.6-foot chip sample collected by the U.S. Bureau of Mines contains 900 parts per million copper (Fechner, 1986).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760009.

References:

Capps, 1919 (B 692); Capps, 1924; Cobb, 1972 (MF 370); MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Fechner, 1986; Werdon and others, 2000; Schmidt and others, 2002.

Primary reference: Capps, 1919 (B 692, p. 202)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Eastview

Site type: Prospect

ARDF no.: TK078

Latitude: 62.3365 **Quadrangle:** TK B-5

Longitude: 149.0585

Location description and accuracy:
The Eastview prospect is at an elevation of about 4,000 feet on the ridge at the head of Hyphen Creek. The prospect is south of Middle Fork Iron Creek and about 0.3 mile southeast of the top of hill 5066, in the NW1/4NE14 sec. 22, T. 26 N., R. 2 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 71 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other: Ag, Fe

Ore minerals: Chalcopyrite, hematite, pyrite

Gangue minerals: Quartz

Geologic description:
Basalt float at the Eastview prospect contains banded quartz, hematite, pyrite, and chalcopyrite; the chalcopyrite is locally abundant (Capps, 1919 [B 692]). The rocks in the vicinity are Triassic(?) basalt (Schmidt and others, 2002). Samples collected by the U.S. Bureau of Mines contain up to 23,000 parts per million copper and 6 parts per million silver (Fechner, 1986).

Alteration:

Age of mineralization:
Occurs in Triassic(?) basalt.

Deposit model:
Basaltic Cu (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:

Three open cuts did not reach bedrock. Samples collected by the U.S. Bureau of Mines contain up to 23,000 parts per million copper and 6 parts per million silver (Fechner, 1986).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760010.

References:

Capps, 1919 (B 692); Capps, 1924; Cobb, 1972 (MF 370); MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Fechner, 1986; Werdon and others, 2000; Schmidt and others, 2002.

Primary reference: Capps, 1919 (B 692)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Blue Lode

Site type: Prospect

ARDF no.: TK079

Latitude: 62.3422 **Quadrangle:** TK B-5

Longitude: 149.0506

Location description and accuracy:

The Blue Lode prospect is at an elevation of about 4,200 feet on the south, valley wall of the Middle Fork, Iron Creek, 0.6 mile northeast of the top of hill 5066. The prospect is in the NE1/4SE1/4 sec. 15, T. 26 N., R. 2 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 73 of Csejtey and Miller (1978).

Commodities:

Main: Ag, Cu

Other:

Ore minerals: Azurite, bornite, chalcopyrite, malachite

Gangue minerals: Quartz

Geologic description:

The Blue Lode prospect consists of chalcopyrite and bornite disseminated in Triassic, Nikolai Greenstone(?) (Schmidt and others, 2002). Outcrops on a cliff show conspicuous malachite and azurite staining. A 2-foot-wide shear zone strikes N16E and dips steeply to the west; it contains some chalcopyrite-bearing quartz (Capps, 1919 [B 692]). Samples collected by the U.S. Bureau of Mines contain up to 70,000 parts per million copper and 44 parts per million silver (Fechner, 1986).

Alteration:

Oxidation of copper minerals.

Age of mineralization:

Occurs in Triassic Nikolai Greenstone.

Deposit model:

Basaltic Cu (Cox and Singer, 1986; model 23)

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

23

Production Status: None

Site Status: Inactive

Workings/exploration:

Workings consist of an open cut. Samples collected by the U.S. Bureau of Mines contain up to 70,000 parts per million copper and 44 parts per million silver (Fechner, 1986). As of January 1, 2000, Cominco held a block of approximately 25 state claims covering this and adjacent prospects (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760011.

References:

Capps, 1919 (B 692); Capps, 1924; Cobb, 1972 (MF 370); MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Fechner, 1986; Werdon and others, 2000; Schmidt and others, 2002.

Primary reference: Capps, 1919 (B 692)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (south of Iron Creek)

Site type: Occurrence

ARDF no.: TK080

Latitude: 62.2814 **Quadrangle:** TK B-5

Longitude: 149.0367

Location description and accuracy:
This occurrence is at an elevation of about 4,000 feet, south of Iron Creek, in the SE1/4SW1/4 sec. 2, T. 25 N., R. 2 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Co, Cu, Ni

Other: Cr

Ore minerals:

Gangue minerals:

Geologic description:
The rocks at this occurrence are mainly altered Paleozoic(?) mafic metavolcanic rocks and serpentinite(?). No sulfides are visible (Csejtey and Miller, 1978). Rock samples contain up to 2,000 parts per million cobalt, 700 parts per million copper, and 1,500 parts per million nickel; chromium exceeds the 5,000-parts-per-million, detection limit (Miller and others, 1978).

Alteration:
The type of alteration in the Paleozoic(?) mafic metavolcanic rocks is not specified (Csejtey and Miller, 1978).

Age of mineralization:

Deposit model:
Basaltic copper (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:
Limited sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (northeast of Middle Fork Iron Creek)

Site type: Occurrences

ARDF no.: TK081

Latitude: 62.3469 **Quadrangle:** TK B-5

Longitude: 149.0332

Location description and accuracy:
This site is a cluster of occurrences extending from an elevation of 3,400 to 4,000 feet on the northeast side of the Middle Fork, Iron Creek. The cluster is centered in the N1/2 of sec. 14, T. 26 N., R. 2 E., Seward Meridian and is accurate to within 1/4 mile.

Commodities:

Main: Ag, Au, Cu, Pb, Zn

Other:

Ore minerals:

Gangue minerals:

Geologic description:
These occurrences are near a greenstone-marble contact (Fechner, 1986). Grab samples of marble taken by the U.S. Bureau of Mines contain up to 150 parts per million silver, 0.39 part per million gold, 13,500 parts per million copper, and 12,000 parts per million lead. Grab samples of sulfide-bearing mafic volcanic rock contain up to 190 parts per million silver, 0.44 part per million gold, and 10 percent zinc. A 4-foot chip sample of sulfide-bearing mafic volcanic rock contains 9% zinc (Fechner, 1986).

Alteration:

Age of mineralization:

Deposit model:
Cyprus massive sulfide? (Cox and Singer, 1986; model 24a?)

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Surface sampling by the U.S. Bureau of Mines (Fechner, 1986).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978; Fechner, 1986; Werdon and others, 2000; Schmidt and others, 2002.

Primary reference: Fechner, 1986

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Talkeetna

Site type: Prospect

ARDF no.: TK082

Latitude: 62.3575 **Quadrangle:** TK B-5

Longitude: 149.0238

Location description and accuracy:

The Talkeetna prospect is at an elevation of about 4,400 feet at the head of Prospect Creek, a tributary of the East Fork, Iron Creek. It is in the SE1/4NE1/4 sec. 11, T. 26 N., R. 2 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Ag, Au, Cu

Other: Fe

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

Gangue minerals: Epidote, quartz

Geologic description:

The Talkeetna prospect consists of: 1) greenstone with replacement bodies of specular hematite and quartz; 2) greenstone breccia with clasts that are partially replaced by pyrite and chalcopyrite in a matrix that contains hematite, chalcopyrite, and quartz; and 3) an east-west shear zone with quartz veinlets that contain pyrite, chalcopyrite, and hematite (Capps, 1919 [B 692]). Amygdules in the greenstone are filled with epidote. Mineralization parallels the shear zone which is up to 30 feet thick and at least several hundred feet long . A conspicuous gossan contains copper carbonates (Capps, 1919 [B 692]). Capps reported samples that contain up to 8% copper. Csejtey and Miller (1978) collected float samples that contain small amounts of gold. U.S. Bureau of Mines grab samples contain up to 85,000 parts per million copper and 9.6 parts per million silver; 5-foot chip samples contain up to 25,000 parts per million copper and 5.4 parts per million silver (Fechner, 1986).

A number of open cuts and trenches have been excavated through the gossan. As of January 1, 2000, Cominco held a block of approximately 25 state claims covering this and adjacent prospects (Northern Associates Inc., Written Commun., 2001).

Alteration:

Epidote alteration; oxidation of copper minerals.

Age of mineralization:

Deposit model:
Basaltic Cu (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:
A number of open cuts and trenches have been excavated through the gossan. Capps (1919, p. 203) reported samples with up to 8% copper. Examination and sampling by the U.S. Geological Survey and U.S. bureau of Mines (Csejtey and Miller, 1978; Fechner, 1986).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760012.

References:
Capps, 1919 (B 692); Capps, 1924; Berg and Cobb, 1967; Cobb, 1972 (MF 370); MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Fechner, 1986; Werdon and others, 2000; Schmidt and others, 2002.

Primary reference: Capps, 1919 (B 692)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (tributary to East Fork, Iron Creek)

Site type: Prospect

ARDF no.: TK083

Latitude: 62.3767 **Quadrangle:** TK B-4

Longitude: 148.9828

Location description and accuracy:
This prospect is at an elevation of about 3,000 feet on a south tributary of the East Fork, Iron Creek. It is in the northwest corner of sec. 6, T. 26 N., R. 3 E., Seward Meridian. The location is accurate to within 1/4 mile radius. This is locality 77 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite

Gangue minerals:

Geologic description:
This prospect consists of small veins or replacement pods of chalcopyrite in altered, mafic metavolcanic rocks (greenstone) of Paleozoic(?) age (Csejtey and Miller, 1978). A sample of greenstone contains 5,000 parts per million copper (Miller and others, 1978).

Alteration:
The greenstone host rocks are altered but the type of alteration is not specified (Singer and others, 1978).

Age of mineralization:

Deposit model:
Basaltic Cu? (Cox and Singer, 1986; model 23?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Schmidt and others, 2002.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (in south tributary to upper Iron Creek)

Site type: Prospect

ARDF no.: TK084

Latitude: 62.2845 **Quadrangle:** TK B-4

Longitude: 148.9806

Location description and accuracy:
This prospect is at an elevation of about 3,200 feet on the east side of a tributary to upper Iron Creek. It is in the NW1/4SW1/4 sec. 6, T. 25 N., R. 3 E., Seward Meridian. The location is accurate to within a 1/4 mile. This is locality 68 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other:

Ore minerals: Malachite

Gangue minerals:

Geologic description:
Copper minerals, mainly malachite, occur in iron-stained brecciated granitic rocks of Jurassic age. Claim staking and diamond drilling in the 1970's (MacKevett and Holloway, 1977).

Alteration:
Minor iron- and copper-stained gossan.

Age of mineralization:
Occurs in Jurassic granitic rocks.

Deposit model:
Porphyry copper? (Cox and Singer, 1986; model 17?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
17?

Production Status: None

Site Status: Inactive

Workings/exploration:
Claim staking and diamond drilling in the 1970's (MacKevett and Holloway, 1977).

Production notes:

Reserves:

Additional comments:

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

Primary reference: MacKevett and Holloway, 1977

Reporter(s): J. Riehle (U.S. Geological Survey)

Last report date: 10/01/2002

Site name(s): Unnamed (south tributary to upper Iron Creek)

Site type: Occurrence

ARDF no.: TK085

Latitude: 62.2672 **Quadrangle:** TK B-4

Longitude: 148.8703

Location description and accuracy:

This occurrence is at an elevation of about 3,300 feet on a south tributary of upper Iron Creek. The occurrence is in the NE1/4 sec. 10, T. 25 N., R. 3 E., Seward Meridian. The location is accurate to within 1/2 mile. This is locality 67 of Csejtey and Miller (1978) and locality 67 of Singer and others (1978).

Commodities:

Main: Cu

Other: Au

Ore minerals: Malachite, pyrite

Gangue minerals:

Geologic description:

This occurrence consists of pyrite and malachite in altered Jurassic granitic rock (Csejtey and Miller, 1978). A float sample contains 0.1 part per million gold and 2000 parts per million copper (Miller and others, 1978).

Alteration:

The granitic host rock is altered, but the type of alteration is not specified (Csejtey and Miller, 1978). Oxidation of copper minerals to malachite.

Age of mineralization:

Occurs in Jurassic granitic rocks.

Deposit model:

Porphyry copper? (Cox and Singer, 1986; model 17?)

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

17?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

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

Primary reference: Miller and others, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (south tributary to East Fork, Iron Creek)

Site type: Occurrence

ARDF no.: TK086

Latitude: 62.3272 **Quadrangle:** TK B-4

Longitude: 148.8189

Location description and accuracy:

This occurrence is at an elevation of about 4,700 feet on the west side of a south tributary to the upper East Fork, Iron Creek. It is about 0.1 mile south-southwest of the center of sec. 24, T. 26 N., R. 3 E., Seward Meridian. The location is accurate within 1/2 mile. This is locality 65 of Csejtey and Miller (1978) and locality 65 of Singer and others (1978).

Commodities:

Main: Cu

Other: Sn

Ore minerals: Malachite, pyrite

Gangue minerals: Quartz

Geologic description:

The rocks in the area of this occurrence includes Tertiary felsic and mafic, subaerial volcanic rocks and related shallow intrusions (Csejtey and others, 1978). Nearby, at a lower elevation, a Jurassic plutonic and metamorphic assemblage is mainly of quartz diorite, granodiorite, amphibolite, and greenschist. The occurrence is a malachite-stained, pyrite-bearing quartz vein that cuts probable Tertiary, volcanic rock. A float sample contains 1,500 parts per million copper and detectable (but less than 10 parts per million) tin (Miller and others, 1978).

Alteration:

Malachite staining.

Age of mineralization:

Probably Tertiary or younger.

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

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

Primary reference: Miller and others, 1978

Reporter(s): D. Bickerstaff (U.S. Geological Survey)

Last report date: 10/01/2002

Site name(s): Unnamed (north tributary to East Fork, Iron Creek)

Site type: Prospect

ARDF no.: TK087

Latitude: 62.3497 **Quadrangle:** TK B-4

Longitude: 148.8163

Location description and accuracy:
This prospect is at an elevation of about 4,000 feet on a southwest-flowing tributary to the East Fork, Iron Creek; it is about 1.8 miles west-southwest of VABM Sedan. The location is accurate to within 1/2 mile. This is locality 64 of Csejtey and Miller (1978) and locality 64 of Singer and others (1978).

Commodities:

Main: Ag, Cu

Other: Au

Ore minerals: Chalcopyrite, pyrite, pyrrhotite(?)

Gangue minerals: Quartz

Geologic description:
This prospect consists of quartz float that contains pyrite, chalcopyrite, and possibly pyrrhotite. It is on or near a sheared contact, possibly a thrust fault, between Triassic(?) metavolcaniclastic rocks and Jurassic plutonic and metamorphic rocks (Csejtey and others, 1978; Schmidt and others, 2002). A float sample contains 7 parts per million silver, 0.9 part per million gold, and 5,000 parts per million copper (Miller and others, 1978).

Alteration:

Age of mineralization:

Deposit model:
Basaltic Cu? (Cox and Singer, 1986; model 23?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Miller and others, 1978; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Schmidt and others, 2002.

Primary reference: Miller and others, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): King and Queen

Site type: Prospect

ARDF no.: TK088

Latitude: 62.4851 **Quadrangle:** TK B-4

Longitude: 148.7927

Location description and accuracy:

The King and Queen prospect is at an elevation of about 3,400 feet on northwest end of a ridge; it is about 2 miles south of the Talkeetna River in the SW1/4 sec. 30, T. 28 N., R. 4 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Ag, Au

Other: Hg

Ore minerals: Ag tellurides(?), gold, iron oxides, pyrite

Gangue minerals: Calcite, chalcedony, clay

Geologic description:

The rocks in the vicinity of this prospect are interbedded felsic and mafic volcanic rocks (Ben Porterfield, written commun., 2001). In part, the felsic rocks form a dome that consists of flow-banded rhyodacite, volcanic breccia, and possibly hot-springs sinter. Hydrobreccia occurs in float. Argillic alteration is dominant, with some propylitic alteration and silicification. Minor fine-grained pyrite and silver tellurides(?) occur in the matrix of the volcanic breccia, which weathers to conspicuous iron oxides. Based on air photos, the dome appears to be 2,000 feet long by 1,600 feet wide.

The following data is provided by Ben Porterfield (written commun., 2001). The prospect was discovered in 1918 by Sinclair and Foster. An old shaft is present on top of the dome. The prospect was explored by Kennecott in 1919, when L.W. Storm reported that gold could be panned from almost any material selected at random. Trench samples have 0.24 ounce of gold per ton from 'seams'; a 25-foot channel sample has 0.08 ounce of gold per ton and 1.76 ounces of silver per ton. A 6-inch-wide seam in an outcrop of felsic rock assays 6.8 ounces of gold per ton and 15.9 ounces of silver per ton. Samples across 58 feet of trench average 1.82 parts per million gold. Grab samples every three feet along 190 feet of an old dump average 490 parts per billion gold. A grab sample of typical volcanic breccia from the shaft dump contains 1 part per million gold. Samples from the margins of the dome contain 12 parts per million mercury. Seven samples collected from a 38-foot-long northern trench contain 1 to 5.7 parts per million gold, and average 2.2

parts per million gold. Stream-sediment samples contain up to 870 parts per billion gold, 1.4 parts per million silver, and 5 parts per million mercury.

Alteration:

Float samples on the rhyodacite dome show strong argillic alteration, mainly illite and smectite. Local propylitic alteration, with calcite veining and opaline silica is associated with mafic agglomerate north of the dome (Ben Porterfield, written commun., 2001). Conspicuous iron staining.

Age of mineralization:

A preliminary whole-rock age date on the basalt is 453 Ma (P. Oswald, oral commun., 2002).

Deposit model:

Hot spring Au-Ag (Cox and Singer, 1986; model 25a)

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

25a

Production Status: None

Site Status: Active?

Workings/exploration:

The following data is provided by Ben Porterfield (written commun., 2001). The prospect was discovered in 1918 by Sinclair and Foster. An old shaft is present on top of the dome. The prospect was explored by Kennecott in 1919, when L.W. Storm reported that gold could be panned from almost any material selected at random. Trench samples contain 0.24 ounce of gold per ton from 'seams'; a 25-foot channel sample assayed 0.08 ounce of gold per ton and 1.76 ounces of silver per ton. A 6-inch-wide seam in an outcrop of felsic rock assays 6.8 ounces of gold per ton and 15.9 ounces of silver per ton. Samples across 58 feet of trench average 1.82 parts per million gold. Grab samples every three feet along 190 feet of an old dump averages 490 parts per billion gold. A grab sample of typical volcanic breccia from the shaft dump contains 1 part per million gold. Samples from the margins of the dome contained 12 parts per million mercury. Seven samples collected from a 38-foot-long northern trench contains 1 to 5.7 parts per million gold, and average 2.2 parts per million gold. Stream-sediment samples have up to 870 parts per billion gold, 1.4 parts per million silver, and 5 parts per million mercury. As of January 1, 2000, a block of 4 prospecting sites covered this prospect (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (southwest of the Talkeetna River)

Site type: Prospect

ARDF no.: TK089

Latitude: 62.4677 **Quadrangle:** TK B-4

Longitude: 148.6880

Location description and accuracy:
This prospect is at an elevation of about 2,700 feet, about 1 mile south of the Talkeetna River and approximately 6 1/2 miles downstream from the mouth of Yellowjacket Creek. It is about 0.5 mile south-southeast of the center of sec. 34, T. 28 N., R. 4 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au, Cu

Other:

Ore minerals:

Gangue minerals:

Geologic description:
Gold and copper(?) occur in Paleozoic(?) volcanic rocks (Csejtey and others, 1978); 33 rock samples and 20 stream-sediment samples have been collected by a mining company (Don Stevens, written commun., 1992).

Alteration:

Age of mineralization:

Deposit model:
Basaltic Cu? (Cox and Singer, 1986; model 23?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23?

Production Status: None

Site Status: Inactive

Workings/exploration:

Thirty-three rock samples and 20 stream-sediment samples have been collected by a mining company (Don Stevens, written commun., 1992).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760013.

References:

Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (near Little Falls Creek)

Site type: Occurrence

ARDF no.: TK090

Latitude: 62.4722 **Quadrangle:** TK B-4

Longitude: 148.6589

Location description and accuracy:

This occurrence is at an elevation of about 1,980 feet at the junction of the a creek that is locally called Little Falls Creek and the Talkeetna River, about 6 miles below the mouth of Yellowjacket Creek. The occurrence is near the center of sec. 35, T. 28 N., R. 4 E., Seward Meridian. The location is accurate. This is locality 46 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite, pyrite

Gangue minerals:

Geologic description:

This occurrence consists of argillite that has a 1-foot-wide gossan that contains a pyritic zone with minor chalcopyrite (Rose, 1967). The argillite is interlayered with a greenstone unit that is estimated to be 11,000 feet thick (Anderson, 1969).

Alteration:

Gossan.

Age of mineralization:

Deposit model:

Basaltic Cu? (Cox and Singer, 1986; model 23?)

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

23?

Production Status: None

Site Status: Inactive

Workings/exploration:

Work is limited to surface examinations. As of January 1, 2000, there were 3 active state mining claims in section 35 (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760015.

References:

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

Primary reference: Rose, 1967

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Red Ridge

Site type: Prospect

ARDF no.: TK091

Latitude: 62.4966 **Quadrangle:** TK B-4

Longitude: 148.5923

Location description and accuracy:

The Red Ridge prospect is along a northeast-trending ridge about a mile south of VABM Jaina. The prospect extends northeasterly into the Talkeetna Mountains C-4 quadrangle. The prospect is at an elevation of about 5,500 feet, in the S1/2 sec. 19, T. 28 N., R. 5 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 47 of Csejtey and Miller, (1978).

Commodities:

Main: Ag, Au, Cu

Other:

Ore minerals: Pyrite

Gangue minerals: Quartz

Geologic description:

The Red Ridge prospect consists of iron-stained, pyritic phyllite and quartz veins in a sequence of interlayered phyllite, argillite, graywacke and greenstone (Rose, 1967; Anderson, 1969). Samples of the pyritic material contain up to 1 part per million silver and 0.44 part per million gold. There are also numerous barren quartz veins. A sample of fault gouge contains 1,600 parts per million copper.

Alteration:

The pyritic phyllite is oxidized.

Age of mineralization:

Deposit model:

Low sulfide gold-quartz veins?, Basaltic Cu? (Cox and Singer, 1986; model 36a?, 23?)

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

36a?, 23?

Production Status: None

Site Status: Inactive

Workings/exploration:

Samples of pyritic phyllite and quartz veins collected by the State of Alaska Department of Natural Resources contain up to 1 part per million silver and 0.44 part per million gold (Rose, 1967; Anderson, 1969). Exploration by Cities Service Minerals Company included ground magnetics, EM and IP geophysical surveys, and excavation of 2 trenches (Don Stevens, written commun., 1992). A sample of fault gouge collected by Anderson (1969) contained 1,600 parts per million copper.

In the 1970's, the Red Ridge 1 to 82 lode claims were staked by Cities Service Minerals Company. As of January 1, 2000, no valid claims were present (Northern Associates Inc., written Commun., 2001).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760014.

References:

Rose, 1967; Anderson, 1969; Csejtey and others, 1978; Csejtey and Miller, 1978.

Primary reference: Rose, 1967

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (northeast of Talkeetna River)

Site type: Occurrence

ARDF no.: TK092

Latitude: 62.4731 **Quadrangle:** TK B-4

Longitude: 148.5668

Location description and accuracy:

This occurrence is at an elevation of about 4,200 feet, approximately 1 3/4 miles northeast of the Talkeetna River and 4 miles downstream from Yellowjacket Creek. The occurrence is near the center of sec. 32, T. 28 N., R. 5 E., Seward Meridian. The location accurate to within 1/4 mile. This is locality 49 of Csejtey and Miller (1978).

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite, pyrrhotite

Gangue minerals: Quartz

Geologic description:

At this occurrence, a few percent of pyrrhotite and chalcopyrite are in northeast- striking quartz veins and replacement zones in greenstone. The zones are 0.5 to 2.0 feet thick and dip steeply to the southeast (Rose, 1967).

Alteration:

Age of mineralization:

Deposit model:

Basaltic Cu? (Cox and Singer, 1986; model 23?)

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

23?

Production Status: None

Site Status: Inactive

Workings/exploration:

Production notes:

Reserves:

Additional comments:

References:

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

Primary reference: Rose, 1967

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (west tributary to upper Little Falls Creek)

Site type: Occurrence

ARDF no.: TK093

Latitude: 62.0800 **Quadrangle:** TK B-3

Longitude: 149.2565

Location description and accuracy:

This occurrence is at an elevation of about 4,000 feet above a southwest tributary of a creek that is informally called Little Falls Creek (Anderson 1969). The location is about 1/2 mile east of the top of hill 5105, in the SE1/4 sec. 26, T. 28 N., R. 5 E., Seward Meridian. The location is accurate to within 1/4 mile. The occurrence is locality 48 of Csejtey and Miller (1978).

Commodities:

Main: Ag, Au, Cu

Other:

Ore minerals: Chalcopyrite, pyrite, pyrrhotite

Gangue minerals:

Geologic description:

This occurrence consists of iron-stained Jurassic (?) quartz-diorite gneiss with inclusions of biotite schist; the rocks contain moderate to abundant amounts of pyrite and pyrrhotite, and traces of chalcopyrite (Rose, 1967). A chip sample of a stained outcrop contains 0.06 percent copper and traces of gold and silver (Anderson, 1969).

Alteration:

The gneissic quartz diorite is iron-stained.

Age of mineralization:

Deposit model:

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

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

20c?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited rock sampling (Anderson, 1969).

Production notes:

Reserves:

Additional comments:

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

Primary reference: Rose, 1967

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Grayling

Site type: Mine

ARDF no.: TK094

Latitude: 62.2649 **Quadrangle:** TK B-3

Longitude: 148.4155

Location description and accuracy:
The Grayling placer mine extends for about a half mile on Clear Creek, just above its junction with the Talkeetna River; it is in the S1/2 sec. 7, T. 25 N., R. 6 E., Seward Meridian. The location is accurate to within one mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the drainage of Clear Creek are Tertiary volcanic rocks (Csejtey and others, 1978). Some placer gold was reportedly recovered in 1922 by James Beaver (E. J. McFaul, and others, unpub. data, 2000).

Alteration:

Age of mineralization:
Quaternary placer.

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:

Some placer gold was reportedly recovered in 1922 by James Beaver (E.J. McFaul and others, unpub. data, 2000). The workings apparently extend for about a half-mile along Clear Creek.

Production notes:

Some placer gold was reportedly recovered in 1922 by James Beaver (E.J. McFaul and others, unpub. data, 2000).

Reserves:

Additional comments:

MAS/MIL number 20760044.

References:

Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Unnamed (on west tributary to Kosina Creek)

Site type: Occurrence

ARDF no.: TK095

Latitude: 62.4267 **Quadrangle:** TK B-3

Longitude: 148.1706

Location description and accuracy:
This placer occurrence is on a west tributary of Kosina Creek, at an elevation of about 3,650 feet,. It is near the center of sec. 16, T. 27 N., R. 7 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Pd

Other: As, Cu

Ore minerals:

Gangue minerals:

Geologic description:
The stream drains an area underlain by plutonic and metamorphic rocks, including banded gneiss (Kurtak and others, 1992). Placer samples collected by the U.S. Bureau of Mines contained up to 24 parts per billion palladium and 100 parts per million arsenic (Balen, 1990). A sample of intrusive rock contains 813 parts per million copper.

Alteration:

Age of mineralization:
Quaternary placer.

Deposit model:
Placer PGE (Cox and Singer, 1986; model 39b)

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Placer samples collected by the U.S. Bureau of Mines (Balen, 1990).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760082.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Unnamed (upper Black River)

Site type: Occurrence

ARDF no.: TK096

Latitude: 62.2720 **Quadrangle:** TK B-3

Longitude: 148.0925

Location description and accuracy:

This occurrence is at an elevation of about 5,350 feet on the east, valley wall at the head of Black River, about a mile to the east of a large, unnamed glacier. It is about 0.5 mile northeast of the center of sec. 11, T. 25 N., R. 7 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Cu, Mo

Other: Au, W

Ore minerals: Chalcopyrite, molybdenite

Gangue minerals:

Geologic description:

This occurrence consists of chalcopyrite- and molybdenite-bearing granitic and andesitic float. It is in an area underlain by Jurassic granodiorite cut by northeast-trending shear zones and intruded by andesite(?) dikes (Csejtey and others, 1978). Samples of mineralized float contain up to 0.15 part per million gold, 446 parts per million molybdenum, 180 parts per million tungsten, and 0.69 percent copper (Kurtak and others, 1992). Placer samples are locally anomalous in gold, lead, tungsten, and zinc (Kurtak and others, 1992).

Alteration:

Altered granitic rocks are limonite-stained near altered andesitic dikes. The andesite locally is copper stained (Kurtak and others, 1992).

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:
Limited sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760098.

References:
Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (on upper Roaring Creek)

Site type: Prospect

ARDF no.: TK097

Latitude: 62.2759 **Quadrangle:** TK B-2

Longitude: 147.9733

Location description and accuracy:
This prospect is at an elevation of about 6,000 feet on the north, valley wall of upper Roaring Creek, about 0.6 mile west-southwest of elevation 6305. The prospect is in the NE1/4 sec. 9, T. 25 N., R. 8 E., Seward Meridian. The location is accurate to within 1/2 mile. This is locality 38 of MacKevett and Holloway (1977).

Commodities:

Main: Cu

Other: Au

Ore minerals:

Gangue minerals:

Geologic description:
The prospect, which was staked for gold and copper, is reportedly a mineralized vein in Jurassic granite (U.S. Bureau of Mines, 1973). It may be genetically related to the prospects at TK098 and TK099.

Alteration:

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:
Work is limited to surface examinations.

Production notes:

Reserves:

Additional comments:

References:
U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Csejtey and others, 1978.

Primary reference: U.S. Bureau of Mines, 1973

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (on upper Granite Creek)

Site type: Occurrence

ARDF no.: TK098

Latitude: 62.2979 **Quadrangle:** TK B-2

Longitude: 147.9524

Location description and accuracy:
This occurrence is at an elevation of about 5,100 feet on the west, valley wall of upper Granite Creek. It is 0.1 mile southwest of the center of sec. 34, T. 26 N., R. 8 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Cu

Other:

Ore minerals: Chalcopyrite

Gangue minerals:

Geologic description:
Clautice and others (1990) describe this occurrence as 'chalcopyrite-bearing volcanic [rock] of Talkeetna Formation, in scree below 30x60 stain near felsite.' A sample of chalcopyrite-bearing rock contains more than 1.0 percent copper. This occurrence may be genetically related to TK097 and TK099.

Alteration:
Copper staining.

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:

A chalcopyrite-bearing sample of volcanic rocks of the Talkeetna Formation contain more than 1.0 percent copper (Clautice and others, 1990).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and others, 1978; Clautice and others, 1990.

Primary reference: Clautice and others, 1990

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (in upper Granite Creek)

Site type: Prospect

ARDF no.: TK099

Latitude: 62.2896 **Quadrangle:** TK B-2

Longitude: 147.9462

Location description and accuracy:
This prospect extends for 2 miles along upper Granite Creek. It is centered at an elevation of 5,200 feet, 0.4 mile due north of the center of sec. 3, T. 25 N., R. 8 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Ag, Cu, Zn

Other:

Ore minerals: Chalcopyrite, pyrite, sphalerite(?)

Gangue minerals: Clay, quartz

Geologic description:
This prospect consists of chalcopyrite, pyrite, and sphalerite(?) in a siliceous gouge zone near the contact between Upper Jurassic diorite and tuffaceous volcanic rocks of the Lower Jurassic, Talkeetna Formation (Kurtak and others, 1992). The gouge zone strikes N20E and dips 70 W. Rock samples from the south, valley wall of upper Granite Creek contain 1.2 part per million silver, 436 parts per million zinc, and 6,640 parts per million copper (Clautice and others, 1990). A U.S. Bureau of Mines 3.5-foot-long, chip sample of an iron-stained zone contains 0.87 percent zinc and 0.16 percent copper. A sulfide-rich float sample collected nearby contains 1.5 ounce silver per ton, 5.8 percent copper, and 2.4 percent zinc (Kurtak and others, 1992). This prospect may be genetically related to prospects at TK097 and TK098. Claims were staked in 1971 by Leo Mark Anthony, who conducted grid soil sampling and trenching.

Alteration:
Alteration includes clay and silicification in fault gouge. Iron-oxide staining.

Age of mineralization:

Deposit model:
Polymetallic vein (Cox and Singer, 1986; model 22c)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
22c

Production Status: None

Site Status: Inactive

Workings/exploration:
Claims were staked in 1971 by Leo Mark Anthony, who conducted grid soil sampling and trenching. Rock samples collected the Alaska Division of Geological and Geophysical Surveys and the U.S. Bureau of Mines (Clautice and others, 1990; Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760059.

References:
Csejtey and others, 1978; Clautice and others, 1990; Kurtak and others, 1992.

Primary reference: Clautice and others, 1990

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Old Gold

Site type: Prospect

ARDF no.: TK100

Latitude: 62.3624 **Quadrangle:** TK B-2

Longitude: 147.9406

Location description and accuracy:
The Old Gold prospect is at an elevation of about 5,600 feet, about 3 miles south-southwest of Black Lake and 0.5 mile southwest of peak 6025. It is in the NE1/4 sec. 10, T. 26 N., R. 8 E., Seward Meridian. The location is accurate to within one mile.

Commodities:

Main: Ag, Au

Other:

Ore minerals: Limonite

Gangue minerals:

Geologic description:
The rocks in the vicinity of the Old Gold prospect are Jurassic granodiorite (Csejtey and others, 1978). Two claims were staked in 1978. The prospect consists of iron-stained and clay-altered, quartz diorite exposed in a saddle near the top of a ridge (Kurtak and others, 1992). Nine grab samples collected by the U.S. Bureau of Mines contain up to 90 parts per billion gold and 0.5 part per million silver (Kurtak and others, 1992).

Alteration:
Quartz diorite is clay-altered and iron-stained.

Age of mineralization:

Deposit model:
Porphyry Cu-Au? (Cox and Singer, 1986; model 20c?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
20c?

Production Status: None

Site Status: Inactive

Workings/exploration:

Two claims were staked in 1978. Nine grab samples collected by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760080.

References:

Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Roaring Creek

Site type: Prospect

ARDF no.: TK101

Latitude: 62.2578 **Quadrangle:** TK B-2

Longitude: 147.9174

Location description and accuracy:
This placer prospect is on Roaring Creek, it extends upstream from a point about 1.25 miles from its mouth on the Oshetna River. The location is accurate to within a 1/4 mile. This is locality 60 of Csejtey and Miller (1978).

Commodities:

Main: Au

Other: Zn

Ore minerals: Gold

Gangue minerals:

Geologic description:
Gold in Roaring Creek occurs in Tertiary(?) stream and bench, alluvial deposits that overlie Tertiary volcanic rocks (Csejtey and others, 1978). The creek drains Jurassic quartz diorite, Talkeetna Formation volcanic rocks, sandstone, and argillite, and Tertiary fluviatile conglomerate. The gravel deposits are up to 200 feet wide and 20 feet thick. The stream gradient ranges from 150 to 500 feet per mile (Kurtak and others, 1992). Stream-sediment samples contain up to 4.5 parts per million gold (Balen, 1990) and 115 parts per million zinc (Kurtak and others, 1992).
Multiple placer claims are located along lower Roaring Creek. 'Encouraging' prospects were described by Chapin (1918). Black Creek Mining Company held mining claims in 1990.

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 are located along lower Roaring Creek. 'Encouraging' prospects were described by Chapin (1918). Limited stream sampling by the U.S. Bureau of Mines (Balen, 1990; Kurtak and others, 1992). Black Creek Mining Company held mining claims in 1990.

Production notes:

Reserves:
Roaring Creek contains an estimated 500,000 cubic yards of potentially auriferous gravel (Kurtak and others, 1992). No estimate of grade has been made.

Additional comments:
MAS/MIL number 20760019.

References:
Chapin, 1915; Chapin, 1918; Cobb, 1972 (MF 370); MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Balen, 1990; Kurtak and others, 1992.

Primary reference: Chapin, 1918

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (south of upper Granite Creek)

Site type: Occurrence

ARDF no.: TK102

Latitude: 62.2988 **Quadrangle:** TK B-2

Longitude: 147.9140

Location description and accuracy:
This occurrence is south of upper Granite Creek, at an elevation of about 5,350 feet, approximately 0.7 mile northeast of hill 5642. The location is accurate to within 1/4 mile. This is locality 58 of Csejtey and Miller (1978).

Commodities:

Main: Zn

Other: Cu

Ore minerals: Pyrite

Gangue minerals:

Geologic description:
This occurrence is a small gossan of limonite and pyrite along fractures in meta-andesite (Csejtey and Miller, 1978). A sample of the gossan contains 1,200 parts per million zinc and 120 parts per million copper (Miller and others, 1978).

Alteration:
Iron-oxide alteration.

Age of mineralization:

Deposit model:
Cyprus massive sulfide?, Kuroko massive sulfide? (Cox and Singer, 1986; model 24a?, 28a?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
24a?, 28a?

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (south tributary to Black River)

Site type: Occurrence

ARDF no.: TK103

Latitude: 62.3314 **Quadrangle:** TK B-2

Longitude: 147.9082

Location description and accuracy:
This placer occurrence is at an elevation of about 5,000 feet on an unnamed, north-flowing tributary of Black River, about 4 1/2 miles south of Black Lake. The placer is at the creek junction in the NE1/4 sec. 23, T. 26 N., R. 8 E., Seward Meridian. The location is accurate.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals: Garnet

Geologic description:
This occurrence consists of placer gold and abundant garnet in pan concentrate samples from 2 forks at a stream junction (Clautice and others, 1990). A sample on the east fork contains 4,800 parts per billion gold, and at least 5 colors in the pan; a sample from the west fork contains more than 10,000 parts per billion ppb gold (or about 0.302 ounce of gold per ton) and abundant visible gold. The bedrock is Tertiary conglomerate cemented by limonite and hematite. A sample of the conglomerate did not contain anomalous metal values.

Alteration:

Age of mineralization:
Quaternary placer.

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:
Only limited sampling (Clautice and others, 1990).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978; Clautice and others, 1990.

Primary reference: Clautice and others, 1990

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Lucky Strike

Site type: Prospect

ARDF no.: TK104

Latitude: 62.4125 **Quadrangle:** TK B-2

Longitude: 147.8753

Location description and accuracy:
The Lucky Strike prospect is at an elevation of about 3,850 feet on an unnamed stream that flows into the northeast end of Black Lake. It is in the SE1/4 sec. 24, T. 27 N., R. 8 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Cu, Zn

Other:

Ore minerals:

Gangue minerals:

Geologic description:
This prospect is at the contact between basalt and Jurassic(?) granodiorite (Kurtak and others, 1992). The basalt is iron-stained near the contact. One claim was staked in 1978 (Kurtak and others, 1992). Rock-chip samples collected by the U.S. Bureau of Mines contain up to 60 parts per million copper and 134 ppm zinc (Balen, 1990). A panned-concentrate sample contain 214 ppm zinc.

Alteration:
Contact metamorphism; iron staining.

Age of mineralization:

Deposit model:
Porphyry Cu-Au? (Cox and Singer, 1986; model 20c?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
20c?

Production Status: None

Site Status: Inactive

Workings/exploration:

One claim was staked in 1978 (Kurtak and others, 1992). Rock and stream sediment sampling was done by the U.S. Bureau of Mines (Balen, 1990).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760079.

References:

Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Granite Creek

Site type: Prospect

ARDF no.: TK105

Latitude: 62.2974 **Quadrangle:** TK B-2

Longitude: 147.8626

Location description and accuracy:
This placer prospect extends for about 2 miles of Granite Creek above its mouth on the Oshetna River (Csejtey and Miller, 1978, location 57). The placer is centered on Granite Creek at an elevation of about 4,300 feet. The location is accurate to within 1/4 mile.

Commodities:

Main: Au

Other: Zn

Ore minerals: Gold

Gangue minerals:

Geologic description:
Gold in Granite Creek occurs in Tertiary(?) alluvial gravel deposits. The prospect was discovered in 1914, when placer claims were located on lower Granite Creek. Enough gold was found to encourage further prospecting in 1918 (Chapin, 1918). The placer deposits overlie Tertiary volcanic rocks and Jurassic volcanic rocks, and sandstone and argillite of the Talkeetna Formation (Csejtey and others, 1978). A Jurassic intrusion crops out at the head of the creek. Quaternary glacial deposits are also present at the head of the creek. The stream valley is 50 to 250 feet wide and the alluvial gravel is up to 15 feet thick. Boulders are up to 10 feet in diameter. The creek gradient is 150 to 300 feet per mile. A U.S. Bureau of Mines sample of the gravel contains 0.0002 ounce of gold per cubic yard; other samples contain up to 329 parts per million zinc (Kurtak and others, 1992).

Alteration:

Age of mineralization:
Tertiary(?) placer.

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:
The prospect was discovered in 1914, when placer claims were located on lower Granite Creek. Enough gold was found to encourage further prospecting in 1918 (Chapin, 1918). Limited sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:
No production is known.

Reserves:
An estimated 500,000 cubic yards of potentially auriferous alluvial material is present in the drainage but no estimate of grade has been made (Kurtak and others, 1992).

Additional comments:
MAS/MIL number 20760020.

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

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (northwest tributary to Oshetna River)

Site type: Occurrence

ARDF no.: TK106

Latitude: 62.3056 **Quadrangle:** TK B-2

Longitude: 147.8258

Location description and accuracy:
This placer occurrence is at an elevation of about 4,000 feet near the head of an unnamed, southeast-flowing tributary of the Oshetna River, about a mile northeast of Granite Creek. It is near the center of the south boundary of sec. 29, T. 26 N., R. 9 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
Gold occurs in alluvial gravel composed primarily of Tertiary conglomerate and volcanic rocks of the Talkeetna Formation (Kurtak and others, 1992). Panned concentrates contain at least 3 colors of gold per pan and up to 4.3 parts per million gold (Clautice and others, 1990).

Alteration:

Age of mineralization:
Quaternary placer.

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:

Limited sampling by the Alaska Division of Geological and Geophysical Surveys (Clautice and others, 1990).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and others, 1978; Clautice and others, 1990; Kurtak and others, 1992.

Primary reference: Clautice and others, 1990

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Busch Creek

Site type: Mine

ARDF no.: TK107

Latitude: 62.4761 **Quadrangle:** TK B-2

Longitude: 147.7390

Location description and accuracy:

Placer workings are between an elevation of about 3,500 to 3,900 feet in upper Busch Creek, a tributary of Goose Creek. Claims extend from the SW1/4 sec. 34 to the SE1/4 sec. 23., T. 28 N., R. 9 E., Seward Meridian. The coordinates are about in the center of the claims. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Hg, Pd, Pt

Ore minerals: Gold, isoferroplatinum, magnetite, native mercury

Gangue minerals:

Geologic description:

Upper Busch Creek drains an area of granodiorite (Csejtey and others, 1978), but bedrock is not exposed at the mine site. Placer gold in Busch Creek occurs in at least two glaciofluvial bench gravels as well as in the active stream bed. The gold may occur on clay-rich false bedrock (Kurtak and others, 1992). The gold particles are flat and up to 2 mm in diameter, although most are finer (0.5 mm). Miners report finding native mercury on gold flakes from virgin gravels. A 0.15-mm-long grain of isoferroplatinum was identified by Kurtak and others (1992). Stream-sediment samples collected by the U.S. Bureau of Mines contain more than 10 parts per million gold, and a placer concentrate sample contains 1,060 parts per billion platinum and 120 parts per billion palladium (Balen, 1990). Bench gravel samples contain up to 0.012 ounce of gold per cubic yard and 480 parts per billion platinum (Kurtak and others, 1992). Abundant magnetite hinders gold recovery.

Shaft sinking started in the early 1900's (Kurtak and others, 1992). In 1988, a mining operation processed 1000 cubic yards per day of bank-run material through a 7-jig plant. Production of 150 ounces of gold was reported in 1988; the estimated average grade is 0.025 ounce of gold per cubic yard (Balen, 1990). Jig- and centrifuge-type concentrators have improved gold recovery. As of January 1, 2000, a block of approximately 45 state claims and 2 prospecting sites covered this deposit (Northern Associates Inc., written

communication, 2001).

Alteration:

Age of mineralization:
Quaternary placer.

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:
Shaft sinking started in the early 1900's (Kurtak and others, 1992). In 1988, a mining operation processed 1000 cubic yards per day of bank-run material through a 7-jig plant. Stream sampling by the U.S. Bureau of Mines (Balen, 1990; Kurtak and others, 1992). Mining claims include Pearly 1, Busch Creek 1-18, Got-cha and Golden Goose 1-4 (Kurtak and others, 1992). As of January 1, 2000, a block of approximately 45 state claims and 2 prospecting sites covered this deposit (Northern Associates Inc., written communication, 2001).

Production notes:
Production of 150 ounces of gold was reported in 1988; the estimated average grade is 0.025 ounce of gold per cubic yard (Balen, 1990). Jig- and centrifuge-type concentrators have improved gold recovery.

Reserves:
A large potential resource is in the upper glaciofluvial bench gravels, and significant gold is reported in the gravels 2 1/2 miles downstream from the mine (Kurtak and others, 1992).

Additional comments:
MAS/MIL number 0020760052.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992; U.S. Bureau of Mines, 1995.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Goose Creek

Site type: Occurrence

ARDF no.: TK108

Latitude: 62.4960 **Quadrangle:** TK B-2

Longitude: 147.6649

Location description and accuracy:
This placer occurrence is at an elevation of about 3,500 feet on two adjacent, north-flowing tributaries to Goose Creek,. They are about 1/2 mile east of Busch Creek in the SE1/4 sec. 19, T. 28 N., R. 10 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals: Garnet

Geologic description:
This occurrence consists of placer gold and garnet-rich black sand in 2 adjacent creeks. Bedrock is not exposed nearby but the upper parts of the creeks drain the contact between Middle to Upper Jurassic granodiorite migmatite and Upper Jurassic trondjhemite (Csejtey and others, 1978). Panned-concentrate samples concentrates have more than 10,000 parts per billion gold. Samples from the east creek have 0.566 ounce of gold per ton and 6 colors in the pans; samples from the west creek contain 0.532 ounce of gold per ton and have 5 colors in the pan (Clautice and others, 1990).

Alteration:

Age of mineralization:
Quaternary placer.

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:
Panned-concentrate samples collected by the Alaska Division of Geological and Geophysical Surveys (Clautice and others, 1990).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and others, 1978; Clautice and others, 1990.

Primary reference: Clautice and others, 1990

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Lower Black River

Site type: Occurrence

ARDF no.: TK109

Latitude: 62.4659 **Quadrangle:** TK B-2

Longitude: 147.5433

Location description and accuracy:
This placer occurrence is on Black River, 3 to 4 miles upstream from the Oshetna River. It is near the center of sec. 35, T. 28 N., R. 10 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: W

Ore minerals: Gold

Gangue minerals:

Geologic description:
Gold occurs in alluvial gravel that consists mainly of granitic cobbles with fewer gneiss cobbles (Kurtak and others, 1992) Placer samples collected by the U.S. Bureau of Mines contain up to 0.001 ounce of gold per cubic yard and 1,234 parts per million tungsten (Kurtak and others, 1992). They describe the gold in the samples as 'fine flood gold.' The small size of the placer gold particles could make recovery difficult . Exploration took place in the area from 1975 to 1979.

Alteration:

Age of mineralization:
Quaternary placer.

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:
Exploration took place in the area from 1975 to 1979. The U.S. Bureau of collected placer samples (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760097.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Oshetna River

Site type: Prospect

ARDF no.: TK110

Latitude: 62.3650 **Quadrangle:** TK B-2

Longitude: 147.4953

Location description and accuracy:
This placer prospect and the mining claims on it are on the Oshetna River, upstream from the mouth of the Little Oshetna R River . It is on the east side of sec. 1, T. 26N., R. 10 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The upper part of the Oshetna River drains an area of Tertiary volcanic rocks and remnants of Quaternary landslides and glacial deposits (Kurtak and others, 1992). Near Roaring Creek, the rocks includes Tertiary fluviatile conglomerate; below Roaring Creek, the rocks includes volcanic rocks, sandstone, and argillite of the Jurassic, Talkeetna Formation. The river contains extensive gravel deposits 100 to 1000 feet wide and 10 to 40 feet thick (Kurtak and others, 1992). The gradient of the river is 20 to 130 feet per mile. Gold occurs in the alluvial gravel deposits. Stream-sediment samples collected by the U. S. Bureau of Mines contain 2.2 parts per million gold (Balen, 1990).

Alteration:

Age of mineralization:
Quaternary placer.

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 were staked in 1973. The Bureau of Mines sampled the gravel in the river (Balen, 1990).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760055.

References:

Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Joe Creek

Site type: Prospect

ARDF no.: TK111

Latitude: 62.2717 **Quadrangle:** TK B-1

Longitude: 147.4597

Location description and accuracy:
Placer claims on Joe Creek extend from the SW1/4 sec. 8, T. 25 N., R. 11 E., Seward Meridian, to its junction with Sanona Creek. The location is at the upper end of the claims, at an elevation of about 3,750 feet. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Ag

Ore minerals: Gold

Gangue minerals:

Geologic description:
Upper Joe Creek drains an area of siltstone, shale, and cobble and boulder conglomerate of the Naknek Formation (Csejtey and others, 1978). The middle part of the creek cuts sandstone, siltstone, and conglomerate in fault contact with Talkeetna Formation volcanic rocks, sandstone, and argillite. Some ridges are capped with Tertiary fluviatile conglomerate. Gold occurs in alluvial gravel deposits. The deposits are 50 to 800 feet wide but the thickness is unknown. The gradient of the stream is 60 to 150 feet per mile (Kurtak and others, 1992). Stream-sediment samples collected by the U.S. Bureau of Mines contain up to 1 part per million silver and up to 0.0014 ounce of gold per cubic yard (Kurtak and others, 1992).

Alteration:

Age of mineralization:
Quaternary placer.

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:

At least 37 placer claims were staked between 1980 and 1983. The Bureau of Mines collected samples in the creek (Balen, 1990; Kurtak and others, 1992).

Production notes:

Reserves:

Joe Creek contains an estimated 10 million cubic yards of potentially auriferous, alluvial material; no grade estimate is available (Kurtak and others, 1992).

Additional comments:

MAS/MIL number 20760101.

References:

Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Red Creek

Site type: Prospect

ARDF no.: TK112

Latitude: 62.2558 **Quadrangle:** TK B-1

Longitude: 147.4032

Location description and accuracy:

Placer claims on Red Creek extend for about 4 miles from the south boundary of sec. 15, T. 25 N., R. 11 E., to the NW1/4 sec. 34, T. 26 N., R. 11 E., Seward Meridian. The site is plotted on Red Creek at an elevation of about 3,850 feet; it is accurate to within 1/2 mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:

Red Creek drains an area of cobble and boulder conglomerate, siltstone, and shale of the Jurassic Naknek Formaton, and sandstone, siltstone, shale, and volcanic rocks of the Talkeetna Formation(Csejtey and others, 1978). The surrounding hills are topped by Tertiary fluviatile conglomerate. The valley gravels are 50 to 500 feet wide and 6 to 40 feet thick; the stream gradient is 70 to 170 feet per mile (Kurtak and others, 1992). Stream-sediment samples collected by the U.S. Bureau of Mines contain up to 0.5 part per million silver and up to 0.0020 ounce of gold per cubic yard. A panned- concentrate sample contains 2.13 ounces of gold per cubic yard (Kurtak and others, 1992).

Twelve placer claims were staked by Earle Krinke in the 1980's (Kurtak and others, 1992). A processing plant and camp were located at the mouth of the creek and prospect pits and cuts were dug along the length of the creek. As of January 1, 2000, a block of more than 8 state claims covered this prospect (Northern Associates Inc., written communication, 2001).

Alteration:

Age of mineralization:

Quaternary placer.

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:
Twelve placer claims were staked by Earle Krinke in the 1980's (Kurtak and others, 1992). A processing plant and camp were located at the mouth of the creek and prospect pits and cuts were dug along the length of the creek (Kurtak and others, 1992). As of January 1, 2000, a block of more than 8 state claims covered this prospect (Northern Associates Inc., written communication, 2001). The stream was sampled by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:
Red Creek contains an estimated 3 million cubic yards of potentially auriferous, alluvial material; there is no estimate of the grade (Kurtak and others (1992).

Additional comments:
MAS/MIL number 20769001.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Yacko Creek

Site type: Mine

ARDF no.: TK113

Latitude: 62.2635 **Quadrangle:** TK B-1

Longitude: 147.3616

Location description and accuracy:

Placer claims extend for the length of Yacko Creek, about 6 miles. The center of these claims is near the center of sec. 11, T. 25 N., R. 11 E., Seward Meridian. The location is accurate.

Commodities:

Main: Au, Pt

Other: Pd

Ore minerals: Gold

Gangue minerals:

Geologic description:

Yacko Creek drains an area of Jurassic sedimentary and volcanic rocks, and Tertiary fluviatile conglomerate, siltstone, shale, and cobble and boulder conglomerate (Csejtey and others, 1978). The creek valley is 100 to 600 feet wide and the alluvial gravel is 6 to 50 feet thick (Kurtak and others, 1992). Placer samples collected by the U.S. Bureau of Mines contain up to 0.0032 ounce of gold per cubic yard, 56 parts per billion palladium, and 9600 parts per billion platinum (Kurtak and others, 1992). Samples of glacial gravel on the ridge between Yacko and Walker Creeks have up to 0.001 ounce of gold per cubic yard.

There are several placer camps and numerous claim blocks along Yacko Creek. Chapin (1918) reported coarse gold in that was sufficient '...to encourage further work...' (Chapin, 1918). Churn drilling started in 1954 and suction dredging in 1976. Nelchina Mines operated in 1984. The total production is about 1000 ounces, with 3 ounces of platinum recovered for every 97 ounces of gold (Kurtak and others, 1992). As of January 1, 2000, a block of approximately 45 state claims covered this mine (Northern Associates Inc., written commun., 2001). An estimated 1,000 ounces of gold was produced during 1984 from material that contained about 0.003 ounce of gold per cubic yard (Kurtak and others, 1992).

Alteration:

Age of mineralization:
Quaternary placer.

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:
There are several placer camps and numerous claim blocks along Yacko Creek. Chapin (1918) reported coarse gold in that was sufficient '...to encourage further work...' (Chapin, 1918). Churn drilling started in 1954 and suction dredging in 1976. Nelchina Mines operated in 1984. The total production is about 1000 ounces, with 3 ounces of platinum recovered for every 97 ounces of gold (Kurtak and others, 1992). Placer samples were collected by the U.S. Bureau of Mines (Kurtak and others, 1992). As of January 1, 2000, a block of approximately 45 state claims covered this mine (Northern Associates Inc., written commun., 2001).

Production notes:
An estimated 1,000 ounces of gold was produced during 1984 from material that contained about 0.003 ounce of gold per cubic yard (Kurtak and others, 1992).

Reserves:
There are an estimated 12 million cubic yards of potentially auriferous, alluvial gravel in the creek.

Additional comments:
MAS/MIL number 20760022.

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

Primary reference: Chapin, 1918

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Walker Creek

Site type: Prospect

ARDF no.: TK114

Latitude: 62.3052 **Quadrangle:** TK B-1

Longitude: 147.3342

Location description and accuracy:
This placer prospect is on Walker Creek, about 2 miles upstream from its mouth on Sanona Creek. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Ag, Pb, Pd, W, Zn

Ore minerals: Gold

Gangue minerals:

Geologic description:
Upper Walker Creek drains an area of siltstone, shale, and boulder and cobble conglomerate of the Jurassic, Naknek Formation (Csejtey and others, 1978). The lower creek drains volcanic rocks, argillite, and sandstone of the Talkeetna Formation. Gold occurs in the alluvial gravel deposits. The valley bottom is 50 to 400 feet wide and the gravel is 10 to 50 feet thick; the stream gradient is 70 to 250 feet per mile (Kurtak and others, 1992). Stream-sediment and placer samples collected by the U.S. Bureau of Mines contain up to 1 part per million silver, 5 parts per million gold, 140 parts per million tungsten, 0.19 percent lead, and 0.27 percent zinc; a sample of conglomerate contains 8 parts per billion palladium (Balen, 1990; Kurtak and others, 1992). Placer claims were staked in 1976. Exploration includes bulldozer cuts in the gravels.

Alteration:

Age of mineralization:
Quaternary placer.

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: Probably inactive

Workings/exploration:

Placer claims were staked in 1976. Exploration includes bulldozer cuts in the gravels. Stream sediment and rock samples were collected by the U.S. Bureau of Mines (Balen, 1990; Kurtak and others, 1992).

Production notes:

Reserves:

Walker Creek contains an estimated 4 million cubic yards of potentially auriferous, gravel; no grade estimate is given (Kurtak and others, 1992).

Additional comments:

MAS/MILS number 20760056.

References:

Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992; U.S. Bureau of Mines, 1995.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Fourth of July Creek; Sellick Creek

Site type: Prospect

ARDF no.: TK115

Latitude: 62.3104 **Quadrangle:** TK B-1

Longitude: 147.2759

Location description and accuracy:

Placer claims extend for the length of Fourth of July Creek, a tributary of Sanona Creek; the claims include those on Sellick Creek. This site is plotted on Fourth of July Creek about 0.5 mile below the mouth of Sanona Creek. The location is accurate. The prospect is also known as the 'Lucky Shot claims' (Kurtak and others, 1992).

Commodities:

Main: Au, Pt

Other: Ag, Pd

Ore minerals: Gold

Gangue minerals:

Geologic description:

Fourth of July Creek drains an area of Jurassic volcanic rocks of the Talkeetna Formation, and by boulder and cobble conglomerate, sandstone and siltstone of the Naknek Formation (Csejtey and others, 1978). Gold- and platinum-bearing alluvial gravels in the creek valley are 50 to 150 feet wide and 10 to 40 feet thick. The gradient of the creek is 100 to 180 feet per mile (Kurtak and others, 1992). Samples collected by the U.S. Bureau of Mines contain up to 0.0001 ounce of gold per cubic yard, 2,500 parts per billion platinum, and 22 parts per billion palladium (Kurtak and others, 1992). A representative chip sample of the Jurassic conglomerate contains 5 ppb gold, 5 parts per million silver, and 8 ppb palladium.

The prospect has been staked and explored intermittently since 1900 (Kurtak and others, 1992). In 1976, 21 claims were staked.

Alteration:

Age of mineralization:

Quaternary placer; Jurassic conglomerate with gold, silver, and palladium values.

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:
The prospect has been staked and explored intermittently since 1900 (Kurtak and others, 1992). In 1976, 21 claims were staked. Extensive sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:
Fourth of July Creek contains an estimated 2.5 million cubic yards of potentially auriferous gravel with platinum-group-element values; no grade estimate is given (Kurtak and others, 1992).

Additional comments:
MAS/MIL number 20760023.

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

Primary reference: Chapin, 1918

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Sanona Creek

Site type: Prospect

ARDF no.: TK116

Latitude: 62.3421 **Quadrangle:** TK B-1

Longitude: 147.2662

Location description and accuracy:
Placer claims on Sanona Creek, a tributary of Tyone Creek, extend for about 3 miles downstream from the mouth of Fourth of July Creek. The center of these claims is at an elevation of about 3,000 feet on Sanona Creek. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks along Sanona Creek in this vicinity consists of volcanic rocks, sandstone, and argillite of the Talkeetna Formation (Csejtey and others, 1978). Gold occurs in alluvial gravel deposits estimated to be more than 50 feet thick (Kurtak and others, 1992). The valley bottom is 400 to 800 feet wide, and the average stream gradient is less than 40 feet per mile. Thirty-three mining claims were staked in 1980 and one claim was staked in 1983 (Kurtak and others, 1992). One placer sample collected by the U.S. Bureau of Mines contains a trace of gold (Kurtak and others, 1992).

Alteration:

Age of mineralization:
Quaternary placer.

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:

Thirty-three mining claims were staked in 1980 and one claim was staked in 1983 (Kurtak and others, 1992). One placer sample collected by the U.S. Bureau of Mines contains a trace of gold (Kurtak and others, 1992).

Production notes:

Reserves:

An estimated 30 million cubic yards of potentially auriferous, gravel are in the upper part of the drainage; no grade estimate has been made (Kurtak and others, 1992).

Additional comments:

MAS/MIL number 20760102.

References:

Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Daisy Creek; Grizzly Creek

Site type: Mines

ARDF no.: TK117

Latitude: 62.2786 **Quadrangle:** TK B-1

Longitude: 147.1637

Location description and accuracy:

Placer mining occurred at several places along several miles of Daisy Creek and its tributary, Grizzly Creek (Csejtey and Miller, 1978, loc. 104). This site is plotted on Daisy Creek in the SE1/4 sec. 2, T. 25 N., R. 12 E., Seward Meridian. The location is accurate.

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Daisy Creek drains an area of Jurassic marine volcanic and sedimentary rocks (Kurtak and others, 1992). The creek contains 5- to 12-foot-thick sections of gold-bearing, alluvial gravels The stream gradient is 80 feet per mile. Stream-sediment samples collected by the U.S. Bureau of Mines contain up to 0.0009 ounce of gold per cubic yard and 480 parts per billion platinum (Kurtak and others, 1992). Gold fineness is 750. A sample of Tertiary conglomerate from Grizzly Creek contains 0.0002 ounce of gold per cubic yard.

Mining has taken place intermittently for the entire length of Daisy Creek. Some claims considered to be '.fair prospects.' (Chapin, 1918) were worked on a small scale before 1914 (Cobb, 1973 [B 1374]). But shallow groundwater hindered early mining. Claims were staked in 1954 and 1976. Exploration pits, a dragline, an excavator, hydraulic giants, and sluice boxes were present in 1988 (Kurtak and others (1992). The creek is covered by the Daisy's Glory 1-9 and Daisy Creek 1-9 Above claims.

Alteration:

Age of mineralization:

Quaternary placer; Tertiary conglomerate with gold values.

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:
Mining has taken place intermittently for the entire length of Daisy Creek. Some claims considered to be '.fair prospects.' (Chapin, 1918) were worked on a small scale before 1914 (Cobb, 1973 [B 1374]). But shallow groundwater hindered early mining. Claims were staked in 1954 and 1976. Exploration pits, a dragline, an excavator, hydraulic giants, and sluice boxes were present in 1988 (Kurtak and others (1992). Stream samples collected by the U.S. Bureau of Mines (Kurtak and others, 1992). The creek is covered by the Daisy's Glory 1-9 and Daisy Creek 1-9 Above claims.

Production notes:

Reserves:
An estimated 1.5 million cubic yards of potentially auriferous bank gravel remain in the drainage; no grade estimate is given (Kurtak and others, 1992).

Additional comments:
MAS/MIL number 20760024 and 20760075.

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

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Pumicite Creek

Site type: Prospect

ARDF no.: TK118

Latitude: 62.2974 **Quadrangle:** TK B-1

Longitude: 147.0804

Location description and accuracy:

This placer prospect is on Pumicite Creek, a local name for a west tributary of Tyone Creek. The mouth of Pumicite Creek is about 2 miles downstream from the junction of Daisy Creek and Tyone Creek. The site is plotted at about the midpoint of the creek near the center of sec. 16, T. 6 N., R. 10 W., Copper River Meridian. The location is accurate to within 1/2 mile. The prospect is covered by the Pumicite claim.

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

Pumicite Creek drains an area of volcanic rocks, sandstone, and argillite of the Talkeetna Formation (Csejtey and others, 1978). Tertiary fluviatile conglomerate occurs south of the creek. Gold occurs in the alluvial gravels. The creek is less than 2 feet wide and has a gradient of 300 feet per mile (Kurtak and others, 1992). Stream-sediment samples collected by the U.S. Bureau of Mines contain 2.5 parts per million gold (0.0001 ounce per cubic yard) and 10 parts per billion platinum (Balen, 1990).

Alteration:

Age of mineralization:

Quaternary placer.

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:
Apparently only limited sampling by the U.S. Bureau of Mines (Balen, 1990).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760066.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (northeast of VABM Sunshine)

Site type: Occurrence

ARDF no.: TK119

Latitude: 62.1639 **Quadrangle:** TK A-6

Longitude: 149.6916

Location description and accuracy:
This occurrence is located just above treeline between Sheep Creek and the South Fork of Montana Creek, approximately 600 meters northeast of VABM Sunshine. The location is accurate to within 1/4 mile. This is locality 92 of Csejtey and Miller (1978).

Commodities:

Main: Ag, Co, Cu, Ni, Zn

Other:

Ore minerals:

Gangue minerals:

Geologic description:
Paleozoic(?) greenstone (meta-andesite?) at this occurrence is altered but no sulfides are visible (Csejtey and Miller, 1978). A sample of greenstone contains 2 parts per million silver, 100 parts per million cobalt, 300 parts per million copper, 100 parts per million nickel, and 300 parts per million zinc (Miller and others, 1978).

Alteration:
The greenstone is altered but the type of alteration is not specified (Csejtey and Miller, 1978).

Age of mineralization:

Deposit model:
Basaltic copper (Cox and Singer, 1986; model 23)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
23

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (south of the south Fork, Montana Creek)

Site type: Occurrence

ARDF no.: TK120

Latitude: 62.1854 **Quadrangle:** TK A-6

Longitude: 149.6163

Location description and accuracy:

This occurrence is at an elevation of about 3,150 feet on a ridge about 1 mile south of the south fort of Montana Creek. It is about 0.6 mile south of hill 2480 in the SW1/4NE1/4 sec. 10, T. 24 N., R. 2 W., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Sn

Other: Cr, Sb

Ore minerals:

Gangue minerals:

Geologic description:

This occurrence consists of altered granitic rocks that contain xenoliths of mafic meta-volcanic rocks (Csejtey and Miller, 1978). No ore minerals are visible. A sample of metadiorite contains 2,000 parts per million chromium, 500 parts per million antimony, and 10 parts per million tin (Miller and others, 1978).

Alteration:

The granitic rocks are described as altered, but the type of alteration is not specified (Csejtey and Miller, 1978).

Age of mineralization:

Deposit model:

Tin greisen? (Cox and Singer, 1986; model 15c?)

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

15c?

Production Status: None

Site Status: Inactive

Workings/exploration:
Limited surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (north of VABM Honey)

Site type: Occurrence

ARDF no.: TK121

Latitude: 62.2463 **Quadrangle:** TK A-5

Longitude: 149.3668

Location description and accuracy:
This occurrence is at an elevation of about 3,150 feet on a south tributary of Sheep Creek; it is 3.0 miles north of VABM Honey in the NE1/4 sec. 24, T. 25 N., R. 1 W., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au, Cu, Zn

Other:

Ore minerals: Pyrite

Gangue minerals: Quartz

Geologic description:
This occurrence consists of float of pyritic, silicified granitic rocks (Csejtey and Miller, 1978). A sample of mineralized float contains 0.1 part per million gold, 700 parts per million copper, and 140 parts per million zinc (Miller and others, 1978).

Alteration:
Silicification.

Age of mineralization:

Deposit model:
Porphyry Cu-Au? (Cox and Singer, 1986; model 20c?)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
20c?

Production Status: None

Site Status: Inactive

Workings/exploration:

Limited surface sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:

Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Gunsite

Site type: Prospect

ARDF no.: TK122

Latitude: 62.1363 **Quadrangle:** TK A-5

Longitude: 149.2603

Location description and accuracy:

The Gunsite prospect is at an elevation of about 3,500 feet on the south valley wall of upper Sheep Creek, near the divide with the head of the North Fork, Kashwitna River. The prospect is in the SW1/4 sec. 15, T. 23 N., R. 1 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 35 of MacKevett and Holloway (1977).

Commodities:

Main: Cu

Other: Au

Ore minerals: Bornite, chalcopyrite

Gangue minerals: Quartz

Geologic description:

The Gunsite prospect is in Tertiary or Cretaceous granodiorite and quartz diorite that intrudes mafic igneous rocks (Csejtey and others, 1978). The deposit consists of chalcopyrite and bornite in, and adjacent to, northwest-striking, southwest-dipping quartz veins in altered granodiorite (W. Ellis, written commun., 2001). High gold values reportedly are associated with the veins. Alteration of the granodiorite ranges from slight to intense sericitization, with associated chloritization.

Exploration is limited to surface examinations. As of January 1, 2000, a large block of state mining claims and prospecting sites covered this prospect (Northern Associates Inc., written commun., 2001).

Alteration:

Alteration of the granodiorite ranges from slight to intense sericitization, with associated chloritization (W. Ellis, written commun., 2001).

Age of mineralization:

Probably Cretaceous or younger; associated or cuts granitic rocks of that age.

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: Active?

Workings/exploration:
Exploration is limited to surface examinations. As of January 1, 2000, a large block of state mining claims and prospecting sites covered this prospect (Northern Associates Inc., written commun., 2001).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760038.

References:
U.S. Bureau of Mines, 1973; MacKevett and Holloway, 1977; Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/01/2002

Site name(s): Unnamed (on a south tributary of Sheep River)

Site type: Occurrence

ARDF no.: TK123

Latitude: 62.1864 **Quadrangle:** TK A-5

Longitude: 149.0954

Location description and accuracy:
This occurrence is at an elevation of about 1,500 feet, about 0.4 mile southwest of the junction of the Sheep River and its principal south tributary. It is in the NE1/4 sec. 9, T. 24 N., R. 2 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Cr, Ni, Sb

Other: Sn

Ore minerals:

Gangue minerals:

Geologic description:
This occurrence consists of float of of altered mafic metavolcanic rocks and serpentinite (?). No sulfides are visible (Csejtey and Miller, 1978). Float samples of pyroxenite(?) contain up to 3,000 parts per million chromium, 500 parts per million nickel, 700 parts per million antimony, and 20 parts per million tin (Miller and others, 1978).

Alteration:
The mafic metavolcanic rocks are altered (Csejtey and Miller, 1978) but the type of alteration is not specified.

Age of mineralization:

Deposit model:
Komatiitic Ni-Cu (Cox and Singer, 1986; model 6a)

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):
6a

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited sampling by the U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

References:
Csejtey and Miller, 1978; Csejtey and others, 1978; Miller and others, 1978.

Primary reference: Csejtey and Miller, 1978

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Unnamed (on upper Sheep River)

Site type: Occurrence

ARDF no.: TK124

Latitude: 62.1224 **Quadrangle:** TK A-5

Longitude: 149.0883

Location description and accuracy:

This occurrence is at an elevation of about 2,950 feet on the west valley wall of upper Sheep River. The occurrence is in the southeast corner of sec. 33, T. 24 N., R. 2 E., Seward Meridian. The location is accurate to within 1/2 mile. This is locality 98 of Csejtey and Miller (1978) and Singer and others (1978).

Commodities:

Main: Ag, Cu

Other: Au

Ore minerals: Malachite

Gangue minerals:

Geologic description:

This occurrence consists of malachite-stained float of Cretaceous or Paleocene tonalite (Cobb and Csejtey, 1980). A float sample contains 10 parts per million silver, 0.35 part per million gold, and 5,000 parts per million copper (Miller and others, 1978).

Alteration:

Oxidation of copper minerals.

Age of mineralization:

Cretaceous or younger; quartz veins(?) cut plutonic rocks of this age.

Deposit model:

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

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

20c

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited surface sampling by U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

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

Primary reference: Miller and others, 1978

Reporter(s): D. Bickerstaff (U.S. Geological Survey)

Last report date: 10/01/2002

Site name(s): Unnamed (northeast of upper Sheep Creek)

Site type: Occurrence

ARDF no.: TK125

Latitude: 62.5004 **Quadrangle:** TK A-5

Longitude: 148.6171

Location description and accuracy:

This occurrence is at an elevation of about 4,400 feet, approximately 1/2 mile north-northwest of peak 6319 and 0.8 mile northeast of lake 4101. The occurrence is in the SW1/4 sec. 27, T. 24 N., R. 1 E., Seward Meridian. The location is accurate to within 1/4 mile. This is locality 96 of Csejtey and Miller (1978) and Singer and others (1978).

Commodities:

Main: Ag, Cu

Other: Au

Ore minerals: Chalcopyrite, malachite, pyrite

Gangue minerals: Quartz

Geologic description:

This occurrence consists of float of Cretaceous or Paleocene tonalite that has vein quartz with pyrite and chalcopyrite, and is stained by malachite (Csejtey and others, 1978; Csejtey and Miller, 1978). A float sample contains 20 parts per million silver, 1 part per million gold, and greater than 20,000 parts per million copper (Miller and others, 1978).

Alteration:

Oxidation of copper minerals.

Age of mineralization:

Quartz veins in Cretaceous or younger plutonic rocks.

Deposit model:

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

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

20c

Production Status: None

Site Status: Inactive

Workings/exploration:
Only limited surface sampling by U.S. Geological Survey (Miller and others, 1978).

Production notes:

Reserves:

Additional comments:

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

Primary reference: Miller and others, 1978

Reporter(s): D. Bickerstaff (U.S. Geological Survey)

Last report date: 10/01/2002

Site name(s): Upper Limits

Site type: Prospect

ARDF no.: TK126

Latitude: 62.1883 **Quadrangle:** TK A-3

Longitude: 148.3556

Location description and accuracy:
The Upper Limits placer prospect is at the head of the Talkeetna River just downstream from lake 4408. The location is accurate to within one mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The upper part of the Talkeetna River drains an area underlain by Tertiary volcanic rocks (Csejtey and others, 1978). A placer claim was staked by Franklin and Anna Jones (E.J. McFaul and others, unpub. data, 2000). The gold occurs in the alluvial gravel deposits.

Alteration:

Age of mineralization:
Quaternary placer.

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:

A placer claim was staked by Franklin and Anna Jones (E.J. McFaul and others, unpub. data, 2000).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760045.

References:

Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Upper Oshetna River

Site type: Occurrence

ARDF no.: TK127

Latitude: 62.1066 **Quadrangle:** TK A-2

Longitude: 147.9719

Location description and accuracy:
This placer occurrence on upper Oshetna River extends about a mile upstream from an elevation of 4,800 feet. The location is accurate.

Commodities:

Main: Au

Other: Zn

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the Upper Oshetna River drainage are Tertiary, felsic to mafic subaerial volcanic rocks and sub-volcanic intrusions (Csejtey and others, 1978). Gold occurs in the alluvial gravels. Stream-sediment samples collected by the U.S. Bureau of Mines contain 500-800 parts per million zinc; one sample that did not have visible gold had more than 10 parts per million gold (Kurtak and others, 1992).

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: None

Site Status: Inactive

Workings/exploration:
Stream-sediment sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760100.

References:
Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Nowhere Creek

Site type: Prospect

ARDF no.: TK128

Latitude: 62.2240 **Quadrangle:** TK A-2

Longitude: 147.9593

Location description and accuracy:
This placer prospect extends for about 2 miles of Nowhere Creek, beginning about 1 1/2 miles upstream from its mouth on the Oshetna River. The prospect is centered in the SW1/4 sec. 27, T. 25 N., R. 8 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Ag, Hg

Ore minerals: Gold

Gangue minerals:

Geologic description:
Gold occurs in alluvial gravels in Nowhere Creek. The rocks south of the creek are Tertiary volcanic rocks and fluvial conglomerate; the rocks north of the creek are Jurassic volcanic rocks, sandstone, and argillite, intruded by quartz diorite (Csejtey and others, 1978). Quaternary glacial deposits locally cap the bedrock. The alluvial gravels are from 5 feet to more than 40 feet thick and 50 to 100 feet wide. The stream gradient is 100 to 300 feet per mile (Kurtak and others, 1992). Stream-sediment samples contain up to 0.5 part per million silver, 35 parts per million mercury, and 8.6 parts per billion gold; crystalline gold is locally present (Balen, 1990). Placer claims were staked during 1979 by Amend Mining Co.

Alteration:

Age of mineralization:
Quaternary placer.

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 were staked during 1979 by Amend Mining Co. Sampling by U.S. Bureau of Mines (Balen, 1990).

Production notes:

Reserves:
An estimated 3 million cubic yards of potentially auriferous gravel occurs in the drainage. No grade estimate is given (Kurtak and others, 1992).

Additional comments:
MAS/MIL number 20760099.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Landslide Creek

Site type: Prospect

ARDF no.: TK129

Latitude: 62.2380 **Quadrangle:** TK A-2

Longitude: 147.8612

Location description and accuracy:
Placer claims on Landslide Creek, a south tributary to the Oshetna River, extend upstream for about 2 1/2 miles from its mouth. The coordinates are at an elevation of about 3,700 feet. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
Upper Landslide Creek drains an area of Tertiary volcanic rocks and Quaternary landslide deposits (Kurtak and others, 1992). The lower part of the drainage is underlain by Talkeetna Formation volcanic rocks, sandstone(?), and argillite; Tertiary fluviatile conglomerate; a Jurassic intrusion; and Quaternary landslide and glacial deposits. Gold occurs in the alluvial gravel deposits which are up to 400 feet wide and 20 to 40 feet thick (Kurtak and others, 1992). A placer sample collected by the U.S. Bureau of Mines contains no gold (Kurtak and others, 1992).

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: None

Site Status: Inactive

Workings/exploration:

Twenty-five claims were staked in 1982 (Kurtak and others, 1992). A placer sample collected by the U.S. Bureau of Mines contains no gold (Kurtak and others, 1992).

Production notes:

Reserves:

An estimated 1.5 million cubic yards of alluvial material are in the drainage (Kurtak and others, 1992).

Additional comments:

MAS/MIL number 20760115.

References:

Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Mazuma Creek; Caribou Creek

Site type: Mine

ARDF no.: TK130

Latitude: 62.0467 **Quadrangle:** TK A-2

Longitude: 147.8608

Location description and accuracy:
Placer claims on Mazuma Creek extend from an elevation of about 4,550 feet downstream to Caribou Creek, and then for about a half mile on Caribou Creek. The site is plotted near the center of the mining on Mazuma Creek at an elevation of about 4,050 feet. The location is accurate. This is locality 99 of Csejtey and Miller (1978).

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the drainage of Mazuma Creek are Tertiary conglomerate and volcanic rocks (Csejtey and others, 1978). Several placer claims were staked on Mazuma and Caribou Creeks and a small amount of gold has reportedly been recovered (Cobb, 1973 [B 1374]). As of January 1, 2000, a large block of state claims covered this site (Northern Associates Inc., written communication, 2001).

Alteration:

Age of mineralization:
Quaternary placer.

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 were staked on Mazuma and Caribou Creeks and a small amount of gold has reportedly been recovered (Cobb, 1973 [B 1374]). As of January 1, 2000, a large block of state claims covered this site (Northern Associates Inc., written communication, 2001).

Production notes:

A small amount of gold has reportedly been recovered (Cobb, 1973 [B 1374]).

Reserves:

Additional comments:

MAS/MIL number 20760025 and 20760037.

References:

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

Primary reference: Cobb, 1973 (B 1374)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Gold Creek

Site type: Mine

ARDF no.: TK131

Latitude: 62.2306 **Quadrangle:** TK A-2

Longitude: 147.7414

Location description and accuracy:

The mine is a placer on the middle fork of upper Gold Creek, a tributary of the Oshetna River. Mining cuts on the creek are at elevations of about 4, 500 feet in the Talkeetna Mountains A-2 quadrangle, and about 3,200 feet in the Talkeetna Mountains B-2 quadrangle. The site is arbitrarily located at the 4,500-foot cut in the NW1/4 sec. 26, T. 25 N., R. 9 E., Seward Meridian. The location is accurate to within 1/4 mile. This is location 56 of Csejtey and Miller (1978).

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold, magnetite, psilomelane

Gangue minerals: Garnet

Geologic description:

Alluvial gravels in Gold Creek overlie volcaniclastic breccia, porphyritic basalt, andesite, felsic tuff, sandstone, and argillite of the Jurassic Talkeetna Formation (Kurtak and others, 1992). The ridge west of the creek consists of Tertiary fluviatile conglomerate overlain by Tertiary volcanic rocks. The creek gravels are up to 50 feet thick and average 15 feet thick; the gradient of the creek is about 100 to 200 feet per mile (Kurtak and others, 1992). In addition to gold, the concentrates contain garnet, magnetite, and psilomelane. Placer samples collected by the U.S. Bureau of Mines contain up to 3.1 parts per million platinum and up to 0.0043 ounce of gold per cubic yard (Kurtak and others, 1992). The gold fineness varies from 770 to 850.

Several placer claims are on Gold Creek, some staked as recently as 1980 (Kurtak and others, 1992). Mining cuts are at elevations of about 4,500 and 3, 200 feet. Coarse gold was reported to have been found in 1914 (Chapin, 1918). Suction dredging occurred in 1975 and a small placer mine operated in 1976.

Alteration:

Age of mineralization:
Quaternary placer.

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 are on Gold Creek, some staked as recently as 1980 (Kurtak and others, 1992). Mining cuts are at elevations of about 4,500 and 3, 200 feet. Coarse gold was reported to have been found in 1914 (Chapin, 1918). Suction dredging occurred in 1975 and a small placer mine operated in 1976. Limited placer samples collected by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:
Suction dredging occurred in 1975 and a small placer mine operated in 1976. The amount of gold recovered has not been made public.

Reserves:
An estimated 1 million cubic yards of potentially auriferous placer gravel are in the basin of Gold Creek (Kurtak and others, 1992). There are no estimates of the grade.

Additional comments:
MAS/MIL number 20760021.

References:
Chapin, 1915; Chapin, 1918; Cobb, 1972 (MF 370); MacKevett and Holloway, 1977; Csejtey and Miller, 1978; Csejtey and others, 1978; Singer and others, 1978; Cobb and Csejtey, 1980; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Little Oshetna River

Site type: Prospect

ARDF no.: TK132

Latitude: 62.1857 **Quadrangle:** TK A-2

Longitude: 147.6911

Location description and accuracy:
This placer prospect is on the Little Oshetna River, 3 miles upstream from the mouth of Conglomerate Creek. The location is accurate to within 1/2 mile.

Commodities:

Main: Ag, Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the drainage of the Little Oshetna river are volcanic rocks, sandstone, and siltstone of the Talkeetna Formation; sandstone, and cobble and boulder conglomerate of the Naknek Formation, that locally overlies conglomerate of the Chinitna Formation; and Tertiary volcanic rocks that overlie Tertiary fluviatile conglomerate (Csejtey and others, 1978). Gold occurs in the alluvial gravel deposits. The lower half of the river has extensive accumulations of gravel up to 50 feet thick and 2000 feet wide. The stream gradient averages 100 feet per mile but it is only 50 feet per mile in the lower section (Kurtak and others, 1992).

Placer claims were staked in 1976 by Black Creek Mining Co., and 1982 by R. Swavely. Stream-sediment samples collected by the U.S. Bureau of Mines contain 1 part per million silver, 880 parts per billion platinum, and 0.0001 ounce of gold per cubic yard (Kurtak and others, 1992). The gold in one sample was 764 fine.

Alteration:

Age of mineralization:
Quaternary placer.

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 were staked in 1976 by Black Creek Mining Co., and 1982 by R. Swavely. Stream-sediment sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:
Little Oshetna River contains an estimated 60 million cubic yards of potentially auriferous alluvium; there is no estimate of grade (Kurtak and others, 1992).

Additional comments:
MAS/MIL number 20760054.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Unnamed (Little Nelchina North)

Site type: Occurrence

ARDF no.: TK133

Latitude: 62.1288 **Quadrangle:** TK A-2

Longitude: 147.5014

Location description and accuracy:

This occurrence is said to be at an elevation of about 4,150 feet, north of the Little Nelchina River and 4 miles east of Horsepasture Pass (Baedecker and others, unpub. data, 1998). It is in the NE1/4 sec. 31, T. 24 N., R. 11 E., Seward Meridian, but the accuracy of the location is unknown.

Commodities:

Main: Au, Zn

Other: Cr, Cu

Ore minerals: Magnetite

Gangue minerals:

Geologic description:

This occurrence consists of a magnetite-rich part of an Upper Jurassic sandstone (Baedecker and others, unpub. data, 1998). U.S. Geological Survey rock samples contain up to 1,000 parts per million zinc, 0.4 part per million gold, 290 parts per million chromium, and 280 parts per million copper.

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:

Only limited surface sampling by U.S. Geological Survey.

Production notes:

Reserves:

Additional comments:

References:

Csejtey and others, 1978.

Primary reference: This record

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/04/2002

Site name(s): Red Fox Creek

Site type: Mine

ARDF no.: TK134

Latitude: 62.1733 **Quadrangle:** TK A-1

Longitude: 147.4395

Location description and accuracy:

Placer mine workings on Red Fox Creek extend 5 miles upstream from its mouth. The workings are centered in the NE1/4 sec. 16, T. 24 N., R. 11 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Au, Pt

Other: Pd

Ore minerals: Ferroplatinum, gold

Gangue minerals:

Geologic description:

The bottom of a mining cut on upper Red Fox Creek is shale; most of its drainage area is underlain by siltstone, shale, and cobble and pebble conglomerate of the Naknek Formation (Csejtey and others, 1978). A prominent cliff at the lower end of the drainage is conglomerate. Gold and platinum occur in the alluvial gravel. The gravels are 10 feet thick and up to 100 feet wide near the head of the creek (Kurtak and others, 1992). The stream gradient is 120 feet per mile. Samples collected by the U.S. Bureau of Mines contain up to 0.212 ounce of gold per cubic yard, 7,000 parts per billion (ppb) platinum, and 28 ppb palladium (Kurtak and others, 1992). Ferroplatinum occurs in the concentrates.

Claims were staked between 1977 and 1982 and a mining license was granted in 1983. There are minor workings at the mouth of the creek, and test cuts and stream diversions are along its length. Bonanza Mining Company had a camp and mining operation near the head of the creek (Kurtak and others, 1992). As of January 1, 2000, a block of 6 state claims covered this site and Tyone Creek (Northern Associates Inc., written communication , 2001). An estimated 200 ounces of gold was produced from 10,000 cubic yards of gravel that were mined near the head of the creek, possibly in the 1980's (Kurtak and others, 1992).

Alteration:

Age of mineralization:
Quaternary placer.

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:
Claims were staked between 1977 and 1982 and a mining license was granted in 1983. There are minor workings at the mouth of the creek, and test cuts and stream diversions are along its length. Bonanza Mining Company had a camp and mining operation near the head of the creek (Kurtak and others, 1992). As of January 1, 2000, a block of 6 state claims covered this site and Tyone Creek (Northern Associates Inc., written communication , 2001). Placer sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:
An estimated 200 ounces of gold was produced from 10,000 cubic yards of gravel that were mined near the head of the creek, possibly in the 1980's (Kurtak and others, 1992).

Reserves:
An estimated resource of 500,000 cubic yards of potentially auriferous, gravel is in upper Red Fox Creek near Bonanza Mining Company's workings. An estimated 2 million cubic yards is in the lower part of the creek. No grade estimates are available (Kurtak and others, 1992).

Additional comments:
MAS/MIL number 20760084.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Buchia Creek

Site type: Prospect

ARDF no.: TK135

Latitude: 62.1460 **Quadrangle:** TK A-1

Longitude: 147.4117

Location description and accuracy:
Placer claims extend for about 4 miles on Buchia Creek , a tributary of Tyone Creek, from between about 3,600 and 4,200 feet in elevation. The claims are centered in the SE1/4 sec. 22, T. 24 N., R. 11 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the Buchia Creek drainage are siltstone, shale, and cobble and boulder conglomerate of the Jurassic Naknek Formation (Csejtey and others, 1978). Tertiary fluviatile conglomerate is present on the ridge in its headwaters. White Hill, to the south, is underlain by folded and faulted Cretaceous sandstone, siltstone, and claystone, and by limestone of the Nelchina Formation. Gold occurs in the alluvial gravel that is up to 15 feet thick; the creek gradient averages 400 feet per mile (Kurtak and others, 1992). Stream-sediment samples collected by the U.S. Bureau of Mines contain up to 0.0015 ounce of gold per cubic yard and 50 parts per billion platinum (Kurtak and others, 1992). Samples from tributaries draining White Hill contain up to 0.0015 ounce of gold per cubic yard. The gold fineness varies from 826 to 858. Placer claims were active from 1979 to 1983.

Alteration:

Age of mineralization:
Quaternary placer.

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 were active from 1979 to 1983. Stream-sediment sampling by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:
An estimated 1 million cubic yards of potentially auriferous, alluvium are in the drainage; no grade estimate is given (Kurtak and others, 1992).

Additional comments:
MAS/MIL number 20760103.

References:
Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Unnamed (in Horn Mountains southwest of Cameron Pass)

Site type: Prospect

ARDF no.: TK136

Latitude: 62.0242 **Quadrangle:** TK A-1

Longitude: 147.3542

Location description and accuracy:
This site is a 7-mile-long belt that extends southwest from the head of North Creek, into the Anchorage quadrangle. The coordinates are at about the center of this belt which is near the center of sec. 1, T. 22 N., R. 11 E., Seward Meridian. The location is accurate. This is locality 112 of Csejtey and Miller (1978).

Commodities:

Main: Zeolites

Other:

Ore minerals: Analcime, heulandite, laumonite, mordenite

Gangue minerals: Calcite, feldspar, montmorillonite, quartz

Geologic description:
This deposit is a 7-mile-long belt that consists of zeolite minerals in the Lower Jurassic, Talkeetna Formation (Csejtey and others, 1978). The deposit consists of flat-lying, normally graded, zeolitized tuff beds interlayered with lava flows. The zeolite minerals are analcime, heulandite, laumontite, and mordenite; they are accompanied by calcite, feldspar, montmorillonite, and quartz. The mordenite content ranges from 26 to 72 percent, and averages 49 percent (Hawkins, 1976). According to Hawkins, this deposit is of economic size and grade and warrants development.

Alteration:
Zeolitization of tuff beds.

Age of mineralization:
Jurassic.

Deposit model:

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

Production Status: None

Site Status: Inactive

Workings/exploration:
Only surface examination.

Production notes:

Reserves:

Additional comments:

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

Primary reference: Hawkins, 1976

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): Tyone Creek

Site type: Mine

ARDF no.: TK137

Latitude: 62.1651 **Quadrangle:** TK A-1

Longitude: 147.3523

Location description and accuracy:

Placer mining on Tyone Creek is concentrated above its junction with Buchia Creek, near the center of sec. 13, T. 24 N., R. 11 E., Seward Meridian. The location is accurate to within 1/4 mile.

Commodities:

Main: Au

Other: Pd, Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:

The rocks in Tyone Creek above Buchia Creek are siltstone, shale, and cobble and boulder conglomerate of the Naknek Formation; below Buchia Creek, the rocks are Cretaceous sandstone, siltstone, and claystone, Quaternary glaciofluvial deposits, and Tertiary fluviatile conglomerate (Csejtey and others, 1978). Tertiary conglomerate occurs in the headwaters. area. Gold and platinum occur in the alluvial gravel deposits, which range from 100 to 1000 feet wide and 6 to 50 feet thick (Kurtak and others, 1992). The stream gradient averages 50 feet per mile. Stream-sediment samples collected by the U.S. Bureau of Mines contain up to 4 parts per million platinum, 280 parts per billion palladium, and 0.0032 ounce of gold per cubic yard (Balen, 1990). Gold fineness ranges from 683 to 868, and averages 807 (Kurtak and others, 1992).

Reports by prospectors tell of gold plates worth 1 to 5 cents apiece in the headwaters of the Tyonek River (Paige and Knopf, 1907). As of January 1, 2000, a block of 6 state claims covered this site and Red Fox Creek (Northern Associates Inc., written communication, 2001). About 30,000 cubic yards of gravel was mined from Tyone Creek near the mouth of Red Fox Creek; the grade is unknown (Kurtak and others, 1992).

Alteration:

Age of mineralization:

Quaternary placer.

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:
Stream-sediment sampling by the U.S. Bureau of Mines (Kurtak and others, 1992). As of January 1, 2000, a block of 6 state claims covered this site and Red Fox Creek (Northern Associates Inc., written communication, 2001).

Production notes:
About 30,000 cubic yards of gravel was mined from Tyone Creek near the mouth of Red Fox Creek; the grade is unknown (Kurtak and others, 1992). Reports by prospectors tell of gold plates worth 1 to 5 cents apiece in the headwaters of the Tyonek River (Paige and Knopf, 1907).

Reserves:
An estimated 20 million cubic yards of potentially auriferous, alluvial material are in the upper section of Tyone Creek; there is no estimate of the grade (Kurtak and others, 1992).

Additional comments:
MAS/MIL number 20760036.

References:
Paige and Knopf, 1907; Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

Site name(s): North Creek

Site type: Mine

ARDF no.: TK138

Latitude: 62.0145 **Quadrangle:** TK A-1

Longitude: 147.3106

Location description and accuracy:
Placer mining has occurred on North Creek, a west tributary to Crooked Creek at several locations. The coordinates are near the midpoint of the creek at an elevation of about 3,750 feet, near the southeast corner of sec. 6, T. 22 N., R. 12 E., Seward Meridian. The location is accurate.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the drainage of North Creek drains are volcanic and sedimentary rocks of the Lower Jurassic, Talkeetna Formation (Csejtey and others, 1978). The gold placers occurs in Tertiary(?) alluvial gravel . Fine gold also occurs in Quaternary glacial and glaciofluvial deposits in the vicinity, but not in mineable quantities (Cobb, 1973 [B 1374]). Intermittent, small-scale mining occurred from 1912 to at least 1961 (Cobb, 1973).

Alteration:

Age of mineralization:
Tertiary(?) and Quaternary placers.

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:
Intermittent, small-scale mining occurred from 1912 to at least 1961 (Cobb, 1973).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760027.

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

Primary reference: Cobb, 1973 (B 1374)

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Albert Creek

Site type: Mine

ARDF no.: TK139

Latitude: 62.0021 **Quadrangle:** TK A-1

Longitude: 147.3069

Location description and accuracy:
Placer claims on Albert and Crooked Creeks extend for about six miles from the E1/2 sec. 12, T. 22 N., R. 11 E., to the SW1/4 sec. 23, T. 23 N., R. 12 E., Seward Meridian. This mine is on Albert Creek, in the SW1/4 sec. 8, T. 22 N., R. 12 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Pt, W

Ore minerals: Gold, scheelite

Gangue minerals:

Geologic description:
The rocks in the Albert Creek-Crooked Creek area are volcanic and sedimentary rocks of the Lower Jurassic, Talkeetna Formation (Csejtey and others, 1978). Gold occurs in stream gravels and low benches (Nokleberg and others, 1987). Fine gold also occurs in glacial and glaciofluvial deposits. Much of the gold is within 3 feet of bedrock and on the bedrock surface. Scheelite and platinum have been reported in some samples (Nokleberg and others, 1987). The gold is probably derived from gold-quartz veins in metagray-wacke and phyllite of the Upper Cretaceous Valdez Group.

Several placer claims are on Albert Creek (a tributary of Crooked Creek) and on Crooked Creek. Gold was discovered on Albert Creek in 1912, resulting in a small stam-pede; no other valuable deposits were found, but activity on Albert Creek continued to at least 1961 (Cobb, 1973 [B 1374]). One or more claims on Albert Creek produced 150 ounces of gold in 1914 (Chapin, 1918).

Alteration:

Age of mineralization:
Quaternary placer.

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 are on Albert Creek (a tributary of Crooked Creek) and on Crooked Creek. Gold was discovered on Albert Creek in 1912, resulting in a small stampede; no other valuable deposits were found, but activity on Albert Creek continued to at least 1961 (Cobb, 1973 [B 1374]). The claim blocks include the Timothy Bench Discovery, the Timothy Bench Above Discovery, and the Timothy Bench Below Discovery.

Production notes:
One or more claims on Albert Creek produced 150 ounces of gold in 1914 (Chapin, 1918).

Reserves:

Additional comments:
MAS/MIL number 20760026.

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

Primary reference: Chapin, 1918

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Sleigh Creek

Site type: Prospect

ARDF no.: TK140

Latitude: 62.0067 **Quadrangle:** TK A-1

Longitude: 147.2698

Location description and accuracy:
This placer prospect is on Sleigh Creek, 1/2 mile upstream from its mouth on Crooked Creek. The location is accurate to within 1/2 mile. Alternate names include Cottonwood-Sleigh Creek and Bonanza 1-8 claims.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the drainage of Sleigh Creek are volcanic and sedimentary rocks of the Lower Jurassic, Talkeetna Formation (Csejtey and others, 1978). Gold occurs in the alluvial gravel. Placer gold was reportedly found in 1913 and a claim was staked (Martin and Mertie, 1914).

Alteration:

Age of mineralization:
Quaternary placer.

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 gold was reportedly found in 1913 and a claim was staked (Martin and Mertie, 1914).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760029.

References:

Martin and Mertie, 1914; Csejtey and others, 1978; Cobb and Csejtey, 1980.

Primary reference: Martin and Mertie, 1914

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): White Sand Creek

Site type: Prospect

ARDF no.: TK141

Latitude: 62.2002 **Quadrangle:** TK A-1

Longitude: 147.2676

Location description and accuracy:
Placer claims on White Sand Creek, a west tributary of Tyone Creek, extend from an elevation of about 3,250 to about 3,700 feet. The site is plotted at about the center of these claims. The location is accurate to within one mile.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the drainage of upper White Sand Creek are cobble and boulder conglomerate, siltstone, and shale of the Naknek Formation (Csejtey and others, 1978). Cretaceous sandstone, siltstone, and shale, and Tertiary fluviatile conglomerate occur on the ridges nearby. The lower part of the creek cuts Quaternary glacial deposits. Prominent white cliffs here are composed of loess. The average creek gradient is 150 feet per mile. Gold occurs in alluvial gravel deposits of unknown thickness. Eight claims were staked in 1978; 4 claims were staked in 1980 (Kurtak and others, 1992). Placer samples collected by the U.S. Bureau of Mines contain up to 0.0008 ounce of gold per cubic yard (Kurtak and others, 1992). The gold is 839 fine.

Alteration:

Age of mineralization:
Quaternary placer.

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:

Eight claims were staked in 1978; 4 claims were staked in 1980 (Kurtak and others, 1992). Stream samples were collected by the U.S. Bureau of Mines (Kurtak and others, 1992).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760104.

References:

Csejtey and others, 1978; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Crooked Creek

Site type: Mine

ARDF no.: TK142

Latitude: 62.0618 **Quadrangle:** TK A-1

Longitude: 147.2090

Location description and accuracy:
This placer mine is located on Crooked Creek, 1 1/2 miles downstream from the mouth of Willow Creek and about 3 miles southwest of the Nelchina townsite. The location is accurate.

Commodities:

Main: Au

Other:

Ore minerals: Gold

Gangue minerals:

Geologic description:
The rocks in the drainage of Crooked Creek are Jurassic volcanic and sedimentary rocks (Csejtey and others, 1978). Gold occurs in the alluvial gravel. Some of it is in a blue-gray gravel bed 9 feet thick and about 100 feet below the surface (Chapin, 1918). The mine includes minor surface workings and a 180-foot-deep shaft that did not hit bedrock. The blue-gray gravel from 97 to 106 feet in the shaft contains '.a few colors of gold to the pan' (Chapin, 1918).

Alteration:

Age of mineralization:
Quaternary placer.

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:

The mine includes minor surface workings and a 180-foot-deep shaft that did not hit bedrock. The blue-gray gravel from 97 to 106 feet in the shaft contained '.a few colors of gold to the pan' (Chapin, 1918).

Production notes:

Reserves:

Additional comments:

MAS/MIL number 20760028.

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

Primary reference: Chapin, 1918

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/03/2002

Site name(s): Nicolie Creek

Site type: Prospect

ARDF no.: TK143

Latitude: 62.1757 **Quadrangle:** TK A-1

Longitude: 147.1964

Location description and accuracy:
Placer claims on Nicolie Creek extend upstream from its mouth for about 2 miles. They are in the S1/2 sec. 11, T. 24 N., R. 12 E., Seward Meridian. The location is accurate to within 1/2 mile.

Commodities:

Main: Au

Other: Pt

Ore minerals: Gold

Gangue minerals:

Geologic description:
Nicolie Creek drains an area of sandstone, siltstone, and claystone (Csejtey and others, 1978). The surrounding hills are Tertiary fluviatile conglomerate. The creek is 4 miles long and has an average gradient of 100 feet per mile. Placer claims were staked in 1973 and 1982 (Kurtak and others, 1992). The gold occurs in the alluvial gravel deposits. Stream-sediment samples collected by the U.S. Bureau of Mines contain 7 parts per million gold and 130 parts per billion platinum (Balen, 1990). Gold fineness ranges from 388 to 643.

Alteration:

Age of mineralization:
Quaternary placer.

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 were staked in 1973 and 1982 (Kurtak and others, 1992). Stream-sediment sampling by the U.S. Bureau of Mines (Kurtak and others, 1991).

Production notes:

Reserves:

Additional comments:
MAS/MIL number 20760078.

References:
Csejtey and others, 1978; Balen, 1990; Kurtak and others, 1992.

Primary reference: Kurtak and others, 1992

Reporter(s): R.K. Rogers (U. S. Geological Survey contractor)

Last report date: 10/02/2002

References

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 plate, scale 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 plates, scale 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 plate.

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, 1919, 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 plates, scale 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 plate, scale 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, 20 p, 1 plate, scale 1:250,000.

Csejtey, Bela, Jr., Nelson, W.H., Jones, D.L., Silberling, N.J., Dean, R.M., Morris, M.S., Lanphere, M.A., Smith, J.G., and Silberman, M.L, 1978, Reconnaissance geologic map and geochronology, Talkeetna Mountains quadrangle, north part of the Anchorage quadrangle, and southwest part of the Healy quadrangle, Alaska: U.S. Geological Survey Open-File Report 78-558A, 60 p., scale 1:250,000.

Drake, Jeff, and Layer, Paul, 2001, 40Ar/39Ar analyses from the Iron Creek area, Talkeetna Mountains, quadrangle, Alaska: Alaska Division of Geological and Geophysical Surveys Raw Data File PIR 2001-3, 12 p.

Fechner, Steven A., 1986, 1984 sample results for Bureau of Mines site-specific mineral investigations within the Yentna Mining District, Alaska: U.S. Bureau of Mines Open-File Report 28-86, 53 p.

Fechner, Steven A. and Herzog, D.A., 1990, Gold- and PGM-bearing conglomerate of the Valdez Creek Mining District, Alaska: U.S. Bureau of Mines Open-File Report 12-90, 53 p., 2 plates, scale 1: 126,720.

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 Garmezy, 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 plates, scale 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 plates, scale 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, 99 p., 1 plate, scale 1:1,000,000.

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., Garmezy, 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 plates, 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 plates, scale 1:24,000.

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 plate, scale 1:63,360.

Schmidt, J.M., Werdon, M.B., and Wardlaw, B., 2002, New mapping near Iron Creek, Talkeetna Mountains, indicates presence of Nikolai Greenstone: Alaska Division of Geological and Geophysical Surveys Short Notes on Alaska Geology 2001, 10 mss, 3 fig., 1 table, in press.

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, 33 p., 1 plate, scale 1:250,000.

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 836, 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 Trible, 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.

Warner, J.D., and Dahlin, D., 1989, Tin occurrences associated with the Ohio Creek pluton, Chulitna region, Valdez Creek Mining District, South-Central Alaska: U.S. Bureau of Mines Open-File Report 05-89, 25 pp.

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.

Werdon, M.B., Riehle, J.R., Schmidt, J.M., Newberry, R.J., and Pessel, G.H., 2000, Major oxide, minor oxide, trace element, and geochemical data from rocks collected in 1999 in the Iron Creek area, Talkeetna Mountains B-5 quadrangle, Alaska: Alaska Division of Geological and Geophysical Surveys Raw Data File PIR 2000-2, 31 p., 2 sheets, scale 1:63,360.

Werdon, M.B., Riehle, J.R., Schmidt, J.M., Newberry, R.J., and Pessel, G.H., 2001, Geologic map of the Iron Creek area, Talkeetna Mountains B-5 quadrangle, Alaska: Alaska Division of Geological and Geophysical Surveys Raw Data File PIR 2000-7, 1 sheet, scale 1:63,360.