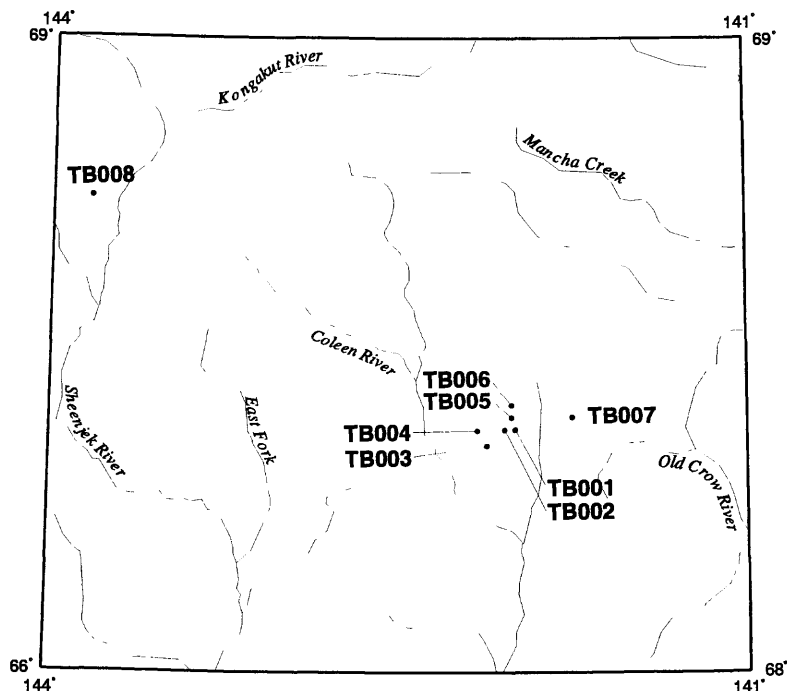


## Table Mountain quadrangle

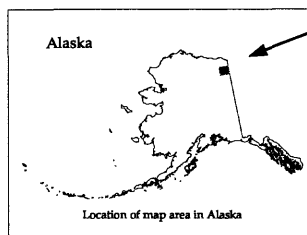
Descriptions of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for a description of the information content of each field in the records. The data presented here are maintained as part of a statewide database on mines, prospects and mineral occurrences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



*Distribution of mineral occurrences in the Table Mountain 1:250,000-scale quadrangle, eastern Alaska*

This and related reports are accessible through the USGS World Wide Web site <http://www-mrs-ak.wr.usgs.gov/ardf>. Comments or information regarding corrections or missing data, or requests for digital retrievals should be directed to the author(s) of this compilation:

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



**Site: Galena Creek - East****Type:** Occurrence**ARDF no.** TB001**Latitude:** 68.381**Quadrangle:** TB B-2**Longitude:** 141.992**Location description and accuracy:**

Location plotted is locality 502 of Barker (1981, pl. A-3), from which massive galena and barite samples were taken during 1977 USBM field work; near crestline of Bear Mountain ridge on east side of Galena Creek; known to within 500 ft (152.4 m).

**Commodities:****Main:** Pb, Ag, Cu, Ba**Other:****Ore minerals:** Argentiferous galena, chalcopyrite?, malachite, and barite**Gangue minerals:****Geologic description:**

Well-defined northwest-trending quartz vein system about 6.5 ft (2 m) wide by 1500 ft (454 m) long, contains massive galena, malachite and barite; altered calcareous siltstone host rock contains minor disseminated galena and malachite. Vein contains up to 21% Cu, though malachite is the only Cu mineral noted in more recent reports; older reports list presence of chalcopyrite in greenstone in general vicinity. Geologic setting is structural dome containing Precambrian-Devonian siltstone, phyllite and greenstone which overlie quartzite (possibly Neurokpuuk Fm.) and are overlain by thick Devonian conglomerate (Kanayut and/or Kekiktuk Fm.) and Mississippian shale (Kayak Shale). Siltstone more calcareous and less hornfelsed, and has more associated greenstone than bedrock west of Galena Cr. (TB002), and has more intense but less widespread propylitic alteration. Vein system follows contact with underlying massive white quartzite (Barker, 1981, p. 33-40, 106-137).

**Alteration:**

Intensely propylitized locally

**Workings/Exploration:**

Rock sample 2502 has massive galena and barite, and contains 21% Cu, 1.2% Pb, 5500 ppm Zn, 170 ppm Ag, and 33 ppm Mo, nearby samples 2511 and 2512 have up to 10.3% Cu, 1.1% Pb, 1200 ppm Zn, 3.3 ppm Ag, and 22 ppm Mo (Barker, 1981, p. 140).

**Age:****Deposit model:**

Lode; polymetallic vein

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

22c

**Production:** No**Status:** Inactive**Production notes:****Reserves:**

**Additional comments:**

**References:**

Barker, 1981; Barker, 1978; Grybeck, 1977; Brosge and Reiser, 1976; Brosge and Reiser, 1977; USGS, 1977; Hartman, 1973; Cobb and others, 1981, OFR 81-767; Brosge and Reiser, 1968

**Primary reference:** Barker, 1981

**Reporter:** K.R. Leonard; D.F. Huber; J.M. Schmidt; J.H. Dover

**Reporter affiliation:** USGS

**Last report date:** 9/20/96

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**Site: Galena Creek-West****Type:** Occurrence**ARDF no.** TB002**Latitude:** 68.38**Quadrangle:** TB B-2**Longitude:** 142.037**Location description and accuracy:**

Location plotted is locality 510 of Barker (1981, pl. A-3), on nose of spur ridge of Bear Mountain on west side of Galena Creek; known to within 500 ft (152.4 m).

**Commodities:****Main:** Zn, Pb, Cu**Other:****Ore minerals:** Sphalerite, galena, chalcopyrite?, malachite**Gangue minerals:** Quartz**Geologic description:**

Sphalerite and galena in widely scattered veins and replacements in hornfelsed and weakly propylitized siltstone, with subordinate greenstone and phyllite; sulfides present in 760 m by 1060 m area along ridge west of Galena Creek; more Zn than Pb in samples. Ag negligible; sulphides rare in phyllite, and malachite-staining common in greenstone. Older reports report presence of chalcopyrite in area. Geologic setting is structural dome containing Precambrian-Devonian siltstone, phyllite and greenstone which overly quartzite (possibly Neurokpuuk Fm.) and are overlain by thick Devonian conglomerate (Kanayut and/or Kekiktuk Fm.) and Mississippian shale (Kayak Shale). Rocks intruded by Early Tertiary rhyolitic dikes; mineralization confined to greenstone-phyllite-siltstone unit; pyrite and Fe-oxides common along margins of rhyolite dikes (Barker, 1981, p. 33-40, 106-37).

**Alteration:**

Weak propylitization.

**Workings/Exploration:**

High-grade sample 510 contains 24 ppm Cu, 13,000 ppm Pb, 35,000 ppm Zn, 2.7 ppm Ag, 10 ppm Mo; nearby samples 506-8 have up to 1000 ppm Cu, 2600 ppm Pb, 2600 ppm Zn, 0.6 ppm Ag, and 12 ppm Mo (Barker, 1981, p. 140).

**Age:****Deposit model:**

Lode; polymetallic vein

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

22c

**Production:** No**Status:** Inactive**Production notes:****Reserves:****Additional comments:**

**References:**

Barker, 1981; Barker, 1978; Grybeck, 1977; Brosge and Reiser, 1976; Brosge and Reiser, 1977; USGS, 1977; Hartman, 1973; Cobb and others, 1981, OFR 81-767; Brosge and Reiser, 1968

**Primary reference:** Barker, 1981

**Reporter:** K.R. Leonard; D.F. Huber; J.M. Schmidt ; J.H. Dover

**Reporter affiliation:** USGS

**Last report date:** 9/20/96

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**Site: Unnamed****Type:** Occurrence**ARDF no.** TB003**Latitude:** 68.356**Quadrangle:** TB B-2**Longitude:** 142.113**Location description and accuracy:**

Location plotted is locality 607 of Barker (1981, pl. A-3); about 4 mi (6.4 km) south southwest of Bear Mountain summit; known to within 500 ft (152.4 m).

**Commodities:****Main:** W**Other:****Ore minerals:** Not reported**Gangue minerals:****Geologic description:**

Heavy mineral concentrate sample is from stream draining granitic porphyry at Bear Mt.

**Alteration:****Workings/Exploration:**

32.8 g of heavy mineral concentrate from 2.5 cu. ft. of bulk sample of alluvial gravel contained 3% W, 0.5% Pb, 0.1% Zn, 50 ppm Pt, 1500 ppm Nb and anomalous La, Sb, Sn, Be, Bi, Cr, and Zr (Barker, 1981, p. 146).

**Age:****Deposit model:**

Stream placer

**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production:** No**Status:** Inactive**Production notes:****Reserves:****Additional comments:****References:**

Barker, 1981; Barker and Swainbank, 1985; Barker, 1978

**Primary reference:** Barker, 1981**Reporter:** K.R. Leonard; D.F. Huber; J.M. Schmidt; J.H. Dover**Reporter affiliation:** USGS**Last report date:** 9/20/96

**Site: Bear Mountain****Type:** Occurrence**ARDF no.** TB004**Latitude:** 68.37**Quadrangle:** TB B-2**Longitude:** 142.15**Location description and accuracy:**

Location is approximate center of area 1.25 mi (2 km) (east-west) by 0.35 mi (0.55 km) (north-south) of anomalous samples 517-521 and 608-13 of Barker (1981, pl. A-3); about 4 mi (6.4 km) southwest of Bear Mountain summit; known to within 2000 ft (610 m).

**Commodities:****Main:** Mo, W, Pb**Other:****Ore minerals:** Unidentified secondary ferromolybdate mineral, molybdenite, wolframite, galena**Gangue minerals:** Limonite, goethite, hematite, jarosite, quartz, topaz, rutile, magnetite, muscovite, K-feldspar, kaolinite**Geologic description:**

Tungsten-rich porphyry molybdenum occurrence. Area of about 1 sq km underlain by altered complex of rhyolite porphyry, quartz porphyry, and a pipe-shaped core of intrusive breccia about 300 m in diameter; complex is cut by dikes of rhyolite porphyry and aplite. Mineralized area defined by Mo-rich gossan zone trending NW for 1.5 km over 40 ha area characterized by soil samples containing 600 ppm Mo or greater; nearly coincident with 30 ha area of soil samples containing 500 ppm W or greater. Total area of Mo + W mineralization about 50 ha; vertical and horizontal zonation evident. Central Mo-rich gossan zone, outer zone of wolframite-topaz mineralization in a Fe-enriched upper-level phase of the complex below a silicified cap, and peripheral zone of Pb-enrichment. Sulfides have largely been oxidized to limonite, hematite, goethite, jarosite, and secondary ferromolybdates; wolframite occurs as disseminated grains in porphyritic rock, quartz veins, and silicified gossan. Molybdenite and galena have each been noted in only one locality. Tertiary rhyolite porphyry stock intrudes Mississippian and older metasedimentary rocks (Barker, 1981, p.33-40, 106-137).

**Alteration:**

Core of sericitic and argillic alteration with outer zone of silicification; local peripheral areas of pyritic and propylitic alteration.

**Workings/Exploration:****Age:****Deposit model:**

Lode; Mo-W porphyry breccia

**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production:** No**Status:** Inactive**Production notes:**

**Reserves:**

**Additional comments:**

Part of regional E-W trend of small domes, intrusions and doubly-plunging anticlines.

**References:**

Barker and Swainbank, 1986; Barker, 1981; Barker, 1978; Grybeck, 1977; Brosge and Reiser, 1976; Cobb and others, 1981, OFR 81-767; Cobb, 1973, B-1374; Brosge and Reiser, 1968

**Primary reference:** Barker, 1981

**Reporter:** K.R. Leonard; D.F. Huber; J.M. Schmidt ; J.H. Dover

**Reporter affiliation:** USGS

**Last report date:** 9/20/96

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**Site: Unnamed****Type:** Occurrence**ARDF no.** TB005**Latitude:** 68.4**Quadrangle:** TB B-2**Longitude:** 142**Location description and accuracy:**

Location plotted is locality 504 of Barker (1981, pl. A-3), about 2 mi (3.2 km) east southeast of Bear Mountain summit on southeast projecting ridge; known to within 1000 ft (305 m).

**Commodities:****Main:** Cu**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Greenstone lense associated with metasiltstone unit and unconformably(?) overlain by Devonian-Mississippian conglomerate

**Alteration:****Workings/Exploration:**

Greenstone? rock sample contains 1% copper, and slightly anomalous silver and molybdenum; soil and stream sediment samples 533D, 600C-602C of Barker (1981, pl. A-3) 1 mi (1.6 km) to the east have as much as 920 ppm Pb, as well as slightly anomalous amounts of Cu, Zn, Mo, and other elements (Barker, 1981, p. 40-50).

**Age:****Deposit model:**

Unknown

**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production:** No**Status:** Inactive**Production notes:****Reserves:****Additional comments:****References:**

Barker, 1981; Brosge and Reiser, 1976

**Primary reference:** Barker, 1981**Reporter:** J.H. Dover

**Reporter affiliation:** USGS

**Last report date:** 9/20/96

**Site: Unnamed****Type:** Occurrence**ARDF no.** TB006**Latitude:** 68.42**Quadrangle:** TB B-2**Longitude:** 142.01**Location description and accuracy:**

Location plotted is for sample 546 of Barker (1981, pl. A-3), in broad drainage about 2 mi (3.2 km) northeast of Bear Mountain summit; known to within 2000 ft (610 m).

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

Drainage in dominantly Devonian-Mississippian? conglomeratic rocks

**Alteration:****Workings/Exploration:**

Pan concentrate from stream contains 500 ppm Cu, 300 ppm Pb, 2000 ppm Zn, and 30 ppm Mo (Barker, 1981, p. 141).

**Age:****Deposit model:**

Unknown

**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production:** No**Status:** Inactive**Production notes:****Reserves:****Additional comments:****References:**

Barker, 1981; Brosge and Reiser, 1976

**Primary reference:** Barker, 1981**Reporter:** J.H. Dover**Reporter affiliation:** USGS**Last report date:** 9/20/96

**Site: Unnamed****Type:** Occurrence**ARDF no.** TB007**Latitude:** 68.4**Quadrangle:** TB B-2**Longitude:** 141.75**Location description and accuracy:**

Location plotted is approximate center of area containing localities 543, 544, and 550 of Barker (1981, pl. A-3), in headwaters area of Lois Creek, about 8.5 mi (13.7 km) east of Bear Lake summit; located to within 1 mi (1.6 km).

**Commodities:****Main:** Cu, Pb, Zn, Mo**Other:****Ore minerals:****Gangue minerals:****Geologic description:**

Within granitic pluton intruding middle Paleozoic clastic and carbonate sequence

**Alteration:****Workings/Exploration:**

Stream sediment samples 544S and 550C contain up to 200 ppm Cu, 1500 ppm Pb, 3000 ppm Zn, and 30 ppm Mo (Barker, 1981, p. 141-142).

**Age:****Deposit model:**

Unknown

**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production:** No**Status:** Inactive**Production notes:****Reserves:****Additional comments:****References:**

Barker, 1981

**Primary reference:** Barker, 1981**Reporter:** J.H. Dover**Reporter affiliation:** USGS**Last report date:** 9/20/96

**Site: Double Mountain****Type:** Occurrence**ARDF no.** TB008**Latitude:** 68.75**Quadrangle:** TB C-5**Longitude:** 143.83**Location description and accuracy:**

Location plotted is locality 47 of Brosge and Reiser (1976, sheet 4); about 1 mi (1.6 km) west southwest of Double Mountain (peak 6750); located to within 1 mi (1.6 km).

**Commodities:****Main:** Cu, Pb**Other:****Ore minerals:** Azurite**Gangue minerals:** Quartz**Geologic description:**

Azurite present in volcanic rocks; sample is of quartz veins in green slate and volcanic rocks

**Alteration:****Workings/Exploration:**

Quartz vein samples contain 0.5% Cu, 0.15% Pb, and 2.8 ppm Ag (Barker, 1981, p. 33, loc. 22).

**Age:****Deposit model:**

Lode; vein

**Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):****Production:** No**Status:** Inactive**Production notes:****Reserves:****Additional comments:****References:**

Barker, 1981; Barker, 1978; Grybeck, 1977; Brosge and Reiser, 1976; Cobb and others, 1981, OFR 81-767; Brosge and Reiser, 1968; Hartman, 1973

**Primary reference:** Barker, 1981**Reporter:** K.R. Leonard; D.F. Huber; J.M. Schmidt**Reporter affiliation:** USGS**Last report date:** 10/13/92

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