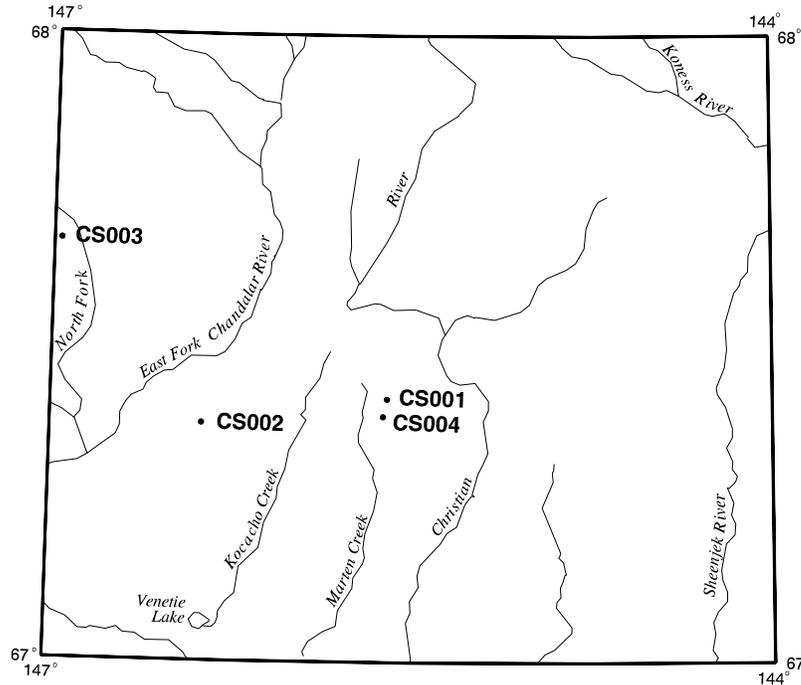


## U.S. Department of the Interior - U.S. Geological Survey

### Christian quadrangle

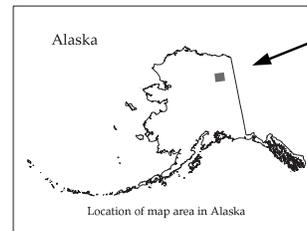
Descriptions of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for a description of the information content of each field in the records. The data presented here are maintained as part of a statewide database on mines, prospects and mineral occurrences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



*Distribution of mineral occurrences in the Christian 1:250,000-scale quadrangle, northeastern 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:

James Dover  
 U.S. Geological Survey  
 4200 University Drive  
 Anchorage, AK 99508-4667  
 Voice: (907) 786-7419  
 e-mail: [jdover@usgs.gov](mailto:jdover@usgs.gov)



*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: Timber/Marten Creeks****Type:** Occurrence**ARDF no.** CS001**Latitude:** 67.42**Quadrangle:** CS B-3**Longitude:** 145.6**Location description and accuracy:**

Location plotted is locality 34 of Barker and Clautice (1978, p. 14) near headwaters of Timber and Marten Creeks, about 11.5 miles (18.5 km) west northwest of Christian; within three miles (4.8 km)

**Commodities:****Main:** Cr**Other:****Ore minerals:** Chromite**Gangue minerals:****Geologic description:**

Minor chromite in poorly exposed peridotite of Christian mafic-ultramafic complex. Geochemical sample contains 6.6% Cr<sub>2</sub>O<sub>3</sub> (Foley and others, 1985, p. 18-19).

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

Lode; podiform chromite

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

8a

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

Barker and Clautice, 1978; Foley and others, 1985; Enns and Findlay, 1977; Hawley and Garcia, 1976

**Primary reference:** Foley and others, 1985**Reporter:** J.M. Schmidt; J.H. Dover**Reporter affiliation:** USGS**Last report date:** 9/12/96

**Site: Levi Creek****Type:** Occurrence**ARDF no.** CS002**Latitude:** 67.38**Quadrangle:** CS B-4**Longitude:** 146.37**Location description and accuracy:**

Levi Creek, 2 miles (3.2 km) northwest of Tsyooktuihvun Lake, about 26 miles (41.8 km) north of Venetie; within 3 miles (4.8 km).

**Commodities:****Main:** Cr, PGE**Other:****Ore minerals:** Chromite**Gangue minerals:** Magnetite**Geologic description:**

Source and host rocks are pyroxenite, peridotite, dunite and gabbro of the Christian River mafic-ultramafic complex.

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

7% chromite was observed in a rock sample from Levi Creek. Cr-bearing magnetite from Levi Creek contained 0.003 troy oz/short ton Pt and 0.0006 oz/short ton Pd. Traces of PGE also occur (Foley and others, 1985, p. 19; Foley and others, 1989, p. 2).

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

Lode; podiform chromite

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

8a

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

Foley and others, 1985; Foley and others, 1989; Hawley and Garcia, 1976; Enns and Findlay, 1977

**Primary reference:** Foley and others, 1985**Reporter:** J.M. Schmidt

**Reporter affiliation:** USGS

**Last report date:** 10/15/92

**Site: Unnamed****Type:** Occurrence**ARDF no.** CS003**Latitude:** 67.67**Quadrangle:** CS C-5**Longitude:** 146.97**Location description and accuracy:**

Location plotted is locality 11 of Barker (1981, p. 30), about 2 miles (3.2 km) west-southwest of major fork in North Fork of East Fork of Chandalar River; within two miles (3.2 km).

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

Copper values appear to be related to Upper Devonian black metaclastic pyllitic rocks under a thrust sheet of Skajit Limestone.

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

202 claims were staked (ACH and CHA claim groups) in 1975. Exploration included drilling; no results reported (Barker, 1981, p. 32, loc. 11).

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

Lode; Cu in clastic sedimentary rocks

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

See MAS/MILS Sequence # 0020320004, USBM (1995)

**References:**

Barker, 1978; Barker, 1981; USBM, 1995

**Primary reference:** Barker, 1981**Reporter:** J.M. Schmidt**Reporter affiliation:** USGS**Last report date:** 10/15/92

**Site: Christian River Chromium****Type:** Prospect**ARDF no.** CS004**Latitude:** 67.39**Quadrangle:** CS B-3**Longitude:** 145.62**Location description and accuracy:**

Hill 2470, in headwaters area of Marten Creek, about 12 miles (19.3 km) west of Christian; within 1 mile (1.6 km).

**Commodities:****Main:** Cr**Other:** PGE**Ore minerals:** Chromite**Gangue minerals:****Geologic description:**

Chromite associated with peridotitic rocks and yellowish soil contains residual nodules of dark, weakly magnetic material 1-2 inches (25.4-50.8 mm) across. Type of ultramafic occurrence uncertain

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

Analysis of a 2 lb (0.91 kg) sample of nodules showed 4.5 percent chromium and a trace of platinum and palladium.

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

Lode

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

USBM, 1995, MAS/MILS Sequence # 0020320005

**Primary reference:** USBM, 1995**Reporter:** J.H. Dover**Reporter affiliation:** USGS**Last report date:** 9/3/96

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