

#### SURFICIAL GEOLOGY

##### COLLUVIUM

**C** Material transported by gravity or material on gentle slopes derived from physical weathering of bedrock. Includes talus, landslide debris, debris flow deposits and avalanche cones

##### FLUVIAL DEPOSITS

**F** Gravels, sands and silts deposited by streams and rivers, includes alluvial fans and river terraces

##### ICE

**I** Permanent snow and ice, glaciers and snowfields

##### GLACIAL DEPOSITS

**M** Clay, sand and rock fragments deposited by glaciers, includes Fraser Glaciation till and recent moraines. This unit includes small areas of colluvium, bedrock, glaciofluvial, glacioclastic and eolian deposits

##### BEDROCK

**R** Outcrops and rock covered by a few centimetres of surficial material. Includes up to 50% colluvium by area

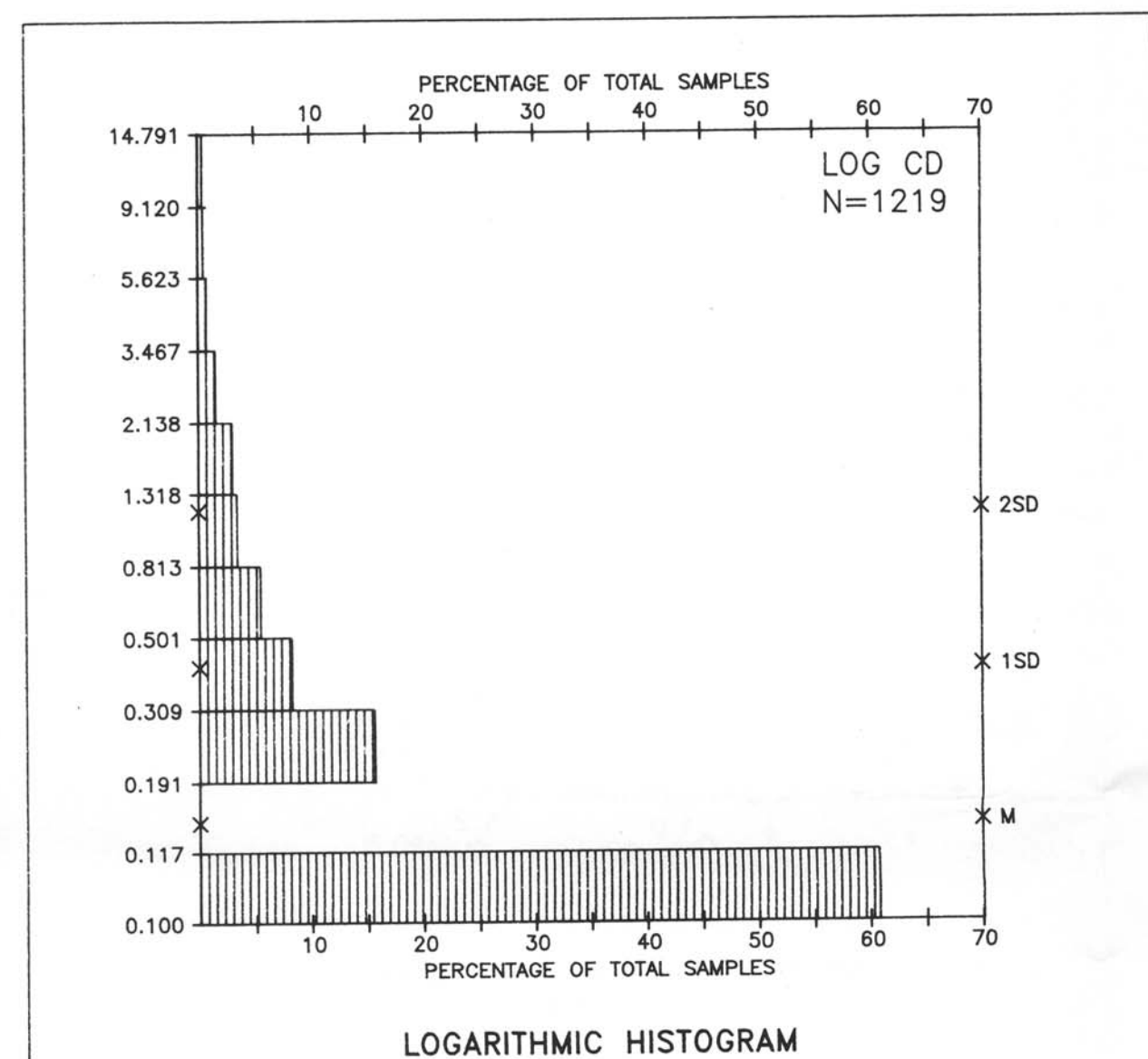
##### VOLCANIC DEPOSITS

**V** Unconsolidated volcanic ash, cinder and coarse ejecta and lava flows younger than Fraser Glaciation

##### SYMBOLS

Meltwater channel  
Glacial station, direction of flow known, unknown  
Drumlin, direction of flow known

Source of Information:  
Ryder, J.M. (1984) Inventory for the Skeena-Iskut Area (NTS 104F, 104G, and parts of 104B and 104H). British Columbia Ministry of Environment, Technical Report 11.



#### CONCENTRATION FREQUENCY

1.6 - 14.1	◇	N = 60 (4.9%)
0.9 - 1.5	◇	N = 58 (4.8%)
0.4 - 0.8	◆	N = 168 (13.8%)
0.2 - 0.3	+	N = 191 (15.7%)
0.1 - 0.1	+	N = 742 (60.9%)

#### CONTRACTORS - 104F

Sample collection by McElhenny Engineering Services Limited, Vancouver, B.C.

Sample preparation by Kamloops Research and Assay Lab, Kamloops, B.C.

Sediment chemical analyses by Bondar Clegg and Company Limited, North Vancouver, B.C.

Water chemical analyses by Barringer Magenta, Calgary, Alta.

#### CONTRACTORS - 104G

Sample collection by McElhenny Engineering Services Limited, Vancouver, B.C.

Sample preparation by Golder Associates, Ottawa, Ont.

Sediment chemical analyses by Bondar Clegg and Company Limited, Ottawa, Ont.

Water chemical analyses by Chemes Labs, North Vancouver, B.C.

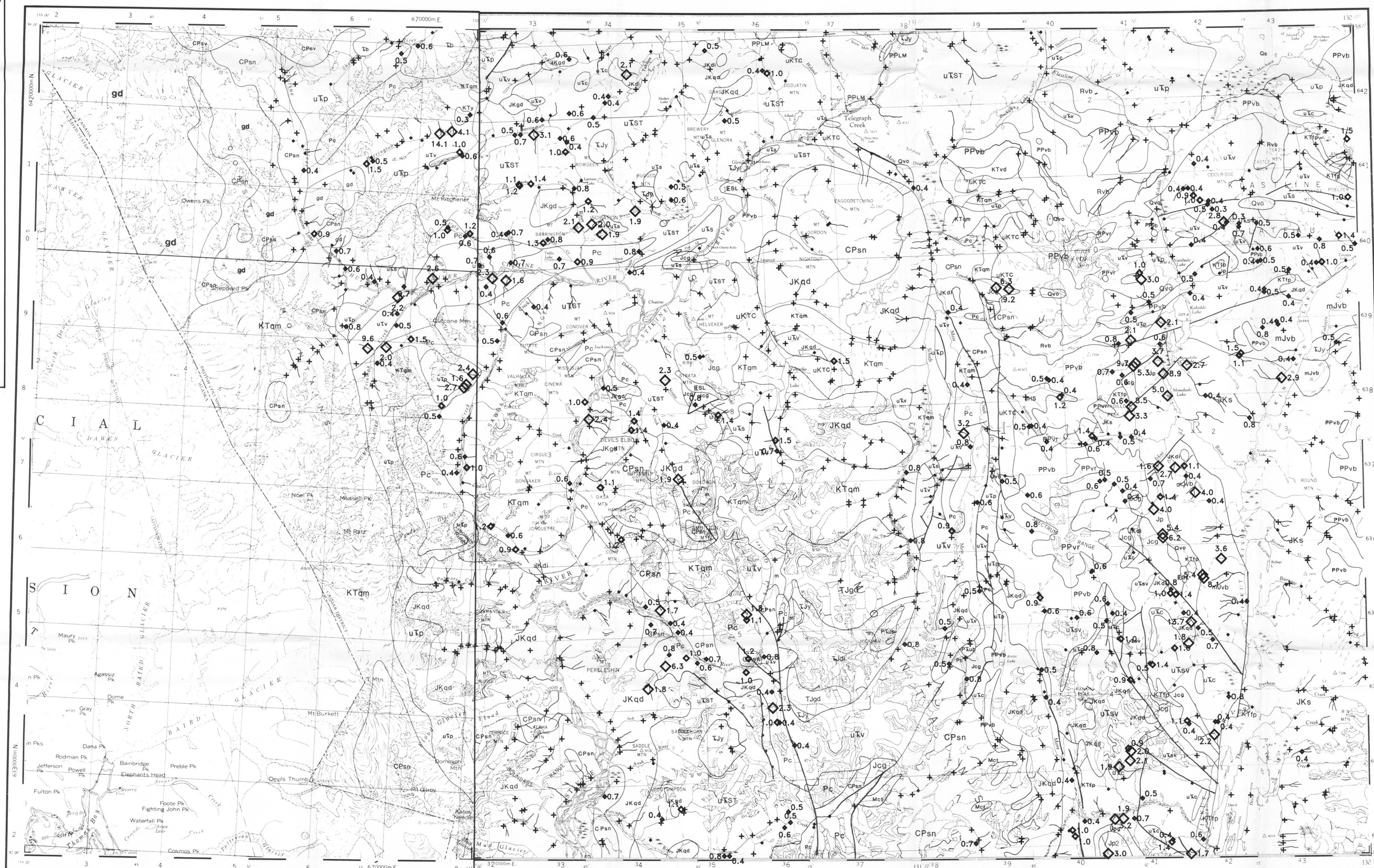
#### OPEN FILE PRODUCTION

British Columbia  
Ministry of Energy, Mines and Petroleum Resources  
Geological Survey Branch  
Applied Geochemistry



Province of British Columbia  
Ministry of Energy, Mines and Petroleum Resources

104F (Zone 8) & 104G (Zone 9)



#### CADMIUM (ppm) STREAM SEDIMENTS

B.C. RGS 19

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NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 111

CANADA-BRITISH COLUMBIA  
MINERAL DEVELOPMENT AGREEMENT (1985-1989)

STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY

NORTHWESTERN BRITISH COLUMBIA, 1987

SCALE 1:250,000

KILOMETRES

Elevation in feet above mean sea level

104G : Mean magnetic declination 1954, 30°15' East in centre of map area, decreasing 4.0' annually

104F : Mean magnetic declination 1966, 28°45' East in centre west edge of map area, increasing 3.8' annually

Universal Transverse Mercator Projection  
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Province of British Columbia  
Ministry of Energy, Mines and Petroleum Resources  
Energy, Mines and Petroleum Resources Canada  
Energy, Mines and Petroleum Resources Canada  
This project is a contribution to the CANADA-BRITISH COLUMBIA MINERAL DEVELOPMENT AGREEMENT, 1985-1990

104F (Zone 8) & 104G (Zone 9)

#### CADMIUM (ppm)

#### STREAM SEDIMENTS

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104F - SUMDUM / 104G - TELEGRAPH CREEK  
NORTHWESTERN BRITISH COLUMBIA, 1987

#### LEGEND

##### STRATIFIED ROCKS

##### QUATERNARY

###### RECENT

**Rvb** (BSLT 64\*) Basalts, cinder, ash

###### PLEISTOCENE AND RECENT

**Qs** (ITLL 64) Surficial clastic sediments and glacial deposits

**Qvo** (IOUV 64) Olivine basalt

##### TERTIARY AND QUATERNARY

###### PLIOCENE AND PLEISTOCENE

**PPLM** (BSLT 63) LEVEL MOUNTAIN GROUP: basalt

**PPvb** (BTRT 63) Basalt, rhyolite, olivine, basalt

**PPvt** (RYLT 63) Rhyolite, trachyte, tuff

##### TERTIARY

###### Eocene

**ESL** (RYLT 59) SLOKO GROUP: rhyolite, trachyte, andesite, basalt

##### CRETACEOUS AND TERTIARY

**KTvd** (ANDS 56) Andesite

##### CRETACEOUS

**UKTC** (SND5 55) TANGO CREEK: sandstone, siltstone, coal

##### JURASSIC AND CRETACEOUS

**JKs** (SLSN 51) Siltstone, greywacke, conglomerate, shale (upper HAZELTON GROUP in part)

##### JURASSIC

**JHs** (SLSN 50) HAZELTON GROUP: siltstone, greywacke, sandstone, tuff

**mJvb** (BSLT 49) Basalt, pillow lava, tuff, volcanoclastic rocks

**Jp** (SHLE 49) Shale

**JT** (CGLM 49) TAKAWAHNI: conglomerate, grit, greywacke

**Jcg** (CGGK 49) Conglomerate, grit, greywacke

##### TRIASSIC

**uTp** (PLLT 45) Phyllite, argillite, siltstone, greywacke, limestone

**uTs** (SLSN 45) Siltstone, chert, sandstone, tuff

**uTsv** (ANDV 45) Undifferentiated andesitic volcanic and clastic sedimentary rocks

**uTst** (VLRK 45) STUHN GROUP: undifferentiated volcanic and sedimentary rocks

**uTv** (ANBT 45) Andesite, basalt

**uTvd** (ANDS 45) Andesite, pyroclastic rocks, greenstone

##### PERMIAN

**Pc** (LSM 36) Limestone, minor, calcareous shale

##### CARBONIFEROUS AND PERMIAN

**CPsn** (SCST 35) Schist, gneiss

**CPsv** (GRNS 35) Greenstone, limestone, shale, clastic sedimentary rocks

##### MISSISSIPPIAN

**Mct** (MTF 34) Limestone, tuff, chert

##### PLUTONIC ROCKS

##### CRETACEOUS AND TERTIARY

**KTfp** (FLSP 56) Felsite, felsoporphry

**KTqm** (GTMZ 56) Quartz monzonite

**KTy** (LSYN 56) Leucocratic syenite

##### JURASSIC AND CRETACEOUS

**JKgd** (GRDR 51) Granodiorite

**JKqd** (GRZD 51) Quartz diorite

**JKdi** (DORT 51) Diorite

##### TRIASSIC AND JURASSIC

**JKgd** (GRDR 46) Granodiorite

**TKdi** (GRZD 46) Quartz diorite, diorite, amphibolite

**TJy** (SYNT 46) Syenite, monzonite

##### TRIASSIC

**Tb** (DORT 42) Diorite, gabbro

**Tdi** (DORT 42) Diorite, monzonite

##### PERMIAN AND TRIASSIC

**Ptub** (UMFC 40) Ultramafic rocks, serpentinite

##### AGE UNKNOWN

**gd** (GRDR 65) Granodiorite

**m** (AMPH 65) Amphibolite, gneiss, migmatite

#### SYMBOLS

Geological boundary  
Fault  
Thrust fault  
Glaciers  
Field duplicate sample sites

#### GEOLOGY AND MINERAL DEPOSITS

Geological base and legend are derived from:  
Southern, J.D., Drew, D.A. and Chubb, A.V. (compilers) (1979) Iskut River, Geological Survey of Canada, Map 1419A.

\*A mnemonic code assigned to rock types and recorded as part of field observations

For location of the following specific information for this area refer to British Columbia Ministry of Energy, Mines and Petroleum Resources, mineral deposits refer to Mineral Inventory Map, M 104F - SUMDUM and M 104G - TELEGRAPH CREEK; assessment reports refer to Assessment Report Index Map, AR 104F - SUMDUM and AR 104G - TELEGRAPH CREEK; bedrock geological mapping refer to Index of Bedrock Mapping, 1985; for mineral and placer claim maps contact the Ministry of Energy, Mines and Petroleum Resources, Mineral Titles Branch, Victoria, for current editions and status.

#### CADMIUM (ppm)

#### STREAM SEDIMENTS

B.C. RGS 19

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104F - SUMDUM / 104G - TELEGRAPH CREEK  
NORTHWESTERN BRITISH COLUMBIA, 1987