

**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 volcanic cones.

**FLUVIAL DEPOSITS**

**F** Gravel, sand and silt 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 moraine. This unit includes small areas of colluvium, bedrock, glacioluvial, glaciolacustrine and soil deposits.

**BEDROCK**

**R** Outcrops and rock covered by a few centimetres of surficial material. Includes up to 30% colluvium by area.

**VOLCANIC DEPOSITS**

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

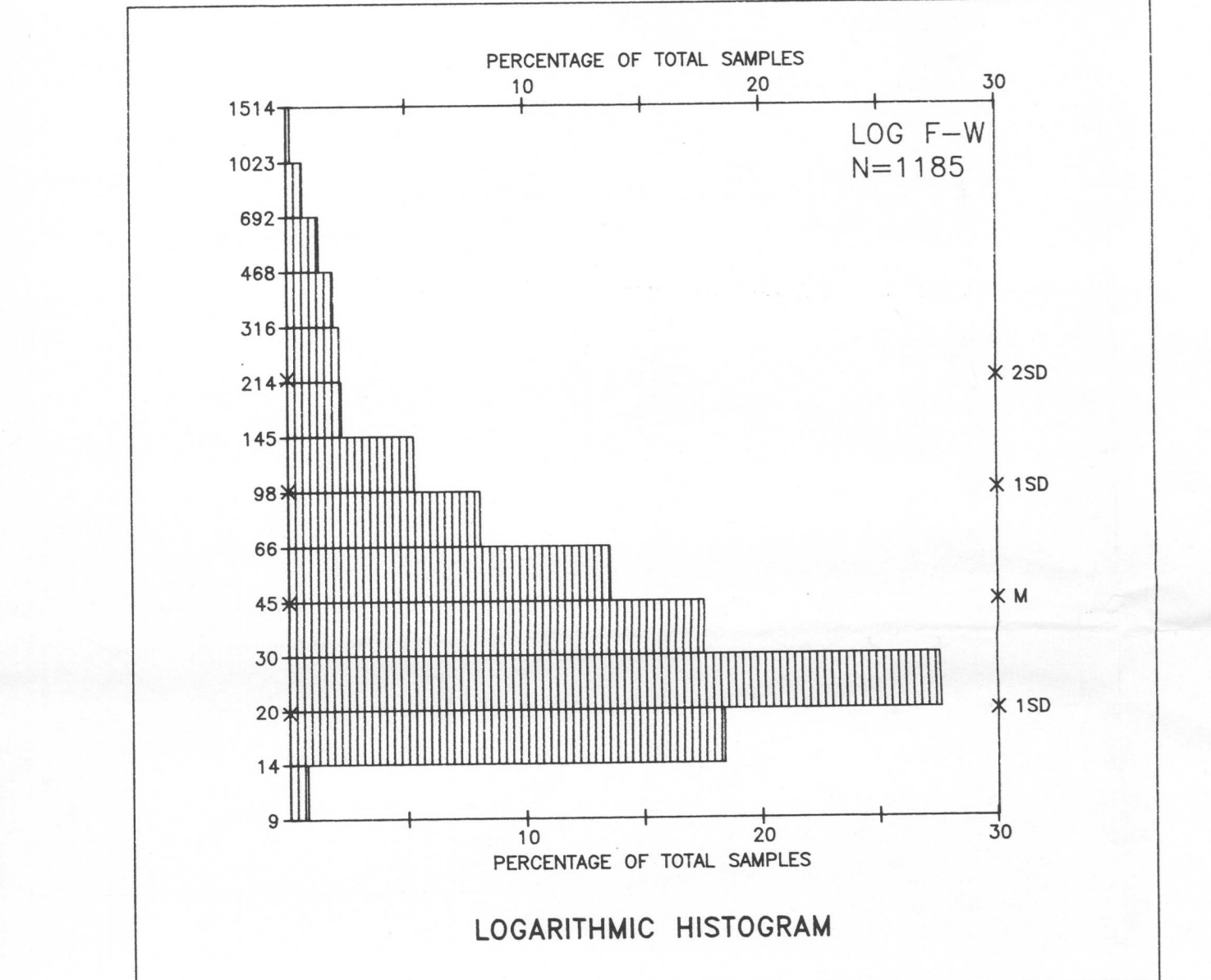
**SYMBOLS**

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
281 - 1160	◇ N = 56 (4.7%)
131 - 280	◆ N = 55 (4.6%)
61 - 130	♦ N = 158 (13.3%)
41 - 60	• N = 163 (13.8%)
10 - 40	+ N = 753 (63.5%)

**CONTRACTORS - 104F**

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

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

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

Water chemical analyses by Barringer Magenta, Calgary, Alta.

**CONTRACTORS - 104G**

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

Sample preparation by Goldex Associates, Ottawa, Ont.

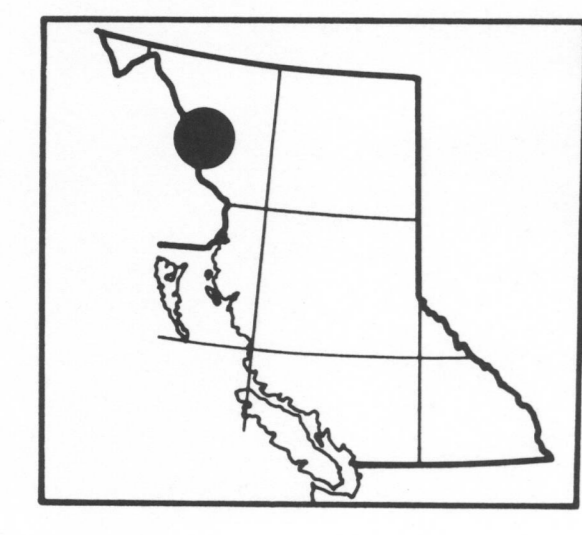
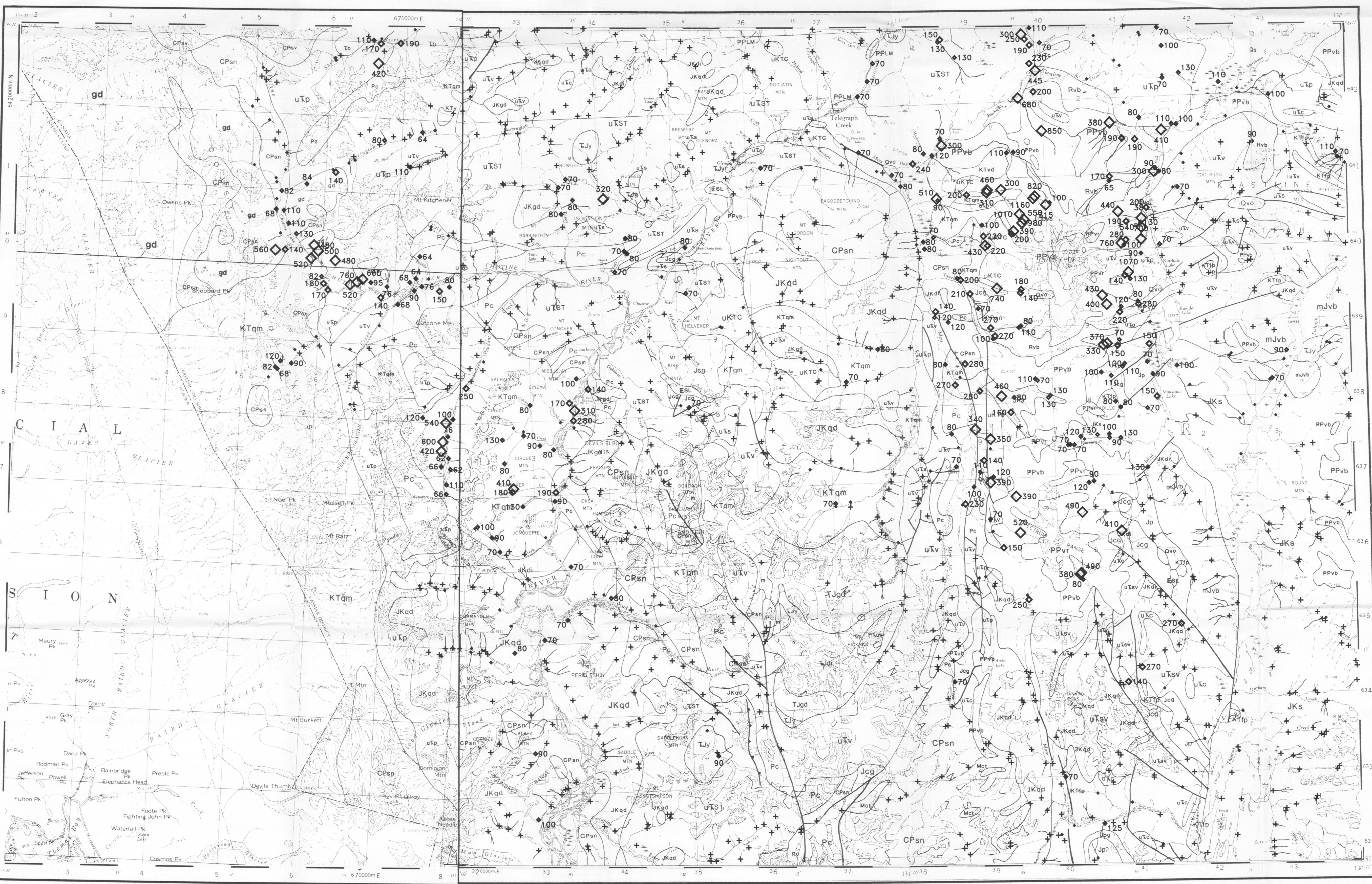
Sediment chemical analyses by Bondar Clagg and Company Limited, Ottawa, Ont.

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

**OPEN FILE PRODUCTION**

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

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



This map forms one of a series of open file maps (B.C. RGS 16-20) released in 1988 by the British Columbia Geological Survey in co-operation with the Geological Survey of Canada. Open File RGS 19 consists of sample location maps at 1:100 000 and 1:250 000 scale, symbol and value maps for 20 elements in stream sediments and 7 elements in stream waters, a current mineral inventory map, listings of field and analytical results and a statistical summary. Copies of map material and listings of field observations, analytical data and methods, from which the open file was prepared are available for reference at:  
Ministry Library in Victoria  
Library of the Geological Survey of Canada  
Map Library at the University of British Columbia, Vancouver  
for purchase at:  
Maps B.C.  
555 Superior Street  
Vancouver, B.C.  
(604) 267-1441  
The data are also available in digital form on MS-DOS 5 1/4" diskettes. For further information please contact:  
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Ministry of Energy, Mines and Petroleum Resources  
Parliament Buildings  
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(604) 387-5234

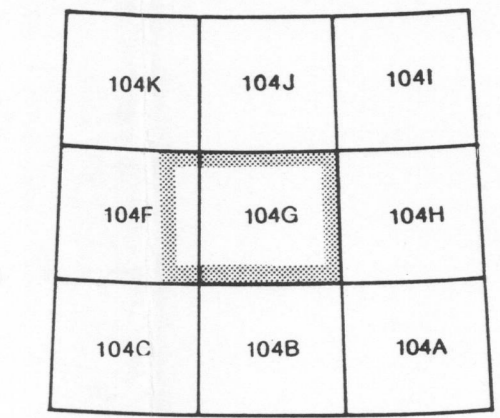
**FLUORIDE (ppb)**  
**STREAM WATERS**  
**B.C. RGS 19**  
**GSC OPEN FILE 1646**  
**NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 111**  
**CANADA-BRITISH COLUMBIA**  
**MINERAL DEVELOPMENT AGREEMENT (1985-1989)**  
**STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY**  
**NORTH-WESTERN BRITISH COLUMBIA, 1987**  
**SCALE 1:250,000**

Elevation in feet above mean sea level  
104G: Mean magnetic declination 1984, 30°15' East in centre of map area, decreasing 4.0' annually  
104F: Mean magnetic declination 1986, 28°45' East in centre west edge of map area, increasing 3.0' 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, 1985-1989



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**FLUORIDE (ppb)**  
**STREAM WATERS**  
B.C. RGS 19  
GSC OPEN FILE 1646  
104F - SUMDUM / 104G - TELEGRAPH CREEK  
NORTH-WESTERN BRITISH COLUMBIA, 1987

**LEGEND**

**QUATERNARY**

**RECENT**

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

**PLEISTOCENE AND RECENT**

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

**Qv** (OLVB 64) Olivine basalt

**TERTIARY AND QUATERNARY**

**PLIOCENE AND PLEISTOCENE**

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

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

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

**TERTIARY**

**EOCENE**

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

**CRETACEOUS AND TERTIARY**

**KTv** (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** (GGLM 49) TAKNAHON: conglomerate, grit, greywacke

**Jcg** (CGKG 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

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

**PERMIAN**

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

**CARBONIFEROUS AND PERMIAN**

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

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

**MISSISSIPPIAN**

**Mcl** (LMTF 34) Limestone, tuff, chert

**PLUTONIC ROCKS**

**CRETACEOUS AND TERTIARY**

**KTp** (FLSP 56) Felsite, feldspar porphyry

**KTm** (QTMZ 56) Quartz monzonite

**KTy** (LSYV 56) Leucocratic syenite

**JURASSIC AND CRETACEOUS**

**JKgd** (GRDR 51) Granodiorite

**JKqd** (GRZD 51) Quartz diorite

**JKdl** (DORT 51) Diorite

**TRIASSIC AND JURASSIC**

**TJgd** (GRDR 46) Granodiorite

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

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

**TRIASSIC**

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

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

**PERMIAN AND TRIASSIC**

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

**AGE UNKNOWN**

**gd** (GRDR 65) Granodiorite

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

**SYMBOLS**

Geological boundary

Fault

Thrust fault

Glaciers

Glaciers

Field duplicate sample sites

**GEOLOGY AND MINERAL DEPOSITS**

Geological base and legend are derived from:  
Southern, J.C., Brew, D.A. and Okulitch, A.V. (compilers) (1979) Iskut River, Geological Survey of Canada, Map 1418A.  
\*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, MI 104F - SUMDUM and MI 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, 1983, for mineral and placer claim maps contact the Ministry of Energy, Mines and Petroleum Resources, Mineral Titles Branch, Victoria, for current editions and status.

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