

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.

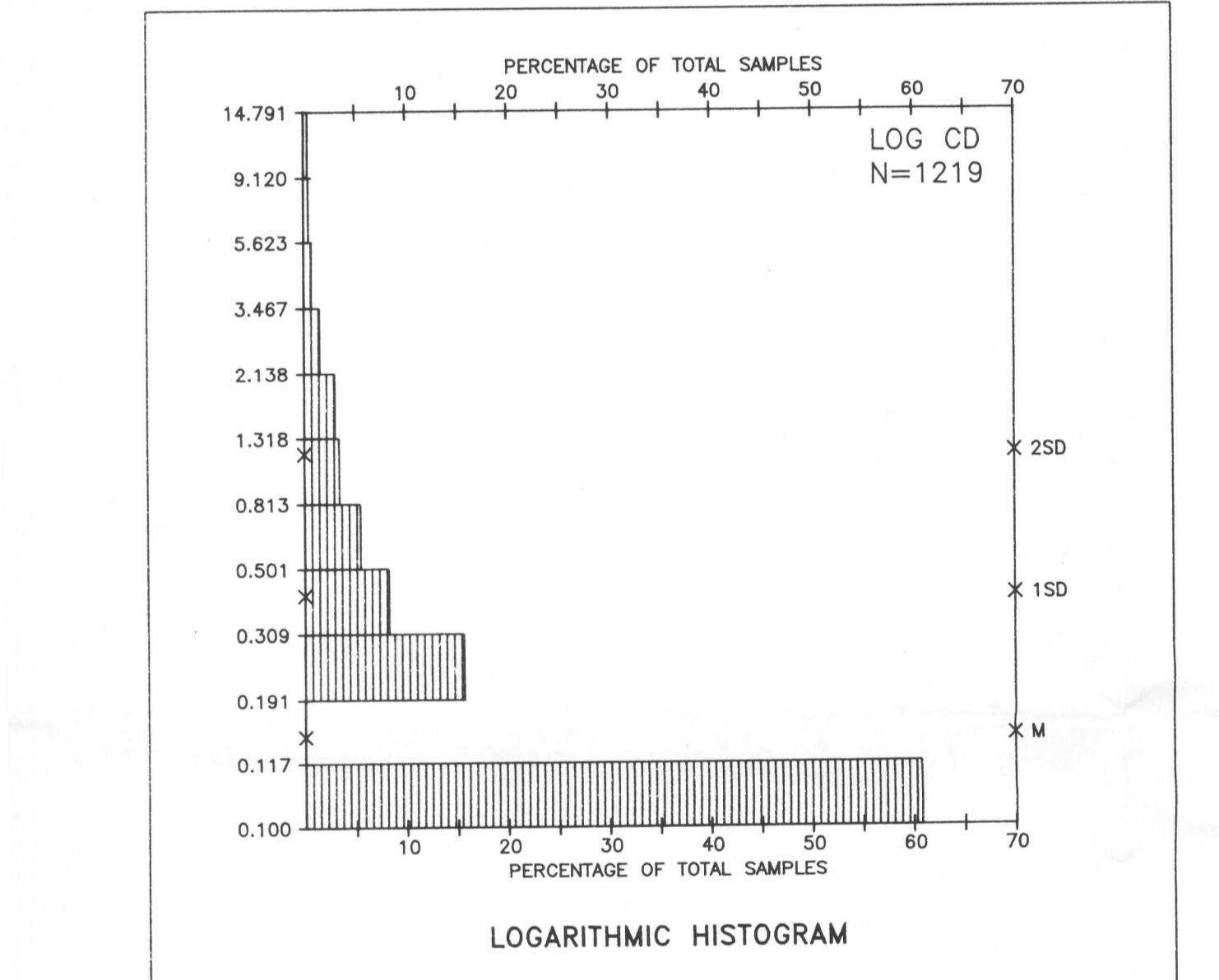
GLACIAL DEPOSITS
M Clay, sand and rock fragments deposited by glaciers, includes Fraser Glaciation till and recent moraines. This unit includes small areas of colluvium, bedrock, glacioluvial, glaciolacustrine and eolian deposits.

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
 Melwater channel
 Glacial striation, 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.



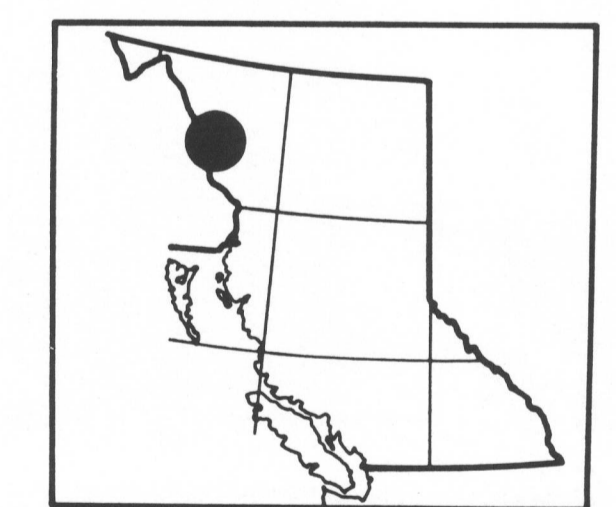
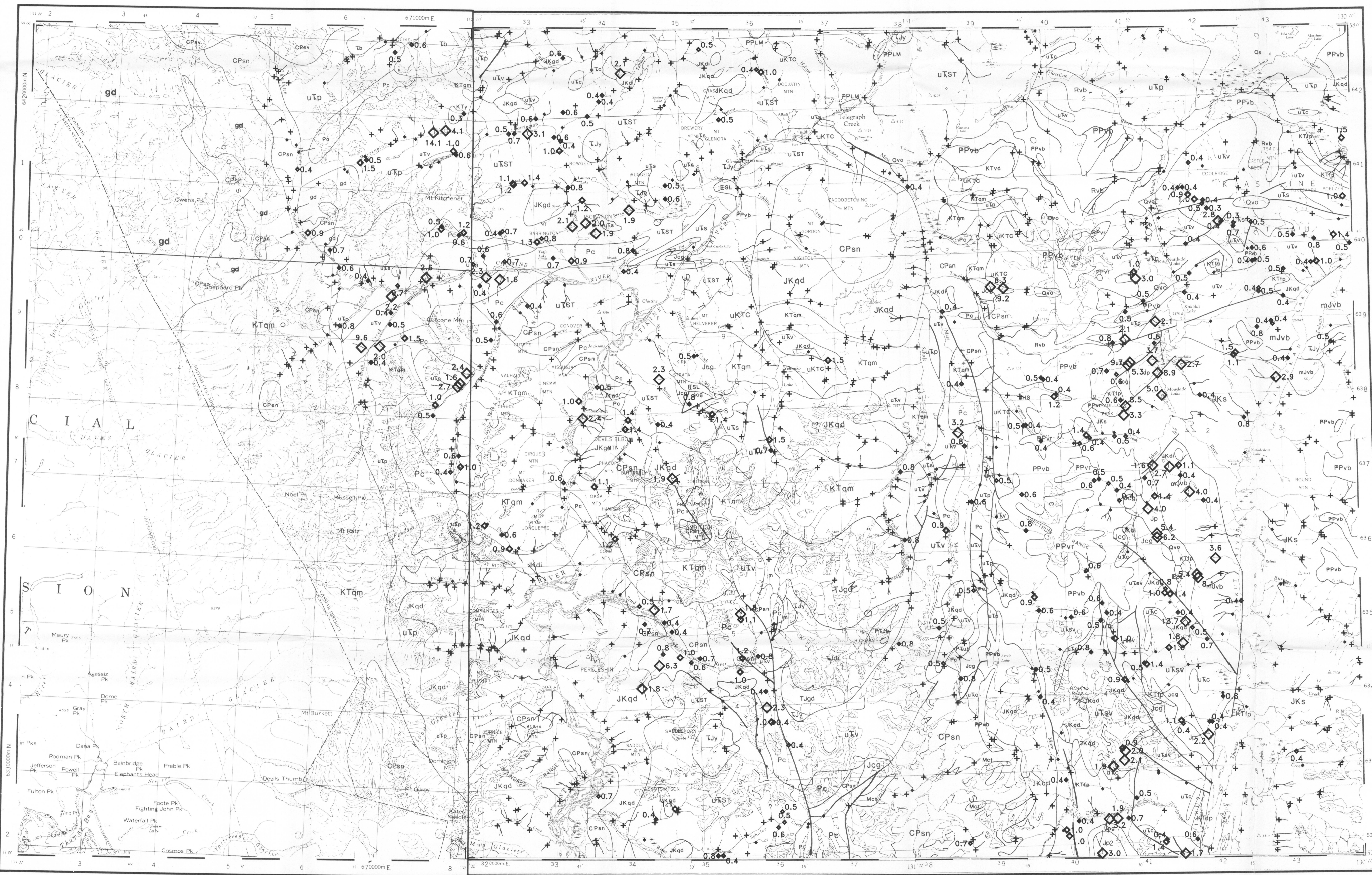
CONCENTRATION	FREQUENCY
1.6 - 14.1	◇ N = 60 (4.9%)
0.9 - 1.5	◆ N = 58 (4.8%)
0.4 - 0.8	♦ N = 168 (13.8%)
0.2 - 0.3	• N = 191 (15.7%)
0.1 - 0.1	+ N = 742 (60.9%)

CONTRACTORS - 104F
 Sample collection by McElhenny Engineering Services Limited, Vancouver, B.C.
 Sample preparation by Kamlopa Research and Assay Lab, Kamlopa, 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 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 18-20) released in 1988 by the British Columbia Geological Survey in co-operation with the Geological Survey of Canada. Open File RGS 18 consists of sample location maps at 1:100 000 and 1:250 000 scales, symbol and value maps for 20 elements in stream sediments and 2 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
 Libraries of the Geological Survey of Canada
 Map Library at the University of British Columbia, Vancouver
 For purchase at:
 Maps B.C.
 525 Superior Street
 Victoria, B.C.
 V8V 1Z5
 (604) 367-1441
 The data are also available in digital form on MS-DOS 5 1/4" diskettes. For further information please contact:
 Applied Geochemistry Subsection
 Geological Survey Branch
 Ministry of Energy, Mines and Petroleum Resources
 Parliament Buildings
 Victoria, British Columbia, V8V 1X4
 (604) 367-3234

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

CADMIUM (ppm)
STREAM SEDIMENTS
 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
 NORTHWESTERN BRITISH COLUMBIA, 1987
 SCALE 1 : 250,000

Elevation in feet above mean sea level
 104G: Mean magnetic declination 1954, 30915' East in centre of map area, decreasing 4.0' annually
 104F: Mean magnetic declination 1966, 28045' East in centre west edge of map area, increasing 3.8' annually

Province of British Columbia
 Ministry of Energy, Mines and Petroleum Resources
 Energy, Mines and Petroleum Resources Canada
 THIS PROJECT IS A CONTRIBUTION TO THE CANADA-BRITISH COLUMBIA MINERAL DEVELOPMENT AGREEMENT, 1985 - 1990

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CADMIUM (ppm)
STREAM SEDIMENTS
 B.C. RGS 19
 GSC OPEN FILE 1646
 104F - SUMDUM / 104G - TELEGRAPH CREEK
 NORTHWESTERN BRITISH COLUMBIA, 1987

LEGEND
STRATIFIED ROCKS

QUATERNARY
RECENT
Rvb (BSLT 647) Basalts, cinder, ash

PLEISTOCENE AND RECENT
Os (TILL 64) Surficial clastic sediments and glacial deposits
Ovo (OLVB 64) Olivine basalt

TERTIARY AND QUATERNARY
PLIOCENE AND PLEISTOCENE
PPLM (BSLT 63) LEVEL MOUNTAIN GROUP: basalt
PPvb (BTRT 63) Basalt, rhyolite, olivine, basalt
PPvt (RYVLT 63) Rhyolite, trachyte, tuff

TERTIARY
Eocene
ESL (RYVLT 59) SLOKO GROUP: rhyolite, trachyte, andesite, basalt

CRETACEOUS AND TERTIARY
KTvd (ANDS 56) Andesite

CRETACEOUS
JKTC (ANDS 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, volcaniclastic rocks
Jp (SHLE 49) Shale
JT (CGLM 49) TAKWAHON: conglomerate, grit, greywacke
Jcg (CGGK 49) Conglomerate, grit, greywacke

TRIASSIC
Utp (PLT 45) Phyllite, argillite, siltstone, greywacke, limestone
Uts (SLSN 45) Siltstone, chert, sandstone, tuff
Utsv (ANDV 45) Undifferentiated andesitic volcanic and clastic sedimentary rocks
Ust (VLRK 45) STUHNIG GROUP: undifferentiated volcanic and sedimentary rocks
Utv (ANBT 45) Andesite, basalt
Utd (ANDS 45) Andesite, pyroclastic rocks, greenstone

PERMIAN
Pc (LMSH 36) Limestone, minor calcareous shale

CARBONIFEROUS AND PERMIAN
CPsn (SGST 35) Schist, gneiss
CPsv (GRNS 35) Greenstone, limestone, shale, clastic sedimentary rocks

MISSISSIPPIAN
Mct (LMTF 54) Limestone, tuff, chert

PLUTONIC ROCKS

CRETACEOUS AND TERTIARY
KTfp (FLSP 56) Felsite, kalspar porphyry
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
Tjgd (GRDR 46) Granodiorite
Tjdi (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
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
 Field duplicate sample sites

GEOLOGY AND MINERAL DEPOSITS
 Geological base and legend are derived from:
 Southern, G.D., Blevin, D.A. and Chalkin, 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, 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, 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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