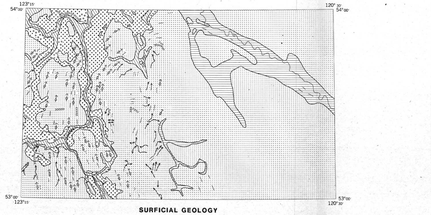


SURFICIAL GEOLOGY

Kilometres 0 20 40 60

Scale 1:1 000 000

BRITISH COLUMBIA SURFICIAL DEPOSITS

PROGLACIAL DEPOSITS

LACUSTRINE DEPOSITS: Varved silt, clay, and sand, locally drumlinized and fluted through minor ice re-advance, fringed by beach deposits. Deposits up to 120 m thick along Nechako, >200 m thick along Blackwater.

Meltwater or outwash channel deposits bounded by cutbanks or terraces

UNDIVIDED GLACIOLACUSTRINE AND GLACIOFLUVIAL DEPOSITS: Sand, silt and clay with local accumulations up to 70 m thick along valley bottoms

GLACIAL DEPOSITS

Undivided glacial till and ground moraine. Areas of low relief include abundant drumlins, rock drumlins, fluting, and esker complexes. Bedrock exposures predominate above 1700 m elevation

Outwash channel cutbank or terrace

Small meltwater or abandoned stream channel indicating direction of flow

Fluting or glacial striation

Drumlin, direction of flow known

Eskers and esker complexes

Kettled and pitted terrain

Note: Glacial deposits and features within NTS 93H are unmapped

Sources of information:

Geological Survey of Canada

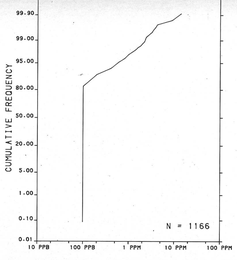
1938: Geology of Willow River Sheet
Map 335 A, West Half
Map 336 A, East Half

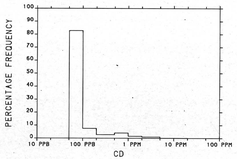
Tipper, H.W.

1971: Glacial Geomorphology and Pleistocene History of Central British Columbia;
Geological Survey of Canada,
Bulletin 196. 89p. (esp. Map 1288A, scale 1:250 000)

Tipper, H.W., Campbell, R.B., Taylor, G.C. and Stott, D.F.

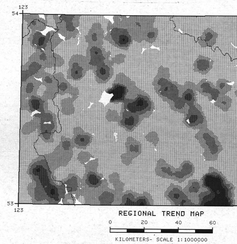
1979: Parsnip River,
British Columbia;
Geological Survey of Canada,
Map 1424A, scale 1:1 000 000





CD

HISTOGRAM



Provincial Open File
BC RGS-12-1984 (93G E/2, 93H W/2)

LEGEND

[This legend to be used west of 122°00' only]

Note: This legend is common for Regional Geochemical 72-1984 Open File 1107

CENOZOIC
QUATERNARY
PLEISTOCENE AND RECENT
[17] (TILL 44) TILL, GRAVEL, SAND, SILT, ALLUVIUM

TERTIARY
MIOCENE AND PLIOCENE
[16] (BSLT 43) OLIVINE BASALT FLOWS, BRECCIA, AND TUFF
[15] (SNDS 43) SANDSTONE, SHALE, CONGLOMERATE, DIATOMITE, LIGNITE

OLIGOCENE AND MIOCENE
[14] (ANDS 42) ENDAKO GROUP: ANDESITE, BASALT, DACITE

PALEOCENE, EOCENE, OLIGOCENE
[13] (CGLM 42) CONGLOMERATE, SANDSTONE, SHALE, TUFF, BRECCIA

MESOZOIC - CENOZOIC
UPPER CRETACEOUS AND LOWER TERTIARY
[12] (RYLT 41) OOTSA LAKE GROUP: RHYOLITE, DACITE, TRACHYTE, SANDSTONE, SHALE, CONGLOMERATE

CRETACEOUS
[11] (ANDS 36) ANDESITE, TUFF, BRECCIA, ARGILLITE, ARKOSE, CONGLOMERATE

LOWER CRETACEOUS
[10] (CGLM 36) SKEENA GROUP: CONGLOMERATE, GREYWACKE, SHALE, COAL, VOLCANIC BRECCIA

JURASSIC
MIDDLE JURASSIC
[9] (ANDS 34) HAZELTON GROUP (PART) UNDIVIDED: BASALT, ANDESITE, TUFF, BRECCIA, GREYWACKE, MUDSTONE, CONGLOMERATE

LOWER AND MIDDLE JURASSIC
[8] (SHLE 34) SHALE, GREYWACKE, CONGLOMERATE

UPPER TRIASSIC AND LOWER JURASSIC
[7] (ANDS 33) TAKLA GROUP: ANDESITE, BASALT, TUFF, BRECCIA, CONGLOMERATE, GREYWACKE, SHALE, LIMESTONE

TRIASSIC
UPPER TRIASSIC
[6] (LMSN 32) LIMESTONE
[5] (PLLT 32) BLACK PHYLLITE, SILTSTONE, LIMESTONE, QUARTZITE

PALEOZOIC
PENNSYLVANIAN AND PERMIAN
[4] (UNRT 23) CACHE CREEK GROUP: RIBBON CHERT, BLACK ARGILLITE, LIMESTONE, GREENSTONE

MISSISSIPPIAN AND YOUNGER
[3] (BRCL 23) SLIDE MOUNTAIN GROUP: BASALT, BRECCIA, TUFF, CHERT, ARGILLITE, SANDSTONE, LIMESTONE, CONGLOMERATE

CAMBRIAN
LOWER CAMBRIAN
[2] (LMSN 12) MURAL FORMATION: LIMESTONE (INCLUDES MAYO FORMATION SILTSTONE, SANDSTONE)

PROTEROZOIC
NEOPROTEROZOIC
[1] (GNDS 04) KAZA GROUP: SANDSTONE, CONGLOMERATE, GRIT, PHYLLITE, SCHIST, AMPHIBOLITE, MARBLE, GNEISS

PLUTONIC ROCKS

TERTIARY
[D] (GRDR 42) GRANODIORITE, QUARTZ DIORITE, QUARTZ MONZONITE

LOWER CRETACEOUS
[C] (GTMZ 36) HAYES INTRUSIONS: QUARTZ MONZONITE, SYENITE, MONZONITE, GRANODIORITE, DIORITE

UPPER TRIASSIC
[B] (GRDR 32) TAKOMKANE BATHOLITH AND BODIES OF SIMILAR AGE AND LITHOLOGY: GRANODIORITE, QUARTZ DIORITE, QUARTZ MONZONITE

PERMIAN AND/OR TRIASSIC
[A] (GBPN 31) TREMBLEUR INTRUSIONS AND SIMILAR BODIES: PERIDOTITE, DUNITE, PYROXENITE, SERPENTINITE

SYMBOLS

GEOLOGICAL BOUNDARY: MAPPED, ASSUMED
FAULT: MAPPED, ASSUMED
THRUST FAULT (TEETH ON HANGINGWALL): MAPPED, ASSUMED
ANTICLINAL AXIS
SYNCLINAL AXIS
STREAM SAMPLE SITE

GEOLOGY AND MINERAL DEPOSITS

Generalized geology after Geological Survey of Canada Map 69-1963, Prince George, British Columbia, 1 inch to 4 miles, H. W. Tipper, 1969 and Geological Survey of Canada Map 1424A, Parsnip River, British Columbia, 1:1 000 000, compilation by H. W. Tipper, R. B. Campbell, G. C. Taylor, and D. F. Stott, 1979, used to determine dominant catchment basin rock type for proximity of geochemical data.

The four-letter mnemonic name indicates rock type and the two-digit number indicates age.

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 (MIH) 93G (PRINCE GEORGE) and 93H (MCBRIDE); Assessment Reports, refer to Assessment Report Index Map (ARI) 93H (MCBRIDE); Bedrock Geologic Mapping Reports, refer to Index to Bedrock Geological Mapping, 1982; Mineral and Placer Claim Maps, contact Ministry of Energy, Mines and Petroleum Resources, Titles Branch, for current editions.

Geological Survey of Canada

Resource Geophysics and Geochemistry Division

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

CONTRACTORS

Sample collection by McElhanney Surveying and Engineering Ltd., Vancouver
Sample preparation by Golder Associates, Ottawa

Sediment chemical analysis by Barringer Magenta Ltd., Rexdale, Ontario
Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

Copies of map material and listings of field observations and analytical data, from which the material was prepared, may be available at users expense by application to:

K.G. Campbell Corporation
580 Wellington St.
Bay 238
Ottawa, Ontario
K1R 6K7

The data are also available in digital form.
For further information please contact:

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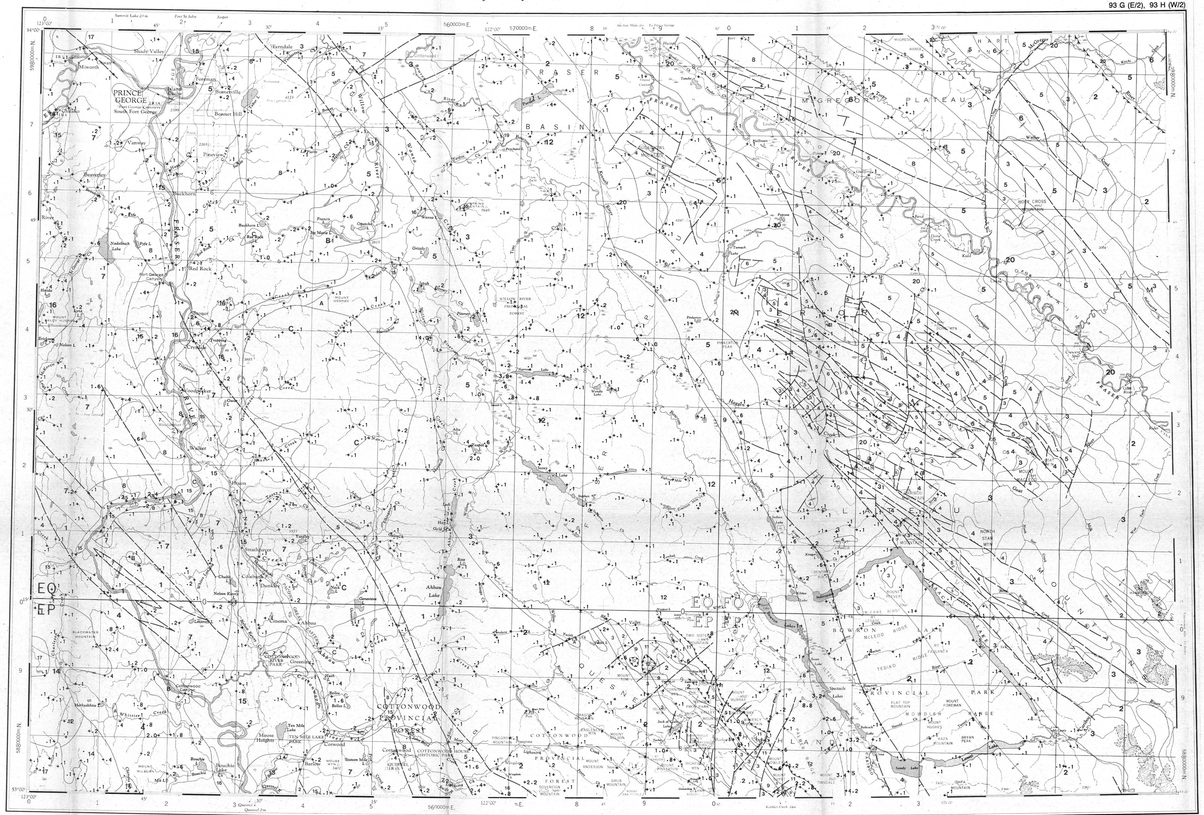
Canada
Department of Energy, Mines and Resources
Geological Survey of Canada

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

93 G (E/2), 93 H (W/2)



93 G (E/2), 93 H (W/2)

INDEX MAP

Elevation in feet above mean sea level

Mean magnetic declination 1965, 27°34' West, decreasing 9.9' annually. Readings vary from 26°41' in the SW corner to 28°27' in the NE corner of the map area

CADMIUM (ppm)
GSC OPEN FILE 1107
REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 72-1984

JOINT CANADA/BRITISH COLUMBIA PROGRAM
STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
EAST-CENTRAL BRITISH COLUMBIA

Scale 1:250 000

Kilometres 5 0 5 10 15 20 Kilometres

Universal Transverse Mercator Projection

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Base map assembled by the Geological Cartography Unit from maps published at the same scale by the Surveys and Mapping Branch in 1969, 1970

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

This map forms one of a series of maps released by the Geological Survey of Canada, Open File 1107. The Open File consists of maps of various geochemical variables; 18 for stream sediment, 3 for stream water and 1 sample site location

This map has been reprinted from a scanned version of the original map. Please see par numérisation d'une carte sur papier.

CADMIUM (ppm)
GSC OPEN FILE 1107
EAST-CENTRAL BRITISH COLUMBIA