

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 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

Provincial Open File
BC RGS-12-1984 (93E 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 401 TILL, GRAVEL, SAND, SILT, ALLUVIUM

MODERN AND PLEISTOCENE

[16] [15] [14] [13] [12] [11] [10] [9] [8] [7] [6] [5] [4] [3] [2] [1]

PALEOCENE, EOCENE, OLILOCENE

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

MESOZOIC - CENOZOIC

UPPER CRETACEOUS AND LOWER TERTIARY

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

CRETACEOUS

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

JURASSIC

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

TRIASSIC

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

PERMIAN AND/OR TRIASSIC

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

PALEOZOIC

PERMIAN AND/OR TRIASSIC

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

PROTEROZOIC

HADRYANIAN

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

PLUTONIC ROCKS

TERTIARY

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

LOWER CRETACEOUS

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

UPPER TRIASSIC

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

PERMIAN AND/OR TRIASSIC

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]

SYMBOLS

GEOLOGICAL BOUNDARY: MAPPED, ASSUMED

FAULT: MAPPED, ASSUMED

THRUST FAULT (TEETH ON HANGINGWALL): MAPPED, ASSUMED

ANTICLINAL AXIS

SYNCLINAL AXIS

STREAM SAMPLE SITE

GEOLGY AND MINERAL DEPOSITS

Generalized geology after Geological Survey of Canada Map 49-1960, Prince George, British Columbia, 1 inch to 4 miles, H. W. Tipper, 1968 and Geological Survey of Canada Map 105A, Parsnip River, British Columbia, 1:100 000, compilation by H. W. Tipper, R. B. Campbell, G. C. Taylor and D. F. Stott, 1979, used to determine dominant sediment basin rock type for grouping 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 (MIM) 53H (McMILLAN); Assessment Reports, refer to Assessment Report Index Map (ARIM) 53H (PRINCE GEORGE); Stream Geology Mapping Reports, refer to Index to Regional Geological Mapping, 1980, Mineral and Placer Claim Maps, contact Ministry of Energy, Mines and Petroleum Resources, Title 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 McManney Surveying and Engineering Ltd., Vancouver
Sample preparation by Golder Associates, Ottawa

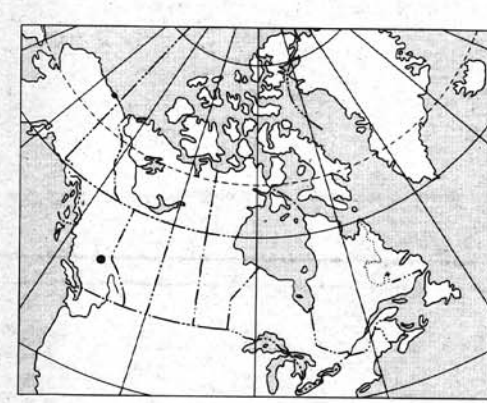
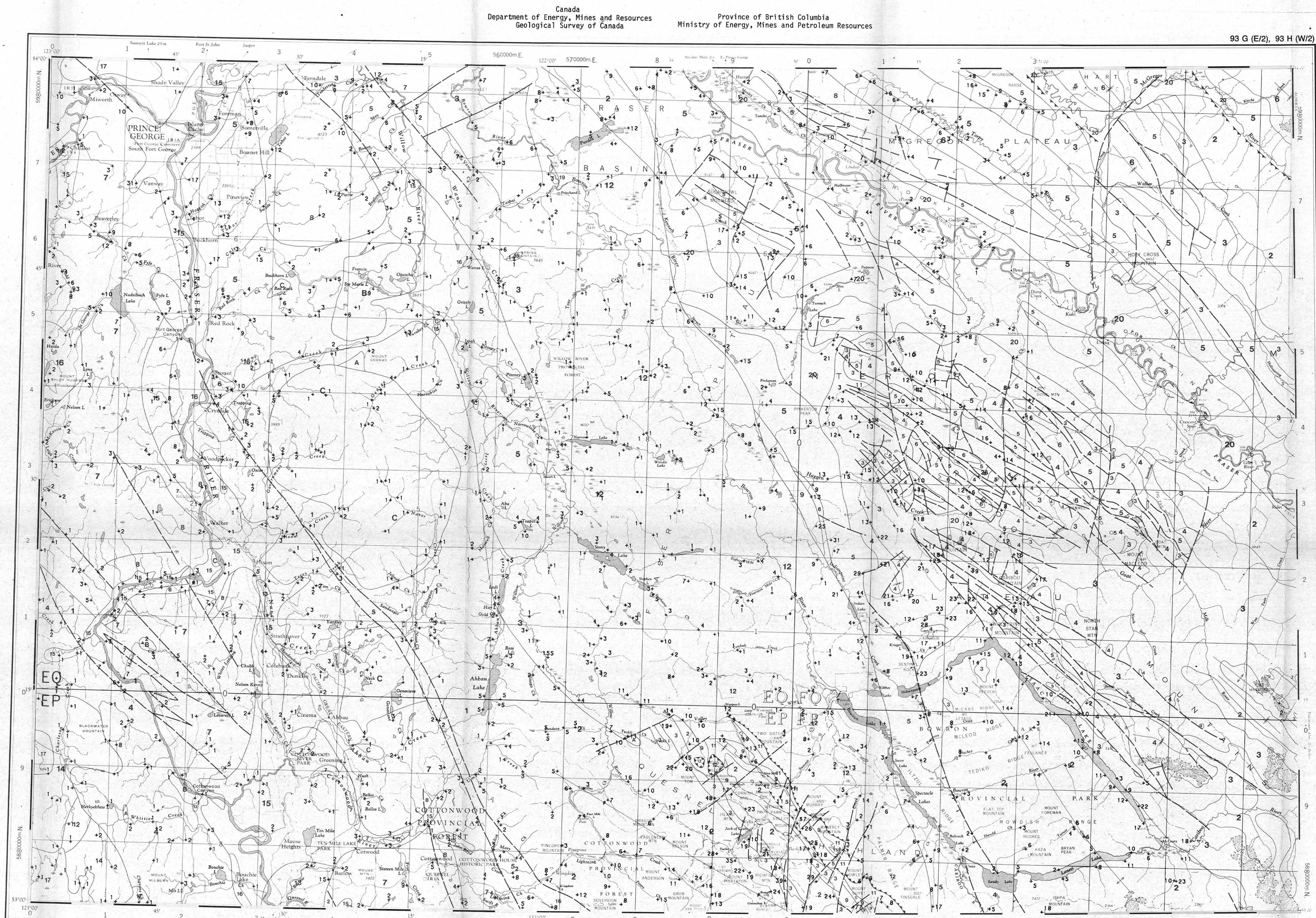
Sediment chemical analysis by Barringer Magenta Ltd., Rexdale, Ontario
Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

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
880 Wellington St.
Box 238
Ottawa, Ontario
K1R 6K7

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

The Director
Computer Science Centre
Department of Energy, Mines and Resources
Ottawa, Ontario
K1A 0E4



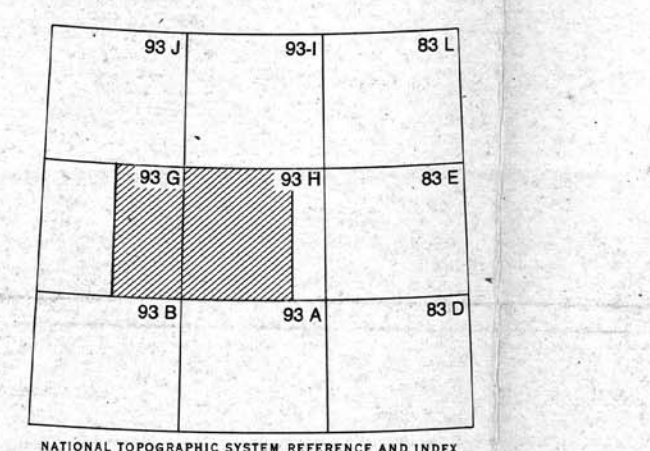
Elevation in feet above mean sea level

Mean magnetic declination 1985, 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

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
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



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

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

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

LEGEND
(This legend to be used east of 122°00' only.)

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

QUATERNARY

PLEISTOCENE AND RECENT

[20] [19] [18] [17] [16] [15] [14] [13] [12] [11] [10] [9] [8] [7] [6] [5] [4] [3] [2] [1]

CRETACEOUS OR TERTIARY

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20]

UPPER JURASSIC AND LOWER CRETACEOUS

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20]

JURASSIC

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20]

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PALEOZOIC

PERMIAN AND/OR TRIASSIC

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[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20]

UPPER TRIASSIC

[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20]

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SYMBOLS

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FAULT: MAPPED, ASSUMED

THRUST FAULT (TEETH ON HANGINGWALL): MAPPED, ASSUMED

ANTICLINAL AXIS

SYNCLINAL AXIS

STREAM SAMPLE SITE

GEOLGY AND MINERAL DEPOSITS

Generalized geology after Geological Survey of Canada, Map 196A to accompany Part 72-36, Geology of the Willow River Area, British Columbia, by R. B. Campbell, E. W. Tipper, and F. G. Young, Geological Survey of Canada Map 105A, Parsnip River, British Columbia, 1:100 000, compilation by H. W. Tipper, R. B. Campbell, G. C. Taylor and D. F. Stott, 1979, used to determine dominant sediment basin rock type for grouping of geochemical data.

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SYMBOLS

GEOLOGICAL BOUNDARY: MAPPED, ASSUMED

FAULT: DOT ON DOWNTOWN SIDE; MAPPED, ASSUMED

THRUST FAULT (TEETH ON HANGINGWALL): MAPPED, ASSUMED

ANTICLINAL AXIS

SYNCLINAL AXIS

STREAM SAMPLE SITE