

BRITISH COLUMBIA SURFICIAL DEPOSITS

PROGLACIAL DEPOSITS

LACUSTRINE DEPOSITS: Varved silt, clay, and sand, locally drumlized 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 GLACIOLUVIAL 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 unmaped

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 136, 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 (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
[7] (TILL 44) TILL, GRAVEL, SAND, SILT, ALLUVIUM

TERTIARY

MIOCENE AND PLEISTOCENE
[26] (BSL 42) OLIVINE BASALT FLOWS, BRECCIA, AND TUFF

[15] (ISND 42) SANDSTONE, SHALE, CONGLOMERATE, DIATOMITE, LIGNITE

OLIGOCENE AND MIOCENE
[14] (ANDS 26) ANDESITE, TUFF, BRECCIA, ANGIOLITE, ARKOSE, CONGLOMERATE

PALEOCENE, EOCENE, OLILOCENE
[13] (IGL 42) CONGLOMERATE, SANDSTONE, SHALE, TUFF, BRECCIA

MESOZOIC - CENOZOIC

UPPER CRETACEOUS AND LOWER TERTIARY

[17] (BYLT 41) OOTSA LAKE GROUP: RHYOLITE, DACITE, TRACHYTE, SANDSTONE, SHALE, CONGLOMERATE

CRETACEOUS

[11] (ANDS 26) ANDESITE, TUFF, BRECCIA, ANGIOLITE, ARKOSE, CONGLOMERATE

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

JURASSIC

[7] (MIDDLE JURASSIC) (ANDS 36) HAZELTON GROUP (PART) UNDIVIDED: BASALT, ANDESITE, TUFF, BRECCIA, GREYWACKE, MUDSTONE, CONGLOMERATE

[8] (LOWER AND MIDDLE JURASSIC) (ISL 36) SHALE, GREYWACKE, CONGLOMERATE

TRIASSIC

[5] (UPPER TRIASSIC AND LOWER JURASSIC) (ANDS 25) TAKLA GROUP: ANDESITE, BASALT, TUFF, BRECCIA, CONGLOMERATE, GREYWACKE, SHALE, LIMESTONE

[6] (UPPER TRIASSIC) (LMDN 20) LIMESTONE

[12] (PLLT 33) BLACK PHYLLITE, SILTSTONE, LIMESTONE, QUARTZITE

PALEOZOIC

PENNSYLVANIAN AND PERMIAN

[1] (CHRT 20) CHOCOMECHER GROUP: RIBBON CHERT, BLACK ANGIOLITE, LIMESTONE, GRENSTONE

MISSISSIPPIAN AND/OR YOUNGER

[3] (BSL 21) SLEDGE MOUNTAIN GROUP: BASALT, BRECCIA, TUFF, CHERT, ANGIOLITE, SANDSTONE, LIMESTONE, CONGLOMERATE

CAMBRIAN

[2] (LOWER CAMBRIAN) (LMDN 21) MURAL FORMATION: LIMESTONE (INCLUDES MAITO FORMATION SILTSTONE, SANDSTONE)

PROTEROZOIC

HADRYANIAN

[3] (ISND 06) KAZA GROUP: SANDSTONE, CONGLOMERATE, GYTT, PHYLITE, SCHIST, AMPHIBOLITE, MARBLE, GNEISS

PLUTONIC ROCKS

TERTIARY

[3] (IGOR 42) GRANODIORITE, QUARTZ DIORITE, QUARTZ MONZONITE

LOWER CRETACEOUS

[4] (LMDN 21) MURAL GROUP: QUARTZ MONZONITE, SYENITE, MONZONITE, GRANODIORITE, DIORITE

UPPER TRIASSIC

[8] (IGOR 20) TANKANIAN BATHOLITH AND BODIES OF SIMILAR AGE AND LITHOLOGY: GRANODIORITE, QUARTZ DIORITE, QUARTZ MONZONITE

PERMIAN AND/OR TRIASSIC

[1] (IGOR 21) THUNDER TUFFS AND SIMILAR BODIES: PERIODITE, DUNITE, PYROXENITE, SERPENTINITE

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 49-1980, Prince George, British Columbia, 1:1 000 000. See also H.W. Tipper, 1956 and Geological Survey of Canada File 136A, Permi-Triassic, 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 sediment basin rock type for purposes of geochemical data.

The four-letter mesosonic 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 (M) 195 (BRITISH COLUMBIA) Assessment Reports, refer to Assessment Report Index Map (AR) 802 (PRINCE GEORGE). Involvement Mapping Reports, refer to Index to Bureau Geologist Mapping, 1982, Mineral and Fuel Claim Maps, contact Ministry of Energy, Mines and Petroleum Resources, Titles Branch, for current editions.

Resource Geophysics and Geochemistry Division
Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

CONTRACTORS

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

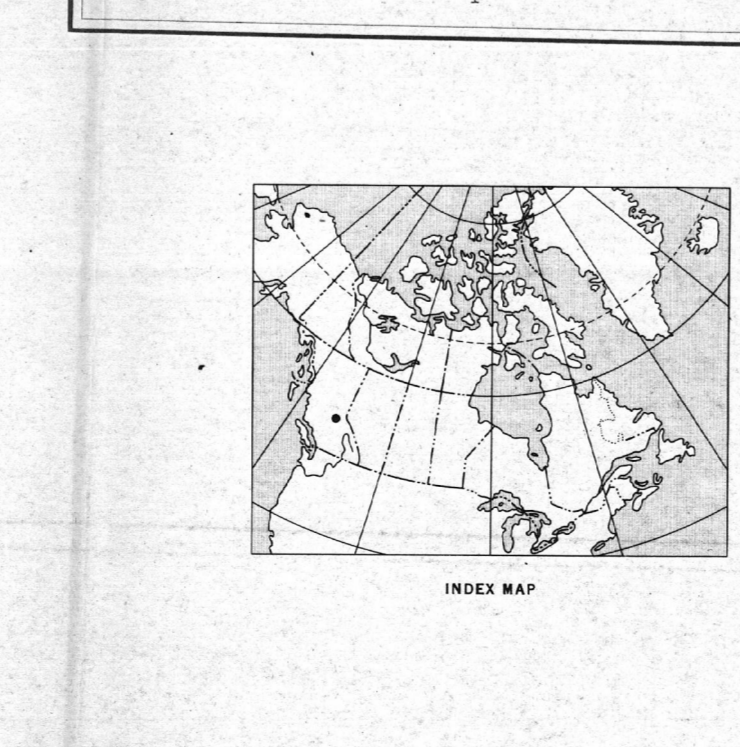
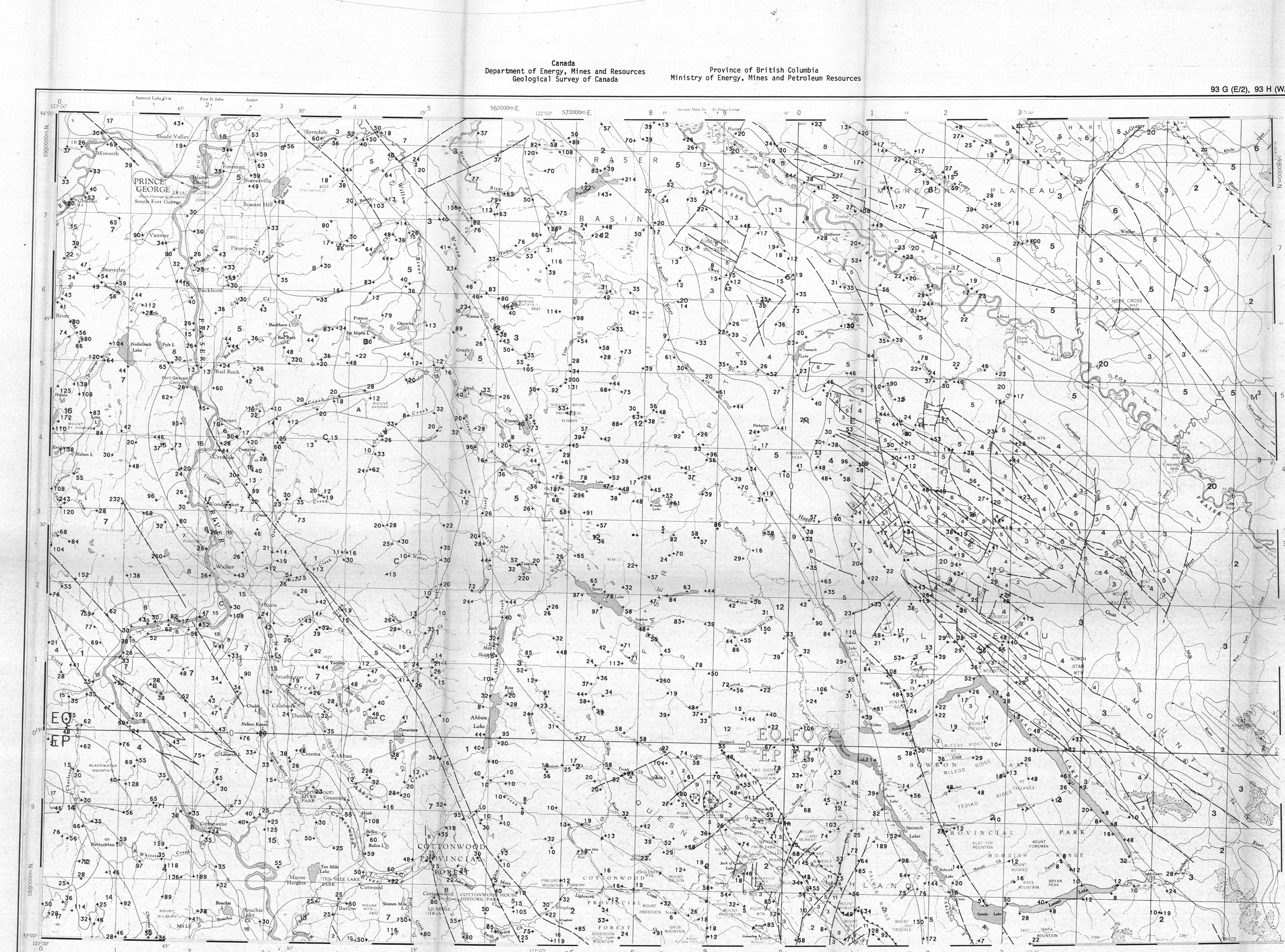
Sediment chemical analysis by Barringer Magenta Ltd.,
Rexdale, Ontario
Water chemical analysis by Barringer Magenta Laboratories
(Alberta) Ltd., Calgary

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.
Bay 238
Ottawa, Ontario
K1R 6J7

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



MERCURY(ppb)
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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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

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

MERCURY(ppb)
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] (TILL 44) TILL, GRAVEL, SAND, SILT, ALLUVIUM

CRETACEOUS OR TERTIARY

UPPER CRETACEOUS OR PALEOCENE
[9] (IGLM 41) BOWEN RIVER COAL BEDS: CONGLOMERATE, BRECCIA, SANDSTONE, SHALE, COAL

UPPER JURASSIC AND LOWER CRETACEOUS

[18] (ISND 35) NIKAHASSIM FORMATION: SANDSTONE, SILTY SHALE, SILTSTONE

JURASSIC

LOWER TO UPPER JURASSIC
[17] (IBHL 34) FERNIE GROUP: SHALE, SILTY SHALE, SILTSTONE

TRIASSIC

UPPER TRIASSIC
[6] (PLLT 33) PHYLLITE, ARGILLITE, MINOR LIMESTONE, QUARTZITE

MIDDLE AND UPPER TRIASSIC
[5] (LMDN 20) SKEENA RIVER GROUP: WHITEHORSE FORMATION: LIMESTONE AND DOLOSTONE

LOWER AND MIDDLE TRIASSIC
[4] (LMDN 20) SKEENA RIVER FORMATION: SILTSTONE AND SILTY LIMESTONE

MISSISSIPPIAN AND PERMIAN

[13] (LMDN 20) ROUNDEL GROUP: (ISML GROUP, BANFF FORMATION): LIMESTONE, SANDSTONE, LIGNITE, SHALE, DOLOSTONE, CHERT

MISSISSIPPIAN

LOWER MISSISSIPPIAN AND/OR YOUNGER
[12] (ISML 21) SLEDGE MOUNTAIN GROUP: ANTLER FORMATION: PILLOW BASALT, BRECCIA, TUFF, MINOR DIORITE AND GABBRO, CHERT, ANGIOLITE, LITHIC SANDSTONE

LOWER MISSISSIPPIAN AND/OR OLDER
[11] (IGLM 21) GUYOT FORMATION: GREENBERRY FORMATION: CONGLOMERATE, ANGIOLITE, LITHIC SANDSTONE, CRINOIDAL LIMESTONE

DEVONIAN

UPPER AND MIDDLE DEVONIAN
[10] (IGLM 18) WALLAGE GROUP: ALEXO, PERDIX, MOUNT NANK, FLUME FORMATIONS: LIMESTONE, SHALE, SANDSTONE, SILTSTONE

LOWER DEVONIAN AND YOUNGER
[9] (ISML 18) BLACK STARBAT FORMATION: BASALT, CHERT, BRECCIA, DOLOMITE, MITE BRECCIA, UPPER UNIT CHERT, ANGIOLITE, PHYLITE, SANDY LIMESTONE

SILURIAN

LOWER SILURIAN
[8] (ISML 16) WANDA FORMATION: ALL OR IN PART: DOLOMITE, LIMESTONE, QUARTZITE, SHALE, GRENSTONE, FLUOR AND SILITE

OROVIAN

LOWER AND MIDDLE OROVIAN
[7] (LMDN 11) SKEENA MOUNTAIN, CHINSHA FORMATIONS: DOLOMITE, LIMESTONE, SANDSTONE, SHALE, QUARTZITE

CAMBRIAN

[5] (ISML 13) LYNX, DOCK CREEK, ARCTOMYS, WATERFLOE, NOTA-ADOLPHUS, TAYL-CHEWAL, TITKANA FORMATIONS: SHALE, SILTY ANGIOLITE, DOLOMITE, SANDSTONE, SILTSTONE, ANGIOLITE, PHYLLITE

LOWER CAMBRIAN AND HADRYANIAN
[4] (ORIZ 21) MAITO, MURAL, MOAS, MENCHINGTON, YAKS PEAK FORMATIONS: QUARTZITE, LIMESTONE, SHALE, SILTSTONE, DOLOMITE, CONGLOMERATE

HADRYANIAN

[3] (ISML 06) YAKKE BELLE, CONUNWAM FORMATIONS: SHALE, LIMESTONE, SILTSTONE, DOLOMITE, PHYLLITE

[2] (PLLT 20) METTIE GROUP: ISAC FORMATION: PHYLLITE, ANGIOLITE, SCHIST, SANDSTONE, LIMESTONE, CONGLOMERATE

[1] (IFCA 06) KAZA GROUP: SAUNDAGE FORMATION: MIDDLE METTIE GROUP: FELDSPATHIC SANDSTONE, GRANULE CONGLOMERATE, SILTSTONE, ANGIOLITE, PHYLLITE, SCHIST, LIMESTONE, MARBLE

[0] (LMDN 06) LOWER METTIE GROUP: ANGIOLITE, PHYLLITE, SANDSTONE, LIMESTONE

INTRUSIVE ROCKS

MISSISSIPPIAN OR YOUNGER
[A] (SRPN 21) SERPENTINITE

SYMBOLS

GEOLOGICAL BOUNDARY: MAPPED, ASSUMED

FAULT: MAPPED, ASSUMED

THRUST FAULT (TEETH ON DOWNHORN SIDE): MAPPED, ASSUMED

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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)

MERCURY(ppb)
GSC OPEN FILE 1107
EAST-CENTRAL BRITISH COLUMBIA

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