

Geological Survey Branch
OPEN FILE 1995-7
 (Sheet 1 of 2)

**GEOLOGY OF THE
 TATLAYOKO LAKE MAP AREA,
 BRITISH COLUMBIA**

NTS 92N/8, 9, 10
 Compiled by P. Scharizza and D.M. Melville

Geology by:
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 B.C. Geological Survey Branch, 1994
 P.J. Umhoefer and M.J. Robinson, Northern Arizona University, 1994
 H.W. Tipper, J. Simpson, D. Watkins, J. Crawford, R. Woodsworth, R. Park, A. Mitchell,
 K. Dahman, B. Calder and J. Lau, Geological Survey of Canada, 1967

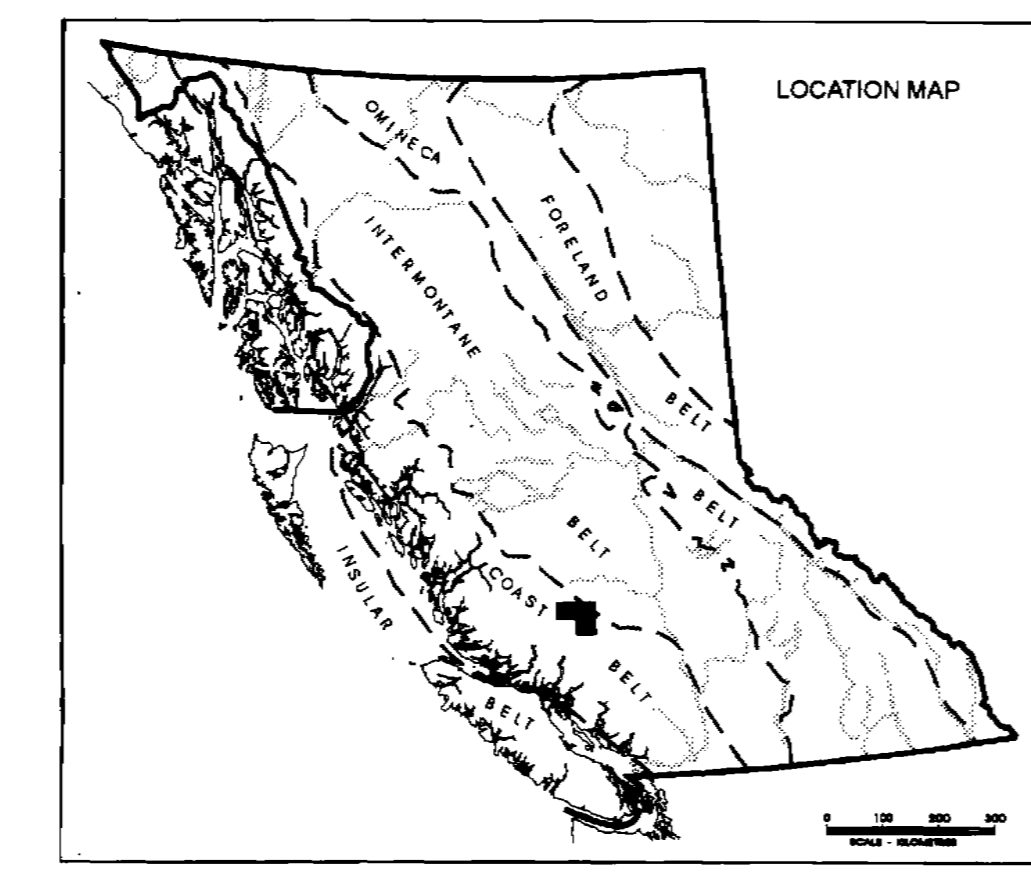
Scale 1:50 000

Legend

- PLEISTOCENE AND RECENT**
 - Qal Unconsolidated glacial, fluvial and alluvial deposits
- MIOCENE AND PLOCEENE**
 - MPCV Olivine basalt flows
- Northeast of Yalakom fault (Intermontane Belt)**
 - Stikine Terrane (?)
- LOWER TO MIDDLE JURASSIC**
 - HAZELTON GROUP (?)
 - ImJv Medium to dark green andesitic to basaltic, locally includes diorite and gabbro; minor amounts of volcanic breccia, sandstone and siltstone; locally characterized by secondary brecciation and quartz-epidote-calcite veining
 - ImJvb Green, purple and grey volcanic breccia and tuff; lesser amounts of volcanic conglomerate and sandstone
- Intrusive Rocks**
 - CRETACEOUS OR TERTIARY (?)
 - KTfp Felsophar porphyry
 - JURASSIC OR CRETACEOUS (?)
 - JKqd Quartz diorite
- Southwest of Yalakom fault (Coast Belt)**
 - UPPER CRETACEOUS
 - POWELL CREEK FORMATION (uKpc2 and uKpc1)
 - uKpc2 Purple, green and grey andesitic volcanic breccia, locally tuff and ash tuff; locally breccia, mafic to intermediate volcanic flows, volcanic conglomerate and sandstone
 - uKpc1 Well stratified volcanic breccia and conglomerate; minor amounts of volcanic sandstone and siltstone
 - uKs Grey and green rhyolite sandstone intercalated with dark grey to purple shale; lesser amounts of andesitic sandstone and chert pebble conglomerate
 - Niut Range
 - TKv Green, brownish weathered andesite and andesite breccia and tuff; commonly hornblende-feldspar-phylite; locally hornblende-andesite-phylite; minor amounts of felsic tuff, agglomerate and conglomerate; may correlate with the Lower Cretaceous Okanagan Formation or the Middle to Upper Triassic Mount-More Formation
 - TKs Conglomerate containing clasts of felsic to mafic volcanic rock and less common clasts of sedimentary and plutonic rock; lesser amounts of andesite, volcanic sandstone and shale
 - UPPER TRIASSIC (?)
 - uTns Brown calcareous sandstone, calcarenite, shale and limestone-cobble conglomerate
- Methow Terrane**
 - LOWER CRETACEOUS
 - Albain
 - JACKASS MOUNTAIN GROUP
 - JKMg Green to bluish-green, light brown to brownish-grey weathering; rhyolite andesite and gneiss sandstone; lesser amounts of siltstone, shale and granite to pebble conglomerate
 - JKMsh Dark grey siltstone and shale; minor amounts of sandstone
 - JKMgq Sandstone intercalated with lenses of pebbles to cobble conglomerate containing volcanic, plutonic and metamorphic clasts
 - JKM Undivided sandstone and conglomerate
- UPPER JURASSIC TO LOWER CRETACEOUS**
 - RELAY MOUNTAIN GROUP
 - Valanginian to Barremian
 - JKRM2 Brown, green and grey rhyolite and andesite sandstone; dark grey to brown siltstone and shale; minor amounts of granite to pebble conglomerate
 - Oxfordian to Valanginian
 - JKRM1 Brown, green and grey rhyolite and andesite sandstone; brown to grey siltstone and mudstone; lesser amounts of polymictic pebbles to cobble conglomerate and *Bufoia* conchae
 - Kimmeridgian to Hauterivian
 - JKRM Eastern Niut Range; Kimmeridgian; felsopharitic sandstone and polymictic pebbles to cobble conglomerate, overlain by Hauterivian(?) shale and andesite sandstone
 - JKRMn Hornblende sandstone and siltstone tentatively correlated with the Relay Mountain Group
 - MIDDLE JURASSIC
 - Calliovan
 - ImJs Volcanic-rhyolite sandstone, gneiss sandstone, siltstone and mudstone; locally includes pebble conglomerate at base
 - LOWER TO MIDDLE JURASSIC**
 - Pliensbachian to Bajocian
 - ImJs Thin-bedded, laminated to cross-bedded siltstone, shale and fine-grained sandstone; medium to very thick-bedded, coarse grained volcanic-rhyolite sandstone and gneiss sandstone; lesser amounts of granite to pebble conglomerate containing volcanic clasts and andesite breccia; minor amounts of laminated to cross-bedded siltstone; locally includes andesitic tuff, volcanic breccia and rare intermediate flows or sills; locally massive sandstone and gneiss sandstone intercalated with lesser amounts of siltstone and shale
 - Pliensbachian to Calliovan
 - ImJsu Units ImJs and ImJs undivided
 - UPPER TRIASSIC**
 - uTs Lithic sandstone, calcarenite, pebbly calcarenite and fossilifer; lesser amounts of siltstone, micritic limestone, andesite sandstone and pebble conglomerate
 - TRIASSIC (?)**
 - Tcg Maroon, locally green, pebbly to cobble conglomerate containing clasts of intermediate to felsic volcanic rock and less common granitoid rock, limestone and calcareous sandstone; lesser amounts of sandstone, siltstone and shale; minor amounts of micritic limestone
 - Tv Purple tuff and welded tuff
- Cadwallader Terrane**
 - LOWER TO MIDDLE JURASSIC
 - ImJc Dark grey argillite and siltstone, commonly with calcareous concretions; minor amounts of sandstone
 - UPPER TRIASSIC
 - uTCH Hurley Formation; thin-bedded, light and dark grey laminated siltstone and shale; thin to thick-bedded, fine to coarse-grained sandstone and calcareous sandstone
- Intrusive Rocks**
 - CRETACEOUS AND/OR TERTIARY (?)
 - KTqd Quartz diorite, granodiorite
 - LATE TRIASSIC AND/OR YOUNGER
 - Tg Granite
 - Tfp Hornblende felsophar porphyry
 - Tqd Quartz diorite, diorite
 - LATE TRIASSIC AND(?) YOUNGER
 - LTKd Mount Skinner igneous Complex; diorite and quartz diorite intruded by dikes of basalt, diabase, hornblende felsophar porphyry, quartz felsophar porphyry and gabbro; also includes masses of the granitic plutons that may be dike swarms and/or screens of older volcanic rock

ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
 CONTOUR INTERVAL 100 FEET
 NORTH AMERICAN DATUM 1927
 TRANSVERSE MERCATOR PROJECTION

- SYMBOLS**
- Geological boundary (defined, approximate, assumed)
 - Fault (defined, approximate, assumed)
 - Thrust Fault
 - Bedding, tops known (inclined, vertical, overturned)
 - Bedding, tops unknown (inclined, vertical)
 - Slaty cleavage, schistosity (inclined, vertical)
 - Vein (inclined, vertical)
 - Dike (inclined, vertical)
 - Joint (inclined, vertical)
 - Bedding/Cleavage intersection lineation
 - Slickenside lineation
 - Fracture cleavage (inclined, vertical)
 - Minor ductile shear zone (inclined, vertical)
 - Minor fold axis with vergence indicated (arrow indicates plunge)
 - Minor brittle fault (inclined, vertical, displacement shown where known)
 - Anticlinal fold axis (arrow indicates plunge)
 - Synclinal fold axis (arrow indicates plunge)
 - Anticlinal fold axis, overturned (arrow indicates plunge)
 - Small bedrock exposure within Quaternary cover
 - Boundary of Tsyi-co Provincial Park

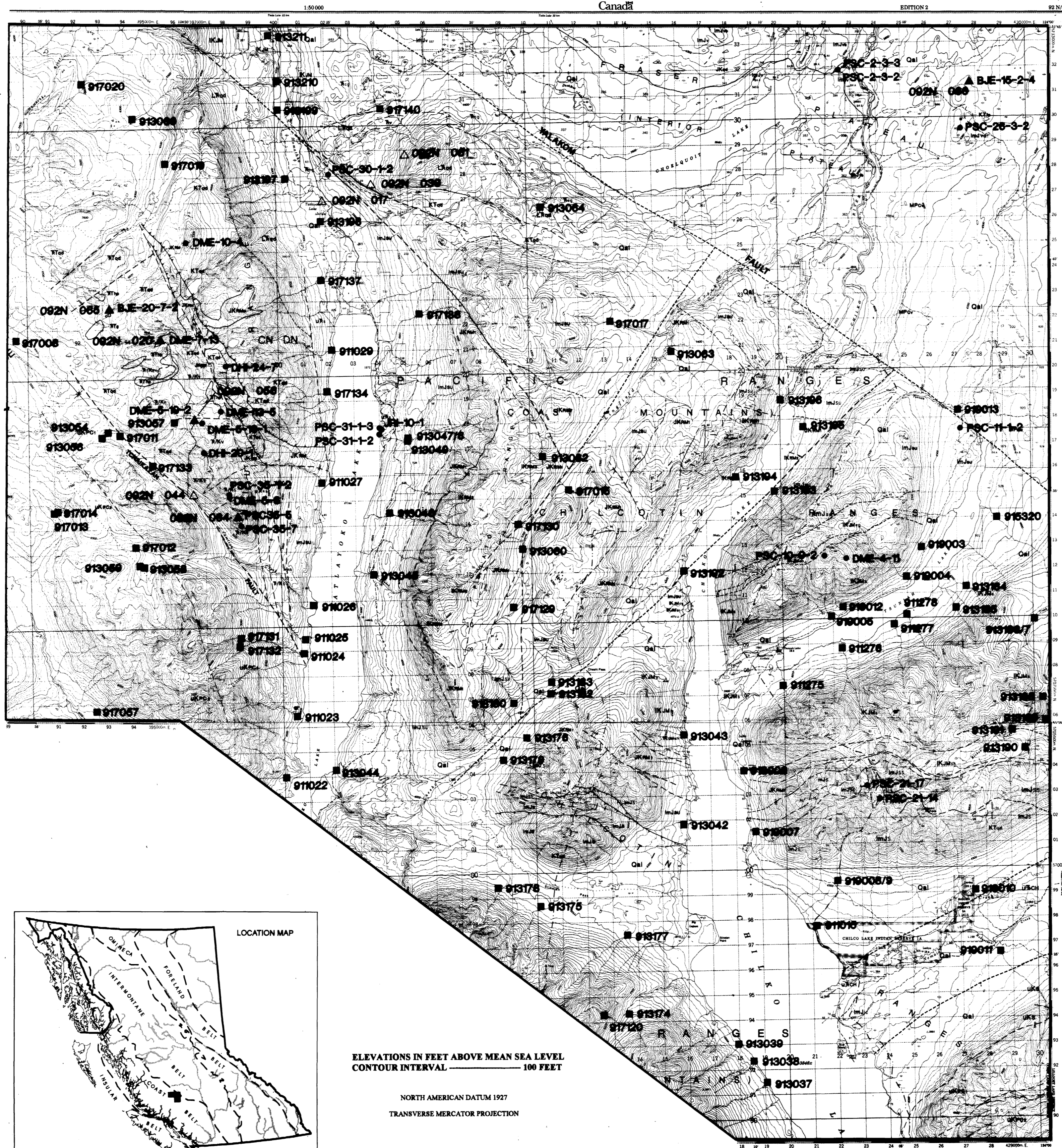


1991 REGIONAL GEOCHEMICAL SURVEY - STREAM SEDIMENT RESULTS

Table with columns: MAP SAMPLE NUMBER, UTM EASTING, UTM NORTHING, and 24 chemical elements (Au, Ag, Mo, Cu, Pb, Zn, Ni, Co, Mn, Fe, As, U, Th, Cd, Sb, Bi, V, Cr, Ba, Na, W, Hg, LOI %).

1994 LITHOGEOCHEMISTRY

Table with columns: FIELD NUMBER, UTM EASTING, UTM NORTHING, ROCK TYPE, and 14 chemical elements (Au, Ag, Cu, Pb, Zn, Ni, Co, Mo, As, Sb, Ba, Na, W, Hg).



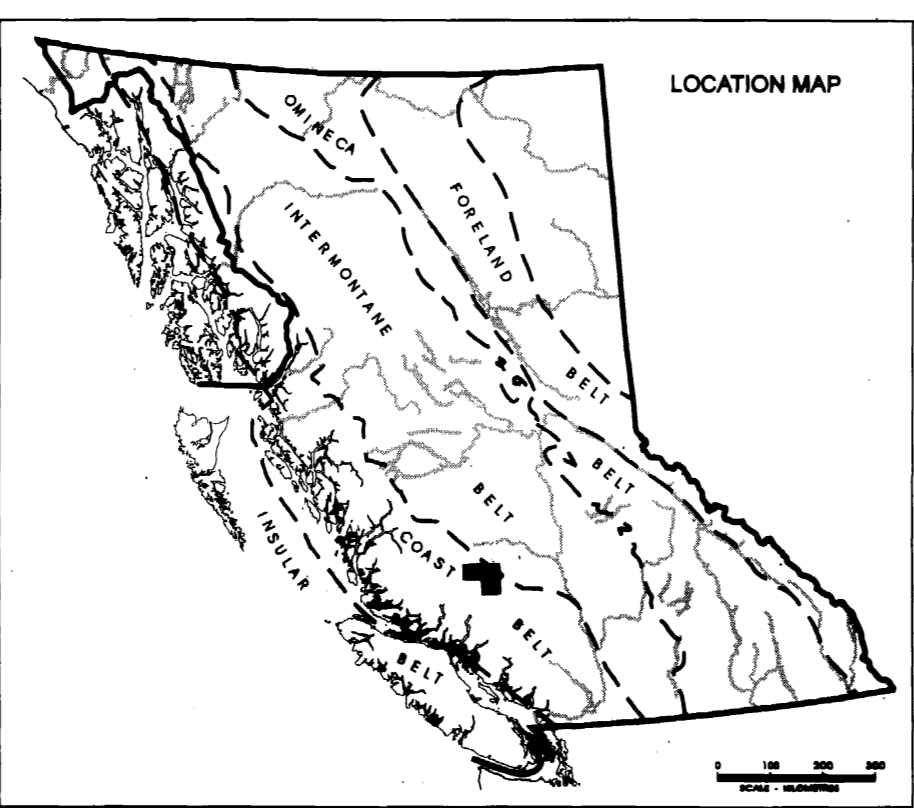
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(Sheet 2 of 2)
**MINERAL OCCURRENCES AND
GEOCHEMISTRY OF
THE TATLAYOKO LAKE MAP AREA,
BRITISH COLUMBIA**
NTS 92N/8, 10
Compiled by D.M. Melville, B.K. Jennings
and P. Schiarizza

Scale 1:100 000

- MINFILE Mineral Occurrences (triangle symbol)
- 1994 Lithochemical Sample Locations (circle symbol)
- 1991 Regional Geochemical Survey (Stream Sediments) (square symbol)

MINFILE MINERAL OCCURRENCES

Table with columns: MINFILE No./Name, UTM EASTING, UTM NORTHING, Economic Commodities, Geological Description.



ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
CONTOUR INTERVAL - 100 FEET

NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION