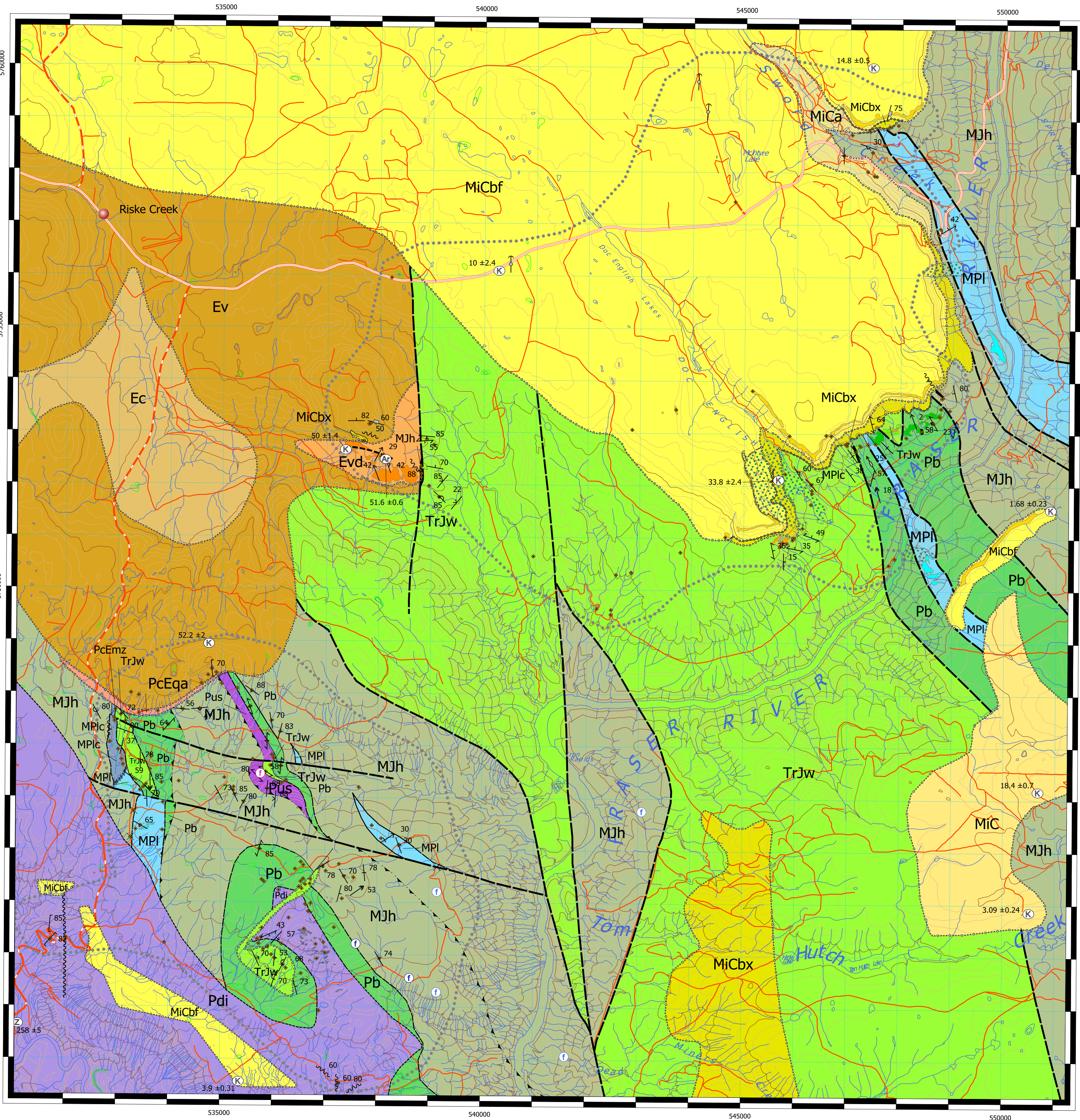




Datum: North American 1983 (mean for CONUS)
Projection: Albers Conical Equal Area
Map center: -122.40:51.90 degrees
Production Date: 22 May 2007
Production File Name: RiskeCk GeologyV7.map

Suggested Citation:
Mihalynuk, M.G. and Harker, L.L. (2007):
Riske Creek Geology (0920/16W);
BC Ministry of Energy, Mines and Petroleum
Resources, Open File 2007-6, scale 1:50 000.



Open File 2007-6
Sheet 1 of 1

Riske Creek Geology

Mainly NTS 0920/16W

Revision Geology by:
Mitchell G. Mihalynuk,
and Leslie L. Harker
after Read (1993)

SCALE 1: 50 000



LAYERED UNITS

- Landslide debris - mainly blocks of Chilcotin Group lithologies
- Quaternary alluvium, where typically more than a few metres thick
- Chilcotin Group (Oligocene to Pleistocene, mainly Miocene basalt)
 - Undivided Chilcotin Group; mainly basalt flows, hyaloclastite and lesser tuffaceous sediment
 - Undivided sedimentary rocks, poorly lithified, tuffaceous sandstone and lesser gravel
 - Massive, well-jointed basalt flows
 - Hyaloclastic basalt breccia, commonly with tan ash matrix, may display large-scale foresets

Unnamed Eocene volcanic strata

- Dacite, welded, hornblende-biotite-feldspar porphyritic ignimbrite (50 Ma, Mihalynuk and Ullrich, unpub.)
- Andesitic breccias, tuffs and flows (minor rhyolite > basalt); lesser conglomerate, sandstone to shale
- Conglomerate, coarse clastic sedimentary rocks
- Basal tuffaceous sediment, mainly chert sandstone, white weathering

Cache Creek Complex

- Argillite, greywacke, wacke, conglomerate turbidites
- Chert, siliceous argillite, siliciclastic rocks
- Limestone, marble, calcareous sedimentary rocks
- Olistostromal limestone, conglomerate and carbonate sandstone
- Basaltic volcanic rocks, commonly aphanitic, light green, autobrecciated
- Serpentinized ultramafite, phaccolite, knockers of other cache creek complex lithologies common

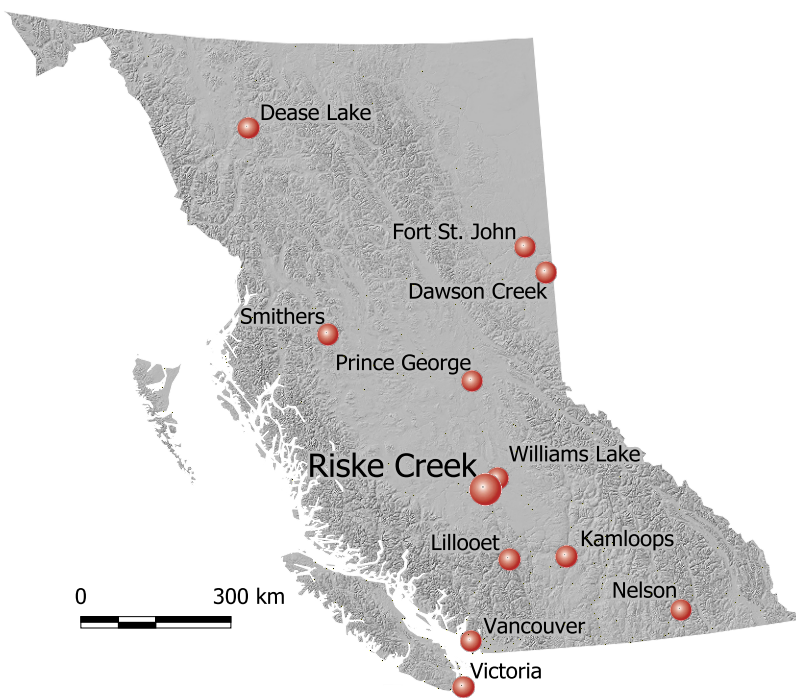
INTRUSIVE ROCKS

- Monzonite, alkali feldspar granite
- Tonalite intrusive rocks, varietal, foliated tectonic breccia

ALTERATION

- White clay and iron oxide alteration (paleoregolith?)

LOCATION

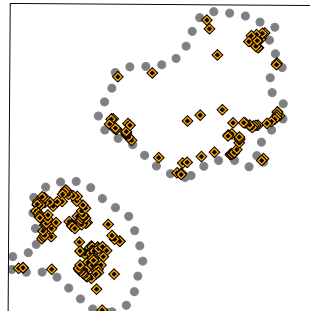


SYMBOLS

- Contacts: defined, approximate, inferred
Unconformity: defined, approximate, inferred
Fault: defined, approximate, inferred
Thrust: defined, approximate, inferred
- Bedding: inclined, vertical, tops known, overtuned
Foliation: 1st, inclined; vertical; horizontal; 2nd; 3rd
Cleavage: inclined, vertical, horizontal
Brittle shear: inclined or vertical
Lineation: mineral or marker inclined; marker horizontal
Hinge line: minor fold, inclined; crenulation
Hinge line: minor fold, inclined; crenulation
Dike: inclined, vertical, horizontal
Igneous layering: inclined, vertical
Joint: inclined, vertical, horizontal
Glacial striation: bidirectional, unidirectional
- Fold hinge trace: anticline, defined; syncline, approximate
Hinge trace inferred: synform, antiform, 2nd generation
- Fossil: macrofossil, microfossil
- Geochronology: K-Ar, U-Pb zircon, 40Ar/39Ar
Breitsprecher and Mortensen (2004) and references within; 40Ar/39Ar data from Ullrich (2007)
- Limit of mapping
Contours: 100m, 20m intervals
Roads: paved, maintained loose, dirt

References

- Breitsprecher, K. and Mortensen, J.K. (2004): BC Age 2004A-1: A database of isotopic age determination for rock units from British Columbia; BC Ministry of Energy, Mines and Petroleum Resources, Open File 2004-3, <http://www.em.gov.bc.ca/Mining/Geosurv/Publications/OpenFiles/OF2004-03/toc.htm>, [December 12, 2006].
- Ullrich, T. (2007): Report on 40Ar/39Ar age determinations for the BC Geological Survey Branch, Unpublished.
- Read, P.B. (1993): Geology of Northeast Taseko Lakes map area, southwestern British Columbia; in Current research; Part A, Cordillera and Pacific margin, Geological Survey of Canada, pages 159-166.



Reliability Diagram

Field Station Locations in 2006

location of observation

Areas Mapped in 2006

outline of mapped area