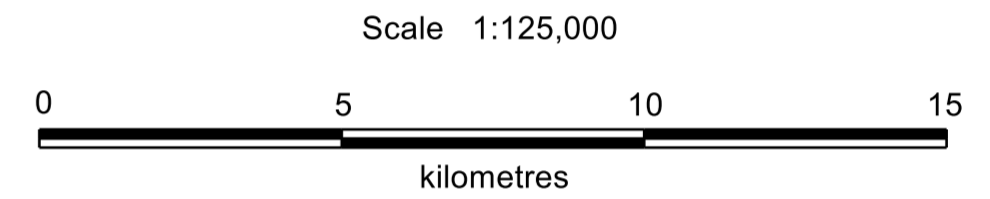
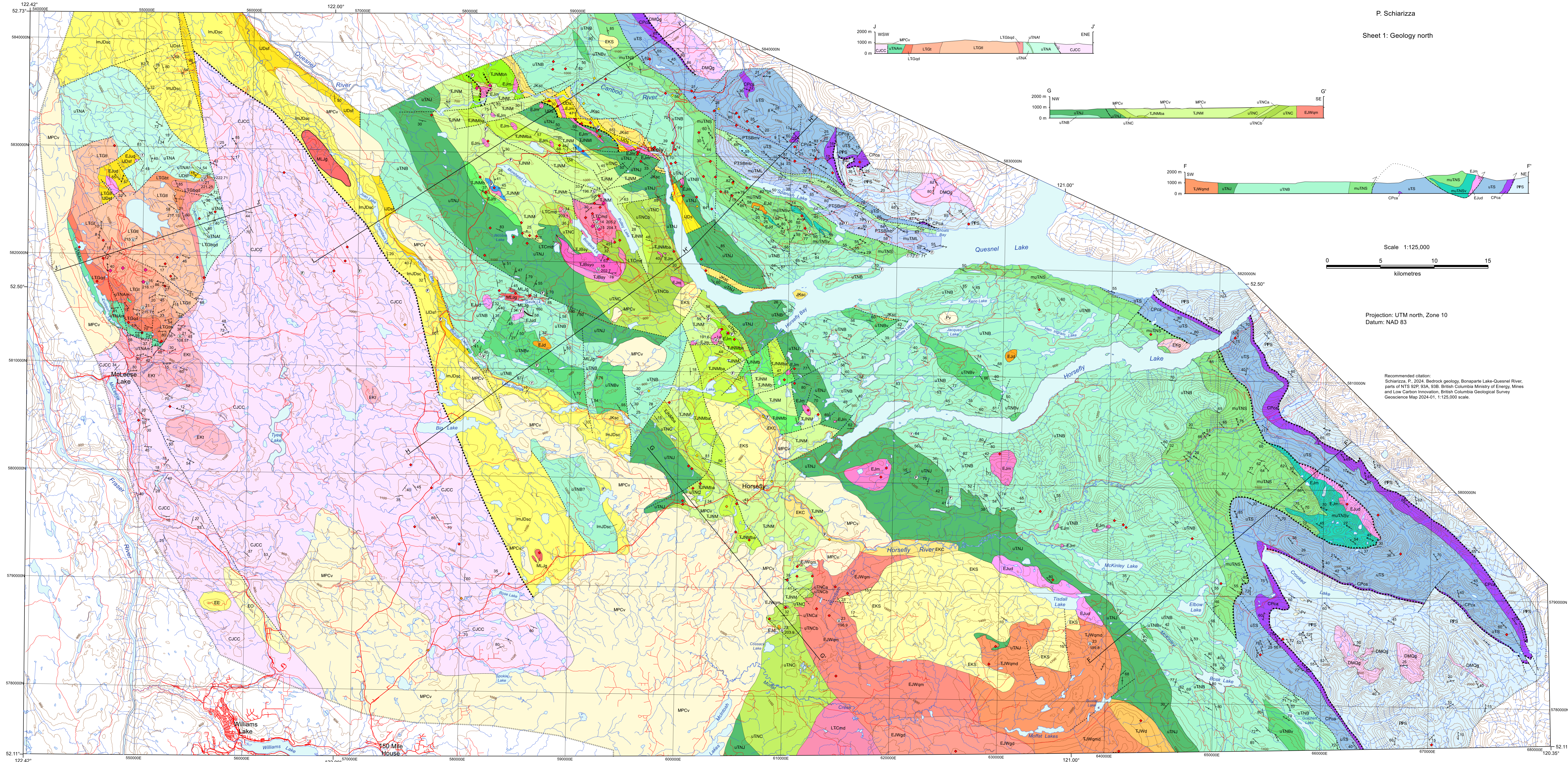
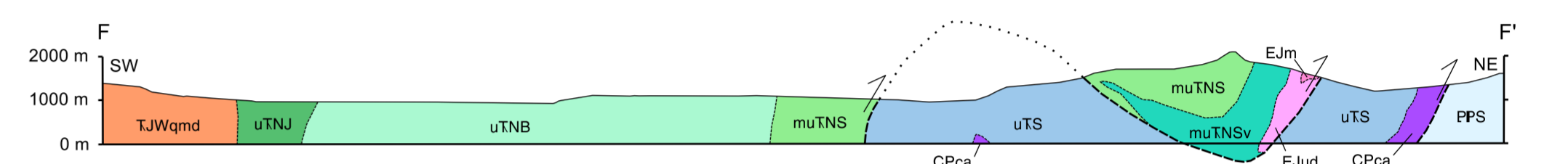
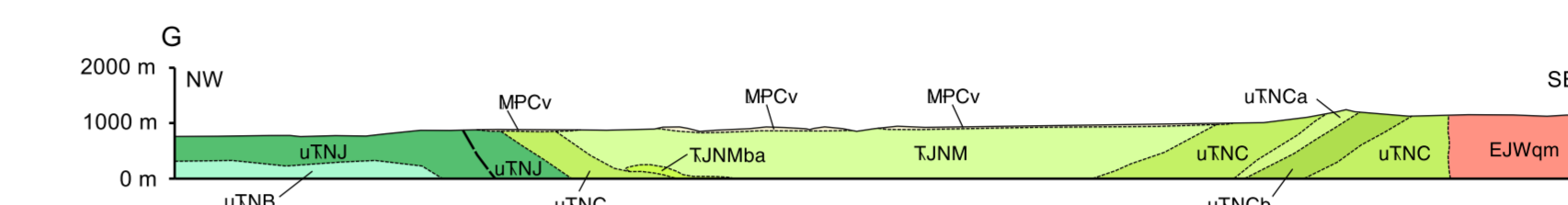
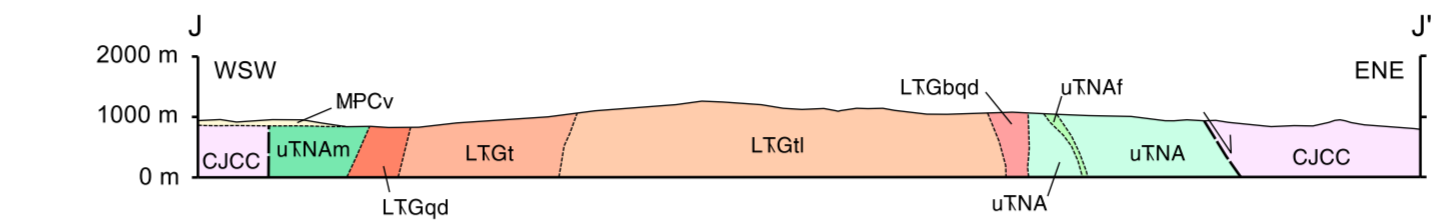
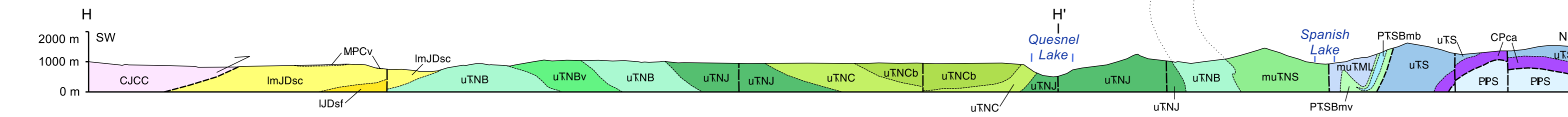
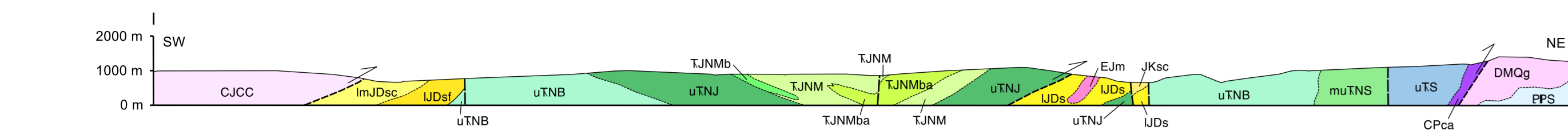


Bedrock geology, Bonaparte Lake - Quesnel River
parts of NTS 92P, 93A, 93B

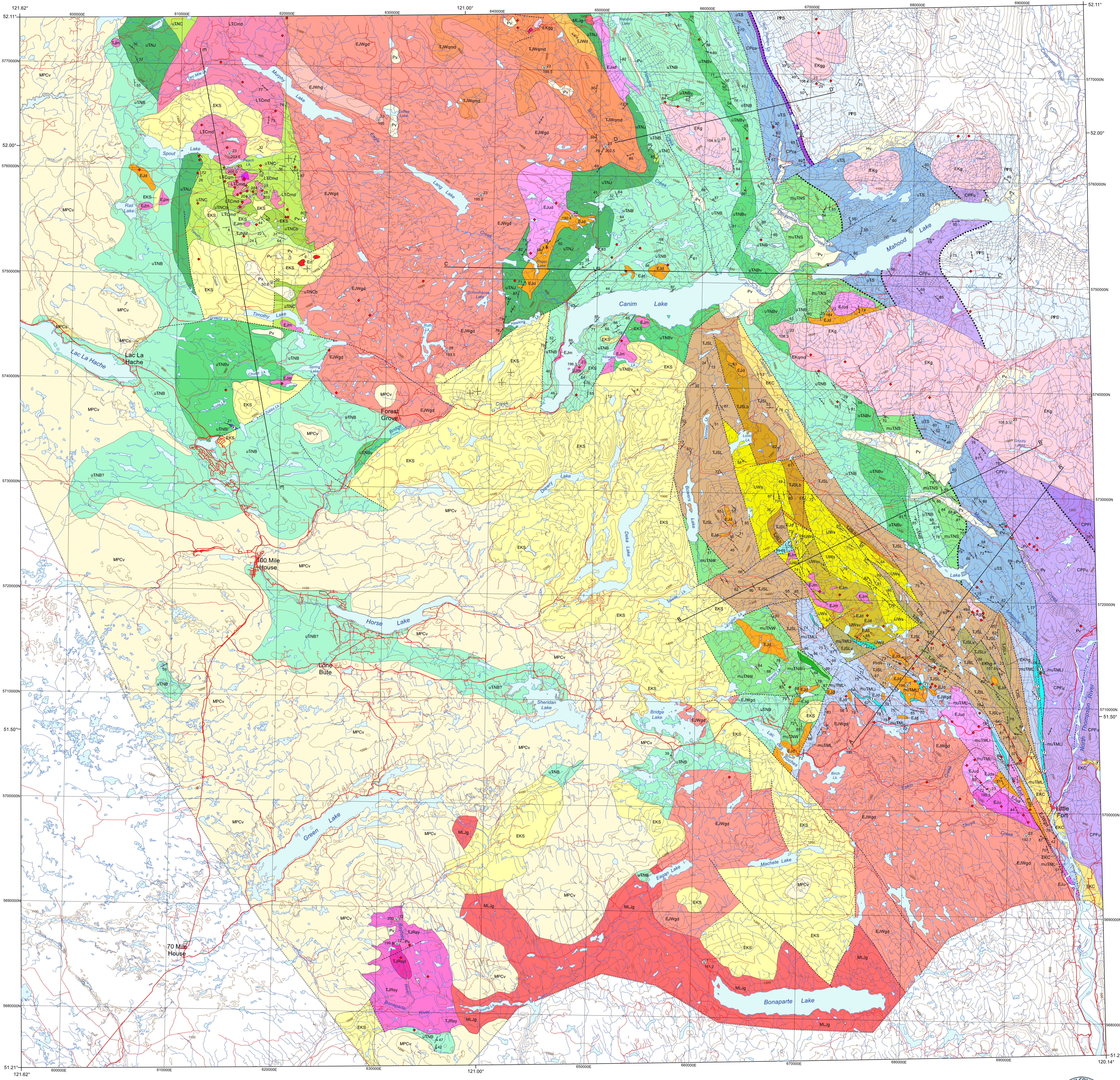
P. Scharizza

Sheet 1: Geology north



Projection: UTM north, Zone 10
Datum: NAD 83

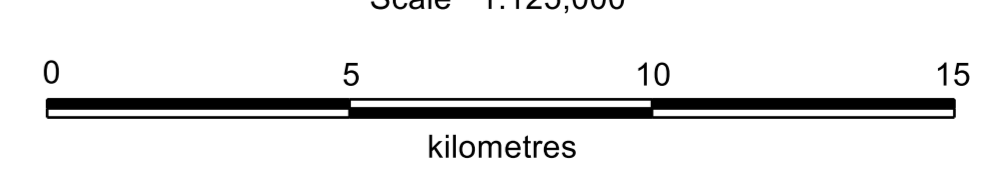
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parts of NTS 92P, 93A, 93B. British Columbia Ministry of Energy, Mines
and Low Carbon Innovation, British Columbia Geological Survey
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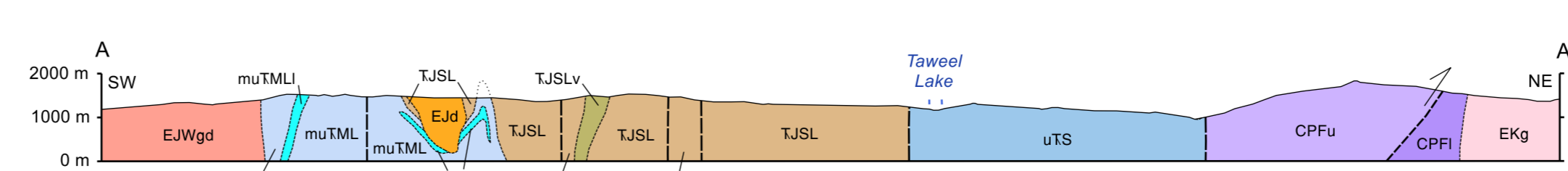
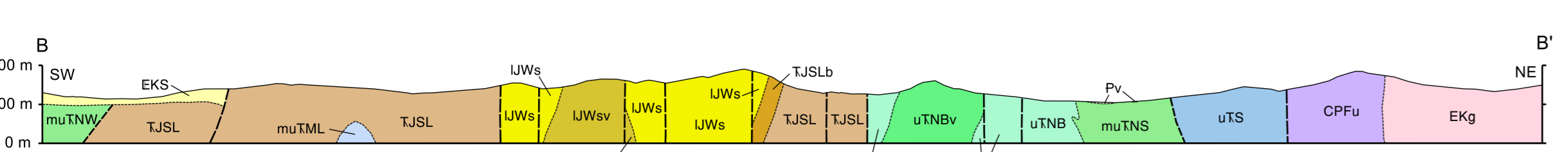
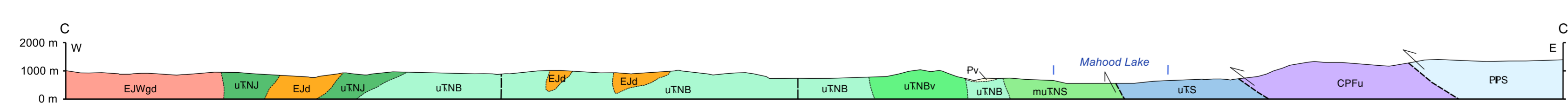
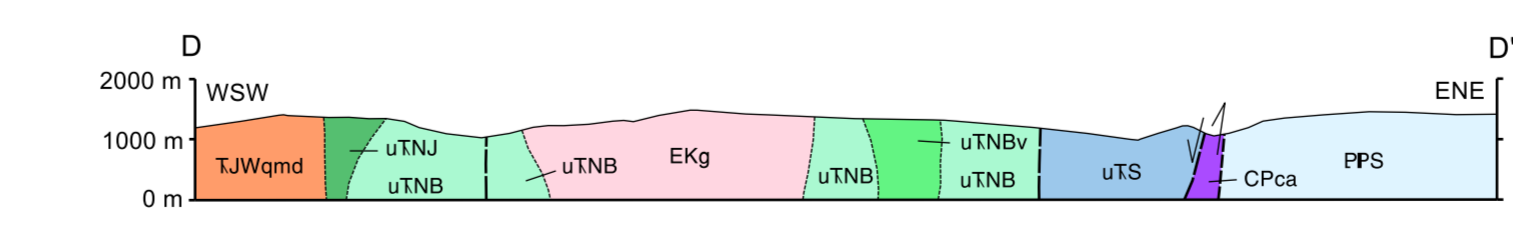
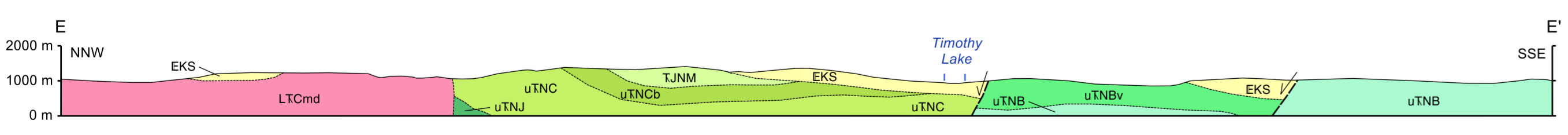
Bedrock geology, Bonaparte Lake - Quesnel River
 parts of NTS 92P, 93A, 93B

P. Scharizza
 Sheet 2: Geology south

Scale 1:125,000

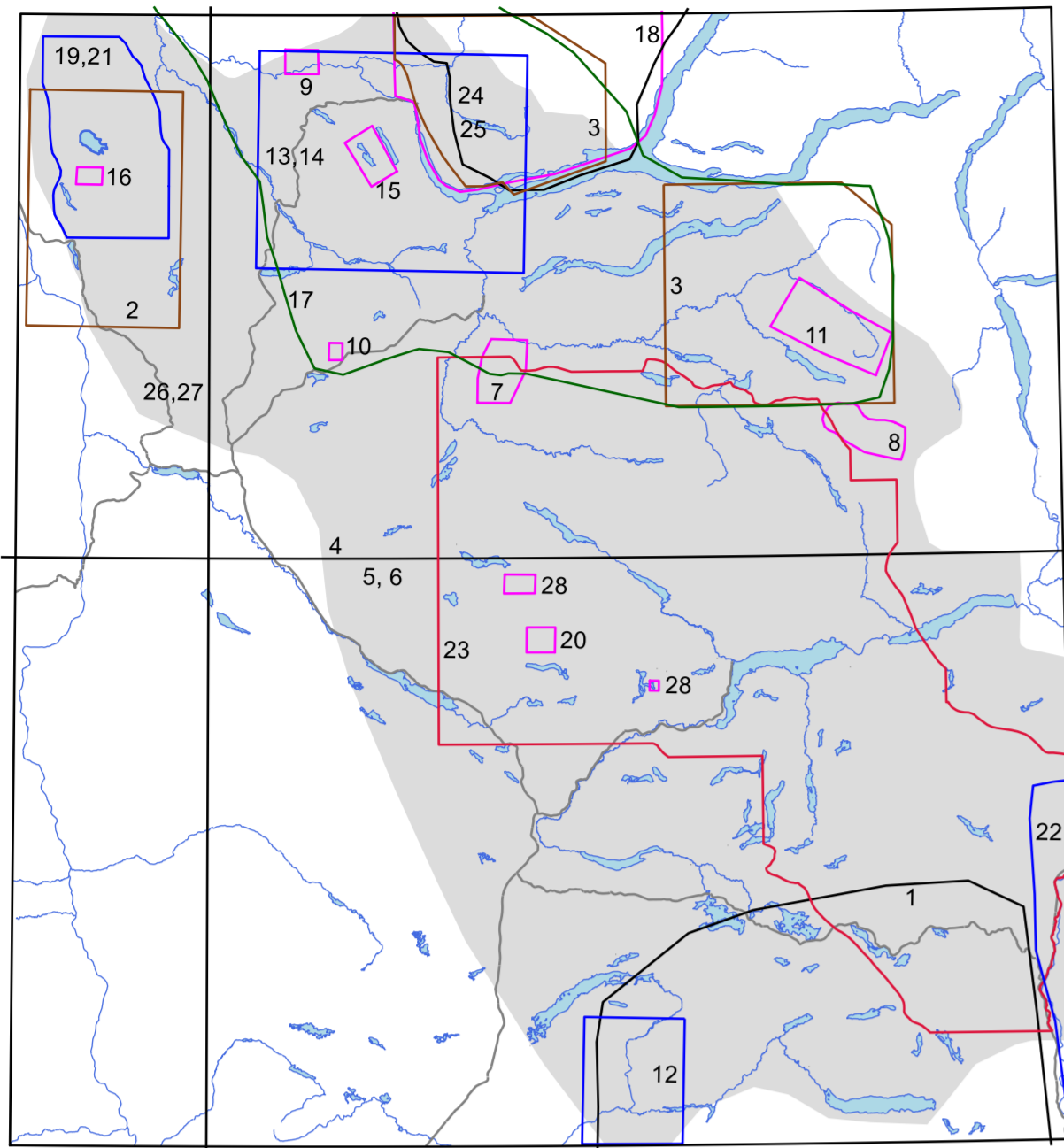


Projection: UTM north, Zone 10
 Datum: NAD 83

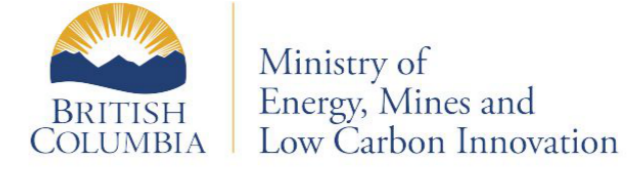


Recommended citation:
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 British Columbia Ministry of Energy, Mines and Low Carbon Innovation, British Columbia Geological
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Bedrock geology, Bonaparte Lake - Quesnel River parts of NTS 92P, 93A, 93B



P. Schiarizza

Sheet 3: Legend

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Younger rocks	Quesnel terrane western belt	Quesnel terrane eastern belt	Quesnel terrane Intrusive rocks	Kootenay and Slide Mountain terranes
Holocene				
Hv Basalt				
Pleistocene				
Pv Basalt; local pillowed basalt, basalt breccia; common peridotite xenoliths				
Miocene to Pleistocene				
Chilcotin Group				
MPCv Olivine basalt; local basalt breccia, conglomerate, sandstone, siltstone, diatomite				
MPCs Conglomerate, sandstone				
Eocene				
Ed Hornblende-biotite-pyroxene diorite				
Enkako Group				
EE Basalt, andesite				
Ootsa Lake Group				
EO Rhyolite, dacite				
Kamloops Group				
Skull Hill Formation				
EKS Basalt, andesite; local volcanic breccia, conglomerate, sandstone, dacite, rhyolite, siltstone, mudstone				
Chu Chua Formation				
EKC Polymictic conglomerate, sandstone, siltstone, mudstone; local coal				
Early Cretaceous				
EKhg Flow-banded quartz-feldspar porphyry				
EKgg Biotite granite, biotite-muscovite granite, quartz-feldspar porphyry, apilite, pegmatite				
EKg Biotite-hornblende granite, granodiorite; local tonalite, quartz diorite, apilite, pegmatite				
EKqmd Hornblende-biotite quartz monzodiorite; local quartz diorite, diorite, granodiorite				
EKt Hornblende tonalite; local leucotonalite, quartz diorite, apilite, pegmatite				
Jurassic or Cretaceous				
JKsc Polymictic conglomerate, sandstone, mudstone				
Middle to Late Jurassic				
MLJg Hornblende-biotite granite, quartz monzonite, granodiorite; local diorite, quartz-feldspar porphyry				
Cache Creek terrane				
Carboniferous to Lower Jurassic				
Cache Creek Complex				
CJCC Chert, argillite, limestone, basalt; local siltstone, sandstone, slate, quartz phyllite, diorite, gabbro, serpentinite				
Lower to Middle Jurassic				
Dragon Mountain succession				
ImJsc Sandstone, polymictic conglomerate, conglomeratic sandstone; local siltstone, slate, basalt				
IJdsf Siltstone, slate, quartz sandstone; local pebble conglomerate				
IJDs Sandstone, siltstone; local polymictic conglomerate				
Middle Triassic to Lower Jurassic				
Nicola Group				
Morehead Lake succession (Rhaetian to early Sinemurian)				
TJNM Red, green and grey feldspathic sandstone, conglomeratic sandstone, polymictic conglomerate; local siltstone, limestone, basalt, andesite				
TJNMI Limestone; local feldspathic sandstone, polymictic conglomerate, siltstone				
TJNMI Intermediate tuff with plagioclase, hornblende, biotite and quartz crystals				
TJNMB Pyroxene-plagioclase-phyric basalt and basalt breccia; local conglomerate, sandstone				
TJNMBh Pyroxene-hornblende-phyric basalt and basalt breccia; local siltstone, sandstone, conglomerate				
TJNMBa Pyroxene-phyric basalt and basalt breccia, commonly with euhedral analcime crystals; local conglomerate, sandstone				
Cossack Lake succession (late Norian to Rhaetian)				
uTNC Polymictic conglomerate and breccia; local feldspathic sandstone, siltstone, basalt, andesite				
uTNCb Pyroxene-phyric basalt and basalt breccia; local sandstone, conglomerate				
uTNCa Trachyandesite with abundant coarse plagioclase phenocrysts				
Jacobie Lake succession (Norian)				
uTNJ Pyroxene-plagioclase-phyric basalt, pillowed basalt, and basalt breccia; local volcanic sandstone, conglomerate, siltstone, limestone				
Arthur Creek succession (Carnian? and Norian)				
uTNA Volcanic sandstone and gritty to pebbly sandstone; local mafic volcanic breccia, conglomerate, basalt, limestone, felsic volcanic breccia, siltstone				
uTNAf Rhyolite breccia, quartz-sericite schist with quartz granules and felsic volcanic fragments				
uTNAm Epidote-actinolite-plagioclase-chlorite schist, foliated limestone, skarn				
Bosk Lake succession (Carnian and Norian)				
uTNB Volcanic sandstone and gritty to pebbly sandstone; local polymictic conglomerate, volcanic conglomerate, basalt, basalt breccia, siltstone, argillite, limestone				
uTNbv Volcanic conglomerate, basalt breccia, pyroxene-phyric basalt, pillowed basalt; local volcanic sandstone, limestone				
uTNBI Limestone				
Spanish Mountain succession (Anisian to Carnian)				
muTNS Siltstone, argillite, chert, slate; local volcanic sandstone, limestone, basalt				
muTNSv Basalt, pillowed basalt, basalt breccia; local sandstone, siltstone				
Wavey Lake succession (Middle and Late Triassic?)				
muTNW Volcanic sandstone, siltstone, chert, slate; local polymictic conglomerate, pyroxene-plagioclase-phyric basalt, basalt breccia				
muTNWv Pyroxene-plagioclase-phyric basalt and basalt breccia; local volcanic sandstone				
Lower Jurassic				
Windy Mountain unit				
IJsv Polymictic conglomerate, conglomeratic sandstone, sandstone, basalt, andesite				
IJwd Feldspar-phyric dacite, chlorite-sericite schist with felsic volcanic fragments				
IJws Sandstone, siltstone, polymictic conglomerate				
Upper Triassic and/or Lower Jurassic				
Silver Lake unit				
TJSL Siltstone, sandstone, conglomerate; local pyroxene-phyric basalt and basalt breccia				
TJSLb Volcanic conglomerate and breccia; local sandstone, basalt				
TJSLv Pyroxene-phyric basalt, pillowed basalt and basalt breccia; local sandstone, conglomerate				
Middle and Upper Triassic				
Meridian Lake unit				
muTML Siltstone, slaty siltstone, argillite; local limestone, limy argillite, chert, slate				
muTMU Limestone; local argillite, siltstone, slate, chert				
Upper Permian - Middle Triassic				
Shoals Bay unit				
PTSBmv Chlorite-sericite schist with granules of quartz and feldspar and/or flattened mafic to felsic metavolcanic fragments; local fine-grained biotite-sericite-quartz schist				
PTSBmb Plagioclase-actinolite-biotite-chlorite schist, commonly with relict mafic phenocrysts and quartz-biotite amygdules				
Lower to Middle Permian				
Harper Ranch Group				
PHR Limestone, siltstone, argillite, chert				
Early Jurassic				
EJd Diorite, gabbro; local hornblende, clinopyroxenite, quartz diorite, hornblende-plagioclase porphyry; EJds microdiorite, quartz diorite, mafic schist, skarn				
EJud Clinopyroxenite, hornblende, gabbro, diorite, intrusion breccia; local wehrlite, dunite				
EJu Dunite, wehrlite, clinopyroxenite, hornblende, serpentinite				
EJm Monzonite, monzodiorite, quartz monzonite, syenite, diorite; local quartz monzodiorite, quartz syenite, quartz diorite				
Late Triassic to Early Jurassic				
Wildhorse suite (Thuya and Takomkane batholiths)				
EJWhg Quartz-feldspar porphyry				
EJWgd Hornblende-biotite granodiorite, commonly with K-feldspar megacrysts; local monzogranite, quartz monzodiorite, quartz diorite, tonalite				
EJWqm Hornblende-biotite quartz monzodiorite, granodiorite, monzogranite, quartz monzodiorite				
TJWqmd Pyroxene-hornblende-biotite quartz monzodiorite; local granodiorite, monzodiorite, diorite, tonalite				
TJWd Pyroxene-hornblende-biotite gabbro, diorite				
Rayfield River pluton				
TJRsyl Leucocratic syenite				
TJRsy Hornblende syenite				
Bootjack stock				
TJBsyo Pyroxene-hornblende nepheline syenite with orbicular pseudoleucite				
TJBsy Pyroxene syenite				
Late Triassic				
Copper Mountain suite				
LTCqm Quartz monzonite				
LTCmd Pyroxene-hornblende-biotite monzodiorite, monzonite, diorite; local syenite, gabbro, clinopyroxenite, quartz monzonite				
Granite Mountain batholith				
LTGti Coarse-grained leucocratic hornblende-biotite tonalite; dikes of leucocratic tonalite, quartz-feldspar porphyry				
LTGt Hornblende tonalite, grading to sericite-chlorite-quartz-biotite schist; dikes of leucocratic tonalite, quartz-feldspar porphyry				
LTGtm Melanocratic hornblende tonalite, grading to sericite-chlorite-quartz-plagioclase schist; dikes of leucocratic tonalite, quartz-feldspar porphyry				
LTGqd Hornblende quartz diorite, grading to sericite-chlorite-quartz-plagioclase schist; local diorite; dikes of leucocratic tonalite, quartz-feldspar porphyry				
LTGbt Leucocratic hornblende-biotite tonalite				
LTGbqd Hornblende-biotite quartz diorite, tonalite; local diorite; dikes of leucocratic tonalite, quartz-feldspar porphyry				
Upper Triassic				
Slocan Group				
uTS Dark grey slate, phyllite, siltstone; local quartzite, quartz sandstone, limestone, argillite				
Carboniferous to Permian				
Crooked amphibolite				
CPca Epidote-amphibole-chlorite-plagioclase schist, metagabbro, serpentinite				
Fennell Formation				
CPFu Upper division: pillowed and massive basalt; local chert, diabase, gabbro, chlorite-actinolite-epidote-plagioclase schist				
CPFI Lower division: chert, slate, siltstone, basalt, quartz sandstone, gabbro, diabase				
Late Devonian to Early Mississippian				
Quesnel Lake intrusive suite				
DMQg Variably foliated, commonly K-feldspar megacrystic granite, granodiorite; local tonalite, quartz diorite, diorite				
Neoproterozoic and/or Paleozoic				
Snowshoe Group				
PPS Quartzite, garnet-muscovite-biotite-quartz schist; local marble, calc-silicate schist, amphibolite				
Geological contact; defined, approximate, inferred				
Fault; defined, approximate, inferred				
Thrust fault; inferred				
Limit of map compilation				
Bedding, inclined, tops known; right-way-up, overturned				
Bedding, tops unknown; horizontal, inclined, vertical				
Slaty cleavage or schistosity; inclined, vertical				
Crenulation cleavage; inclined, vertical				
Axis of mesoscopic fold				
Fossil occurrence; macrofossil, conodont				
U-Pb zircon isotopic date with source (see numbered reference list) and crystallization age (Ma)				
Metallic mineral occurrence (from MINFILE, mainly combinations of Cu, Au, Mo); larger symbol denotes active or abandoned production pit				
Placer Au occurrence (from MINFILE)				
Industrial Minerals occurrence (from MINFILE)				