



LEGEND

OVERLAP ASSEMBLAGES

PLEISTOCENE AND RECENT	Qs Glacial and glacioluvial deposits, stream deposits, felsenmeer, talus, soil, Qsr, river channel sediments
PLEISTOCENE	Pv Olivine basalt
MIOCENE TO PLEISTOCENE	MPT TUYA FORMATION: alkali olivine basalt, tuff, agglomerate, minor trachyte and rhyolite; FP1, may include areas of Mesozoic and Paleozoic rocks
	MPVab Feldspar-quartz porphyry dykes and basaltic dykes, age uncertain
EOCENE	ETC TANZILLA CANYON FORMATION: basal breccia, conglomerate, shale, freshwater limestone, coal; Es, conglomerate, sandstone, shale
	Ev Rhyolite, chalcedonic rhyolite breccia, tuff; Eahp, augite hornblende porphyry
EARLY EOCENE	EMH MAJOR HART PLUTON: granite, miarolitic in part
	Ep Kaolinitized feldspar-quartz porphyry
	EM MEEHAUS PLUTON: biotite-augite granodiorite
CRETACEOUS(?) AND TERTIARY	UPPER CRETACEOUS(?) TO EOCENE
	uKES SIFTON FORMATION: conglomerate, sandstone, shale
	KTS SLOKO GROUP: rhyolite, dacite and trachyte flows, dykes, breccia; KTS1, biotite-quartz latite porphyry; age uncertain
CRETACEOUS LOWER AND (?)UPPER CRETACEOUS	KTC TANGO CREEK FORMATION OF SUSTUT GROUP: conglomerate, sandstone, siltstone, shale
LATE CRETACEOUS	LKLE LITTLE EAGLE PLUTON: biotite-hornblende granite, miarolitic in part
	LKSPG SNOW PEAK GRANITE: biotite-hornblende granite, fine to medium grained
EARLY CRETACEOUS	EKC CASSIAR PLUTONIC SUITE (EKg, EKBR, EKT, EKO) CASSIAR BATHOLITH: biotite-hornblende and biotite-muscovite granite, locally coarsely megacrystic; quartz monzonite, granodiorite; stippled areas indicate abundant li-par-lit gneiss and screens and penchants of metamorphic rocks
	EKT TURNAGAIN PLUTON: strongly jointed, locally miarolitic and pegmatitic, biotite granite
	EKBR BEADY RANGE PLUTON: biotite granite, medium to coarse grained
	EKg Biotite-hornblende granite, age uncertain
JURASSIC MIDDLE TO LATE JURASSIC	MLJSC SNOWDRIFT CREEK PLUTON: biotite-hornblende granodiorite
	MLJGL GRANITE LAKE PLUTON: biotite and biotite-hornblende granodiorite
	MLJgd Biotite and biotite-hornblende granodiorite
	MLJhm Hornblende monzonite, syenite, diorite
MIDDLE JURASSIC (BAJOCIAN, in part)	mJBL BOWSER LAKE GROUP, undivided: conglomerate, siltstone, shale, andesite flows, tuff, breccia, agglomerate; marine and nonmarine; mJBLs, dominantly volcanic; mJBLs, dominantly sedimentary; may be, in part, younger than Middle Jurassic
	MJTL TACHILTA LAKES PLUTON: biotite and biotite-hornblende granodiorite, monzodiorite

STIKINIA

JURASSIC EARLY TO MIDDLE JURASSIC	MJTS THREE SISTERS PLUTON: MJTsp, potassic marginal phase: biotite-hornblende quartz monzonite, granite, syenite; MJTsc, central phase: biotite-hornblende quartz monzonite, quartz monzonite; MJTsm, mafic phase: biotite-hornblende quartz diorite, diorite, gabbro; MJTsl, fine grained phase: clinopyroxene-biotite-hornblende quartz diorite, diorite, and quartz monzodiorite
	MJgd Hornblende granodiorite, diorite
	EJMR McBRIDE RIVER PLUTON: hornblende-biotite granodiorite
	JPC PALLEN CREEK PLUTON and related plutons: biotite-hornblende quartz monzodiorite and quartz monzonite, minor granodiorite
	JT TANZILLA PLUTON: biotite-hornblende granodiorite
	Jgd Granodiorite, Jd, diorite; Js, syenite; age uncertain
LOWER JURASSIC	IJT TAKWAHONI FORMATION (IJTcg - IJT): IJT, undivided greywacke, shale, siltstone, conglomerate, tuff, sandy limestone, arkosic, calcareous sandstone, basal conglomerate
	IJTs Conglomerate, shale, tuff; Toarcian
	IJTgw Greywacke, shale, minor conglomerate; mainly Pliensbachian; IJTgm, hornfelsed equivalents of IJTgw including abundant sills and dykes of quartz-feldspar porphyry and granodiorite
	IJTv Grey to green andesitic breccia and tuff; age uncertain, may be Bajocian
	IJTst Dark grey and black shale, siltstone, tuff, minor greywacke; Sinemurian
	IJTcg Coarse, polymictic conglomerate; Sinemurian; may be partly Toarcian
	IJv Maroon and green epilastic sandstone, pyroclastic volcanic rocks, agglomerate, flows; age uncertain
EARLY JURASSIC	EJT TAHLTAN PLUTON: zoned ultramafic body; pyroxenite, pyroxene syenite, syenite; rich in apatite and magnetite
TRIASSIC AND (?)JURASSIC	TJv Grey and maroon plagioclase porphyry, andesite, volcanic conglomerate, tuffaceous mudstone, breccia, rhyolite; minor siltstone, shale; TJvr, rhyolite, breccia, welded tuff

STIKINIA (continued)

TRIASSIC UPPER TRIASSIC	uTc Massive limestone; minor calcareous shale; very minor greywacke and siltstone
	uTST STUHINI GROUP, upper part: massive and pillowed porphyritic augite basalt and coarse-banded feldspar porphyry, aphanitic basalt; local basal granitic-cobble conglomerate; uTSTs, tuffaceous argillite, greywacke, minor meta-andesite and augite porphyry; uTSTv, volcanic breccia with granitoid clasts
LATE TRIASSIC	LTBc BEGGERLAY CREEK PLUTON: biotite-hornblende diorite, gabbro, monzodiorite, pyroxenite
	LTLG GNAT LAKES ULTRAMAFITE: hornblende clinopyroxenite, hornblende
	LTKH CAKE HILL PLUTON: hornblende quartz monzodiorite, granodiorite, weakly to moderately foliated monzodiorite (and metamorphosed equivalents); rare hornblende diorite
	LTLc LATHAM CREEK PLUTON: hornblende quartz diorite, monzodiorite, strongly foliated
	LTCM CARIBOO MEADOWS PLUTON: augite metagabbro, hornblende
	LTK KAKETSA PLUTON and related intrusions: biotite-hornblende diorite, hornblende diorite, minor biotite-clinopyroxene diorite
	LTMc MANSFIELD CREEK PLUTON: diorite and gabbro, strongly kaolinitized
	LTKga Augite metagabbro; LTKgam, augite-biotite-hornblende gabbro, monzodiorite and monzogabbro, age uncertain
	LTKgdm Undivided biotite-hornblende quartz diorite, granodiorite, quartz monzonite, diorite; LTKgd, strongly foliated diorite, quartz diorite, and minor granodiorite; age uncertain
MIDDLE TRIASSIC	mTST Augite porphyry, meta-andesite, metabasalt, volcanic breccia, and tuff; may include uTST
LOWER AND MIDDLE TRIASSIC	lmTST Argillite, siliceous argillite, greywacke, phyllite; minor chert and limestone; lTSTv, includes augite porphyry breccia and tuff; lmTSTv, includes augite porphyry breccia and tuff
PERMIAN	Pc Massive limestone; may locally include phyllite and ribbon chert; Pp, may be, in part, older than Permian
	Pp Phyllite, ribbon chert; Pp, may be, in part older than Permian
	Pv Phyllite greenstone, phyllite, minor chert and limestone, rusty weathering; Pv, may be, in part, older than Permian

CACHE CREEK TERRANE

JURASSIC LOWER JURASSIC (may be in part, Middle Jurassic)	Jl INKLIN FORMATION: penetratively cleaved, phyllitic slate, greywacke, pebble and cobble conglomerate; Jld, diamictite, possibly Kutcho Formation in part
TRIASSIC UPPER TRIASSIC	uTs SINWA FORMATION: limestone, commonly argillaceous and fetid
LOWER TRIASSIC	lTK KUTCHO FORMATION: basaltic to rhyolitic schist (flows, breccia, crystal tuff); fine grained volcanic sediments, basic schist, conglomerate (may be basal Inklin Formation, in part); lTKi, undivided Kutcho, Inklin, and possibly Cache Creek rocks; lTKt, trondhjemite; lTKg, gabbro
MISSISSIPPIAN TO TRIASSIC	DMTK CACHE CREEK COMPLEX (MPu - MTK) KEDAHDA FORMATION: chert, cherty argillite; minor argillite, siltstone and volcanic sandstone; minor volcanic rocks and metamorphosed equivalents; MTKsv, sediments and volcanics, undivided; MTKgv, greywacke, slate, chert; may be entirely of Late Triassic age
PERMIAN	PT TESLIN FORMATION: massive limestone, minor mafic volcanics
	PFR FRENCH RANGE FORMATION: undivided; basalt, tuff, agglomerate; minor chert, argillite; PFRl, dominantly tuff and agglomerate; PFRv, dominantly mafic volcanic flows
UPPER MISSISSIPPIAN TO PERMIAN	MPH HORSEFEED FORMATION: limestone, dolomitic limestone
	MPc Limestone, age unknown
	MPv Mafic volcanics, greenstone, age unknown
	MPga Coarse grained to pegmatitic gabbro, diorite; MPgv, fine grained, foliated gabbro, greenstone; may include small serpentinite bodies
	MPu Peridotite, dunite, pyroxenite, generally serpentinitized; locally includes pods of nephrite jade and small bodies of listwanite, rodingite, and talc

QUESNELLIA

JURASSIC MIDDLE JURASSIC(?)	MJgd Pink-weathering biotite-hornblende quartz monzonite, granodiorite, granite; age uncertain
LOWER JURASSIC	IJN NAZCHA FORMATION: greywacke, conglomerate, shale, slate, siltstone; Sinemurian and possibly younger
EARLY JURASSIC	EJE EAGLEHEAD PLUTON: biotite-hornblende quartz monzonite, granodiorite, quartz diorite
	EJgd Biotite-hornblende quartz monzonite, granodiorite, quartz diorite; age uncertain
TRIASSIC LATE TRIASSIC	LTKL COW LAKES PLUTON: hornblende granodiorite, hornblende diorite; commonly foliated; may be in part of Early Jurassic age
	LTKgd Foliated hornblende granodiorite, age uncertain
	LTKgd Hornblende granodiorite, hornblende diorite; commonly foliated, includes irregular bodies of EKg and MJgd
	LTKu Peridotite, dunite, serpentinite (Alaskan-type ultramafic body); LTKd, basalt sill
UPPER TRIASSIC	uTc Limestone
UPPER TRIASSIC	uTSH SHONEKTAW FORMATION: augite porphyry, feldspar porphyry, tuff, agglomerate, pyroxenite; minor shale, siltstone, and greywacke; may include some LTKgd; uTSHN, undivided Shonektaw and Nazcha formations
UPPER PALEOZOIC(?) and/or TRIASSIC(?)	uPT Mafic to felsic volcanics, tuff, chert, phyllite, argillite, quartz-sericite schist, crystalline limestone; terrane assignment uncertain

SLIDE MOUNTAIN TERRANE

DEVONIAN TO PERMIAN	DPS UNDIVIDED DEVONIAN(?) TO UPPER PERMIAN SYLVESTER COMPLEX (DMch - DPS) Undivided sedimentary and mafic volcanic rocks, may include minor diorite and gabbro
	DPSs Dominantly chert, argillite, slate, chert and quartz arenite, feldspathic arenite
	DPSq Chert, limestone, coarse quartz arenite
	DPSp Black argillite, chert arenite
	DPSc Limestone, age unknown
	DPSv Dominantly tholeiitic basalt, locally pillowed, fine grained
	DPSd Hornblende diorite, rusty weathering, in part
	DPSga Gabbro, diorite, amphibolite
	DPSu Serpentine, serpentinitized dunite, peridotite, pyroxenite
	DPSa Amphibolite, foliated and gneissic
	DPSr Rhyolite, argillite
PERMIAN EARLY PERMIAN	EPMc MEEK CREEK PLUTON: granite, coarse grained, megacrystic, biotite-bearing
	EPNc NIZI CREEK PLUTON: diorite and gabbro, hornblende-bearing, foliated
	EPt Tonaltite, rectangular phenocrysts of plagioclase feldspar, unfoliated
PENNSYLVANIAN OR PERMIAN BASHKIRIAN TO ASSELIAN	PPc Limestone
PENNSYLVANIAN MOSCOVIAN	Pc Limestone, cherty; includes thin (1-2 m), green chert members
	Pch Chert, orange and green
MISSISSIPPIAN VISÉAN TO NAMURIAN	MN NIZI FORMATION: limestone, cherty limestone, greywacke, minor conglomerate, maroon shale and siltstone
TOURNAISIAN TO VISÉAN	Ms Black argillite and siltstone
DEVONIAN AND MISSISSIPPIAN	DMch Black banded chert
DEVONIAN AND MISSISSIPPIAN	DMgd Granodiorite, foliated; gabbro, agmatite; age uncertain
	DMst Tectonite, siliceous and locally calcareous; gneissic, in part mylonitic, thinly banded, strongly foliated, locally micaceous; includes metasedimentary, ultramafic, and meta-igneous rocks; DMc, limestone, age uncertain
ANCESTRAL NORTH AMERICA	DEVONIAN AND MISSISSIPPIAN UPPER DEVONIAN TO MISSISSIPPIAN (FRASNIAN TO VISÉAN)
	DME EARL GROUP: shale, black, grey, and blue-grey, locally pyritic; argillite; light green, tuffaceous(?) shale; porcellanite; may locally include older rocks
	DM MIDDLE TO UPPER DEVONIAN (GIVETIAN TO FRASNIAN) McDAME FORMATION: upper member, limestone, platy, light grey; local karst breccia; lower member, dolostone, dark grey, fetid; limestone, carbonate breccia; DMm, dark grey, fetid, dolomitic limestone and marble
	LOWER DEVONIAN(?)
	DR RAMHORN FORMATION: upper member, laminated dolostone; lower member, dolomitic sandstone, sandy dolostone, dolostone, and sandstone, commonly crossbedded
SILURIAN AND DEVONIAN	SD Undivided dolostone, dolomitic sandstone, limestone, shaly dolostone; minor calcareous siltstone and shale of Sandpile, Ramhorn, and McDame formations
SILURIAN LOWER SILURIAN	SS SANDPILE FORMATION: dolostone, cherty dolostone, dolostone breccia
ORDOVICIAN AND SILURIAN LOWER ORDOVICIAN TO LOWER SILURIAN (ARENIG TO WENLOCK)	OSRR ROAD RIVER FORMATION: upper unit, graptolitic, platy siltstone, Silurian; lower unit, black, pyritic, graptolitic shale, Ordovician; OSRr1, undivided black, calcareous shale, slate, phyllitic slate, minor limestone, siltstone and pebble conglomerate, Ordovician to Devono-Mississippian and possibly younger
CAMBRIAN AND ORDOVICIAN UPPER CAMBRIAN TO LOWER ORDOVICIAN	COK KECHIKA FORMATION: argillaceous limestone, calcareous shale, limestone, shale; COK, wavy, banded, silty limestone; COS, undivided Kechika and Road River formations; COSv, greenstone, age uncertain
CAMBRIAN LOWER CAMBRIAN ATAN GROUP (CMmgs-Cr)	Cr ROSELLA FORMATION: limestone, dolostone, calcareous shale; brown, grey, and green-grey shale
	Cb BOYA FORMATION: quartzitic sandstone, siltstone, slate, phyllite; CAM, micaceous quartzite, mica schist, minor crystalline limestone; may include some Stelkuz Formation
CAMBRIAN AND YOUNGER(?)	CMm Undivided pyritic, hornfelsic slate, argillite, siltstone, quartzite, micaceous quartzite, schist, limestone; variably metamorphosed; mainly Cambrian to Mississippian(?); CMmc, mainly carbonate; CMmgs, greenstone
UPPER PROTEROZOIC INGENIKA GROUP (UPm-UPs)	UPs STELKUZ FORMATION: interbedded chloritic sandstone, shale, limestone, phyllite; includes distinctive green- and maroon-weathering members; may locally include some Boya Formation; CuPSs, undivided Stelkuz and Boya formations
	UPe ESPÉE FORMATION: crystalline limestone, sandy limestone, dolostone
	UPST SWANNELL and TSAYDIZ formations, undivided: upper part, mainly sericite and chlorite phyllite, schist, calcareous phyllite and phyllitic limestone, siltstone; lower part, mainly micaceous quartzite, mica schist, and quartz pebble conglomerate
	UPm Li-par-lit gneiss; garnet, staurolite, sillimanite, and andalusite schist; abundant granitic sills; amphibolite; probably mainly metamorphosed Swannell Formation

Geological boundary (defined, approximate, assumed)	
Boundary of surficial deposits	
Bedding, top known (inclined, vertical, overturned)	
Bedding, top unknown (inclined, vertical)	
Foliation (inclined, vertical)	
Fault, unknown sense of displacement (defined, approximate)	
Fault, extension (solid circle on downthrown side; defined, approximate)	
Fault, extension (assumed projection under younger deposits)	
Fault, contraction (teeth on upthrust side; defined, approximate, assumed)	
Fault, contraction (assumed projection under younger deposits)	
Fault, strike-slip (arrows indicate direction of relative movement; defined, approximate)	
Fault, strike-slip (assumed projection under younger deposits)	
Dextral strike-slip fault (on cross-sections only)	
Anticline (arrow indicates plunge; defined, approximate, overturned)	
Syncline (arrow indicates plunge; defined, approximate, overturned)	
Anticline and syncline (long arrow points in direction of dip of axial surface)	
Lineation (horizontal, plunging)	
Paleocurrent direction	
Radiometric date: method, mineral, age (in millions of years)	
Method: potassium argon, K; rubidium strontium, R; uranium-lead, U Mineral: biotite, b; hornblende, h; muscovite, m; whole rock, w; zircon, z	
Radiocarbon date (age in years before present)	
Fossil locality and GSC number	
Conodont locality	
Mineral occurrence	
Metamorphic mineral occurrence	
Cross-section line (See Fig. 64)	
Form lines (in cross-sections only)	
Measured stratigraphic section	

MINERALS	METAMORPHIC MINERALS	
AsbestosAsb	Jade (boulder)Jb	Crossitecs
CopperCu	LeadPb	Lawsonitels
Gold (lode)Au	MolybdenumMo	Phenitepr
Gold (placer)Au _p	NickelNi	Pumpellyitepu
Jade (fede)J	TungstenW	Rebeckiteri
ZincZn		Stilpnomelanest

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Incorporates data from Kutcho Creek area by A. Panteliev and D.E. Pearson, B.C. Ministry of Mines and Petroleum Resources, 1975 and from Level Mountain area by T. Hamilton, 1981
Geology of Classy Creek (104 J1-E) and Stikine Canyon (104 J1-W) modified from compilation by P.B. Read, Geotex Consultants Limited, 1983. Geology of Cake Hill (104 J4-W) and Stikine Canyon (104 J1-E) modified from P.B. Read, Geotex Consultants Limited, 1984
Data on the distribution of ultramafic bodies northeast of Letain Lake was kindly provided by W.H. Plumb of Cassiar Asbestos Corporation, Limited in 1967 and ultramafic bodies east of the north end of Dease Lake by B.H. Whiting of Cassiar Resources, Limited in 1981

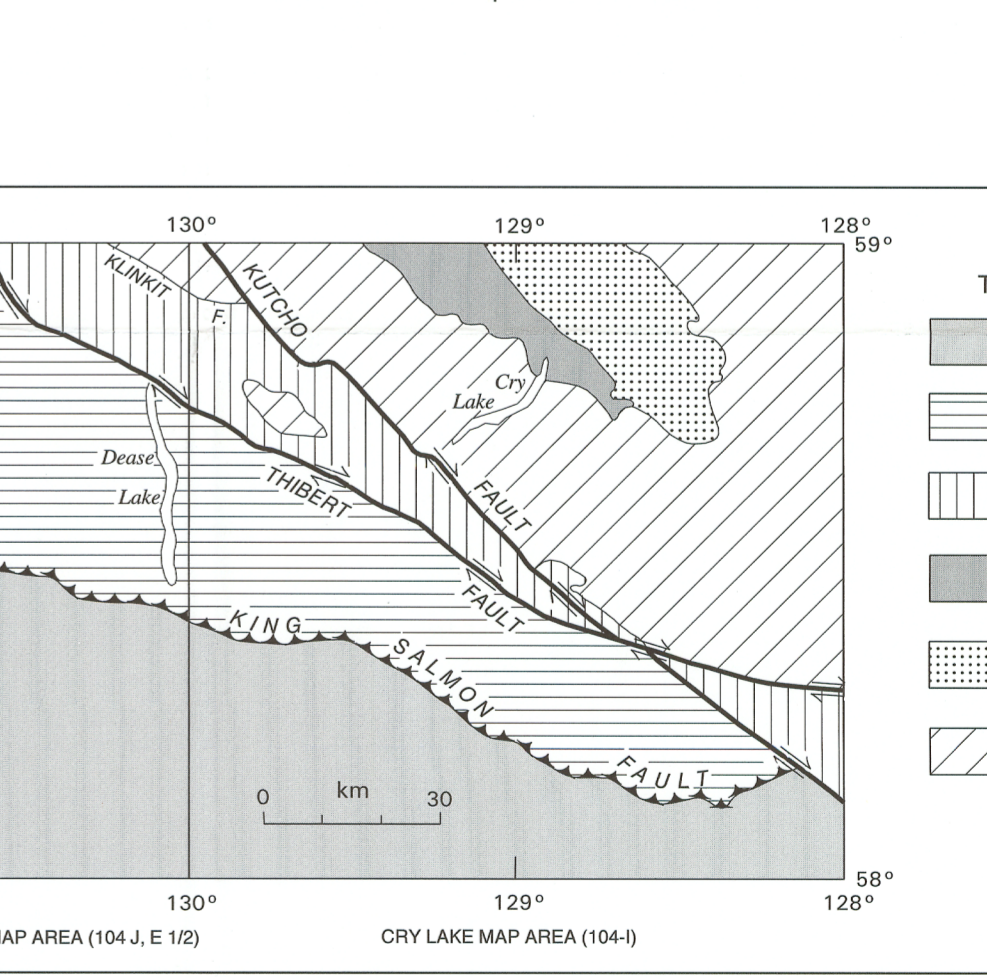
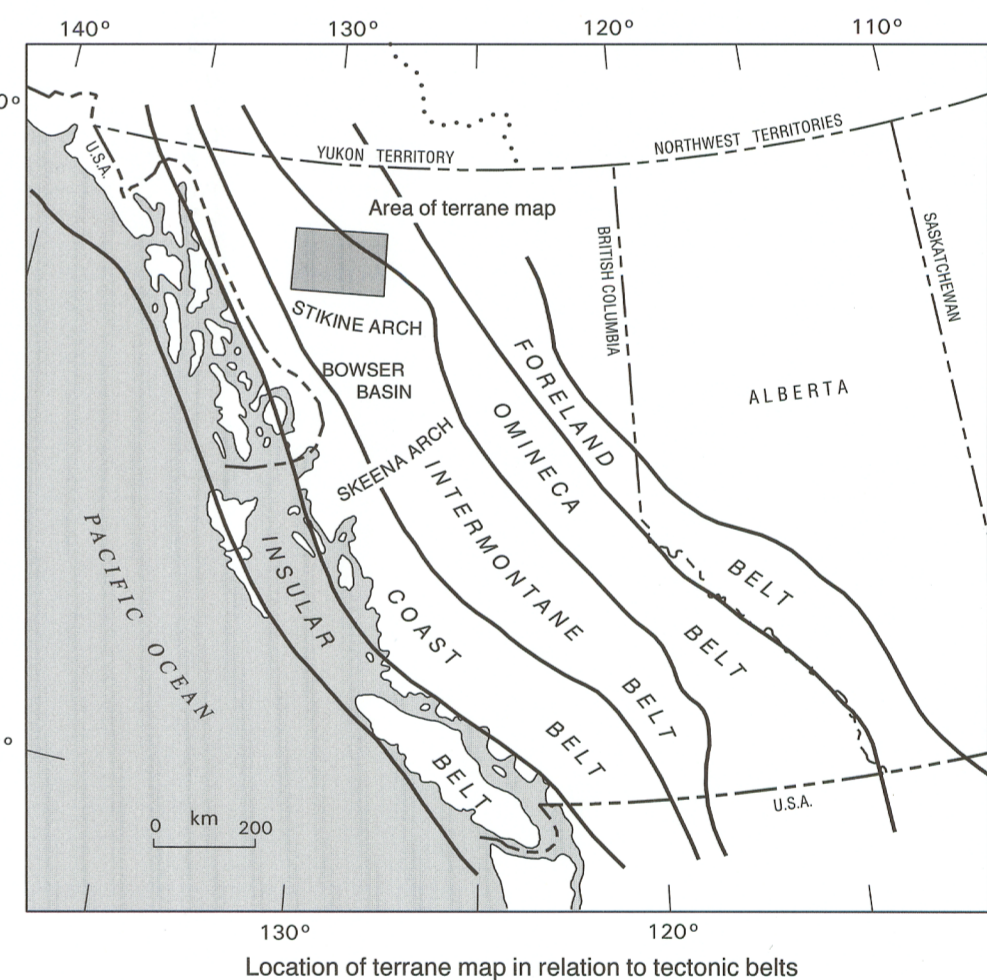


Figure 14. Geological maps of Cry Lake and Dease Lake (east half)