

References

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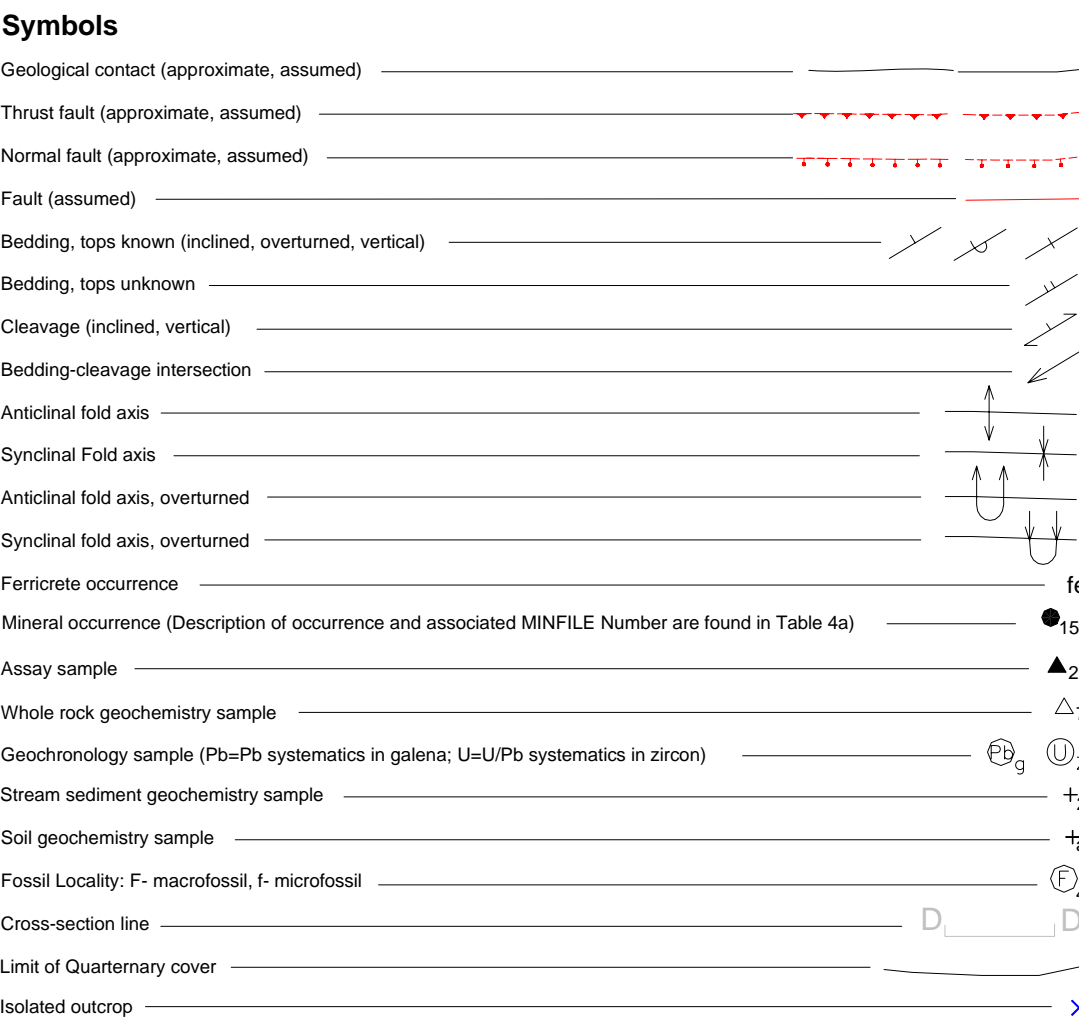
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BASE MAP INFORMATION

North American Datum 1927, Zone 9, Transverse Mercator Projection.

N.B. Outcrop locations are digitally referenced to local UTM coordinates based on 1:50 000 topographical maps produced by Energy, Mines and Resources, Canada. Due to minor discrepancies in UTM grid between NTS base map sheets, location errors up to 200 metres with respect to the 1:50 000 topographic base, may be present. The digital topographic base used here is produced from 1:250 000 topographic bases produced by Energy, Mines and Resources, Canada. As such there will be notable discrepancies between the topographic base and digitized geological data. Contour interval 200m.

Copies of this map may be obtained from Crown Publications Inc., Victoria, B.C.

This map is also included in "Geology and Mineral Deposits of the Northern Kechika Trough between Gataga River and the 60th Parallel," by Fern, F., Rees, C., Nelson, J., and Legun, A., B.C. Ministry of Energy and Mines Bulletin 107 (in prep.), and can be viewed over the internet through the website: <http://www.em.gov.bc.ca/geology/>.

Map Reviewed by K.A. Bellefontaine and W.J. McMillan.
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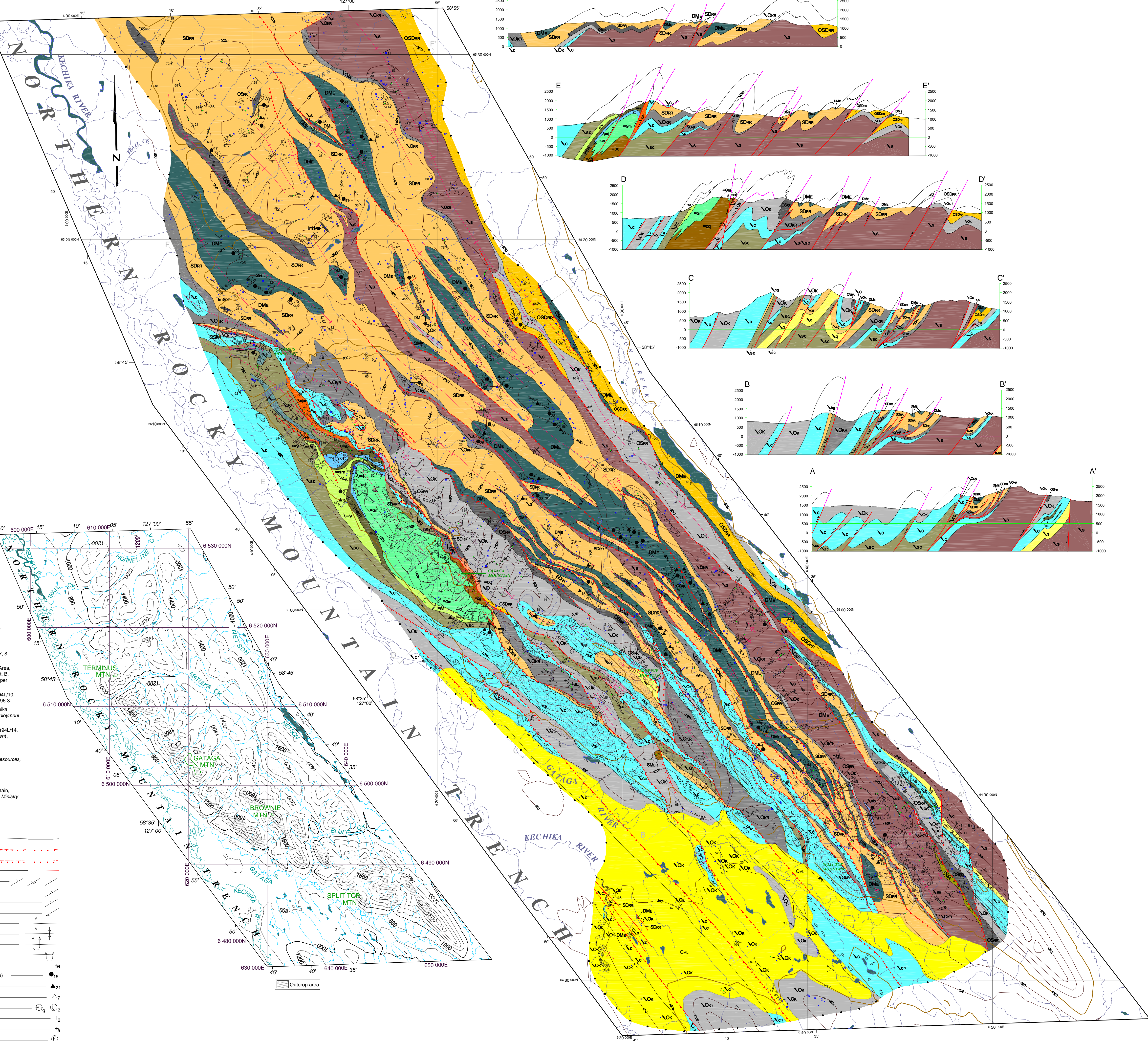


Table 4a

MINERAL OCCURRENCES										DESCRIPTION
MAP NUMBER	MINFILE NUMBER AND NAME	FIELD NUMBER	EASTING	NORTHING	UNIT	COMMODITY				
1	094L 022	FFe95-6-13-2	622800	6499470	=cq	Pb				5 to 10 cm zone of patchy galena in sheared, fractured, silicified slate.
2	094L 028	FFe95-18-13	615225	6506050	=vsm	Cu				Malachite-bearing, maroon and pale green siltstone.
3	094L030	JN95-7-4	610250	6514250	vs and v	Cu				Sparse chalcocite and malachite in breccia near contact between units, sc and v.
4	Black Wednesday	FFe94-10-19-2	637390	6492250	lc	Cu				Malachite and chalcocite bearing breccia veing in, c, limestones.
5		FFe94-3-12-2	643293	6489000	IO k	Ba				Green slate with 1-3cm thick horizon containing authigenic barite crystals.
6		FFe94-30-6	637961	6499440	IO k	Ba				Calcareous, grey slate with 1cm thick horizon containing authigenic barite crystals.
7		JN94-5-7	641154	6487465	IO k	Ba				Green slate with 1-3cm thick horizon containing authigenic barite crystals.
8		CRFe95-23-3	619570	6512275	IO vs	Ba				Beds of dolomitic siltstone with authigenic barite crystals, in black slate.
9	094L 016 Smoke	FFe95-43-7-3A	610070	6529340	SDrr	Zn, Pb				Gossanous, 3-m wide sphalerite-barite calcareous breccia zone in chert-limestone; located at the top of unit SDrr.
10	094L 027	FFe94-18-8	632290	6497800	DMr	Ba				Baritic shale.
11	094L 015 Solo	FFe94-24-13	632515	6501560	DMr	Fe, Zn				Ferritic.
12	094L 015 Solo	FFe94-25-5	633765	6501750	DMr	Ba				Baritic shale.
13	094L 027	FFe94-27-15	631745	6498860	DMr	Ba				Baritic shale.
14	094L 026	FFe94-29-13	634700	6500025	DMr	Cu, Ba				Copper-barite-quartz vein.
15	094L 018 Split Creek	FFe94-39-3-1	637640	6493950	DMr	Ni, Zn, Fe				Ferritic.
16	094L 021	CRFe95-9-9	627800	6501915	DMr	Ba				0.5 m thick, bedded, baritic siltstone; barite finely disseminated or in rosettes up to 1 cm.
17	094L 020	JN95-3-7	631000	6503500	DMr	Ba				Several barite beds 10 to 30 cm thick in siltstone-mudstone.
18	094L 020	JN95-3-8	630785	6503635	DMr	Ba				Laminated barite beds in siltstone-mudstone.
19	094L 020	JN95-4-1	630460	6503925	DMr	Ba				Laminated to massive grey barite, and barite lenses in mudstone, alternating over 2 m.
20	094L 020	JN95-4-2	630215	6504000	DMr	Ba				As above, strongly folded.
21	094L 020	JN95-4-3	629925	6504125	DMr	Ba				Several layers of barite, up to 1 m thick, in laminated mudstone and slate.
22	094L 020	CRFe95-11-6	628600	6504575	DMr	Ba				Slate and siltstone with thin bed containing small barite crystals.
23	094L 023	FFe95-12-2	625300	6506310	DMr	Ba				0.5 m thick bed of calcareous barite in limestone and cherty argillite.
24	094L 024 Broken Bit Barite	FFe95-13-1-1.2	624950	6507125	DMr	Ba				Barite occurrence and associated kill zone.

Table 4a (continued)

MINERAL OCCURRENCES										DESCRIPTION
MAP NUMBER	MINFILE NUMBER AND NAME	FIELD NUMBER	EASTING	NORTHING	UNIT	COMMODITY				
25	094L 025	FFe95-27-7	622300	6509325	DMr	Pb, Ba				Galena-bearing quartz vein in highly fractured slate, siltstone; baritic limestone nearby.
26	094L 025	FFe95-27-4	622575	6509900	DMr	Ba				1 to 5 cm thick beds of baritic limestone; slate and siltstone with barite crystals and pyrite.
27	094L 019 Mat	FFe95-22-8	626660	6510165	DMr	Ba				Grey, calcareous barite in 1 to 20 cm thick beds, over 2 m.
28	094L 019 Mat	FFe95-22-8 to 12	626080	6510860	DMr	Ba				Calcareous barite beds, up to 2 m thick, and siltstone with 1 to 5 cm barite nodules; locally rusty.
29	094L 029	FFe95-23-7	623460	6512210	DMr	Ba				Several horizons, 3 to 10 cm thick, with barite rosettes and crystals, and disseminated pyrite in siltstone and slate.
30	094L 029	JN95-8-6	622485	6512600	DMr	Ba				Small chips of baritic mudstone in black, bedded radiolarian chert.
31	094L 031	CRFe95-24-7	623100	6514000	DMr	Ba				2-m-thick, thinly bedded, black calcareous barite with small chert nodules, in siltstone and chert.
32		CRFe95-26-3-3	624250	6515650	OSRR	Fe				Pyritic slate to siltstone, rusty weathering; some coarse (2 cm) pyrite nodules; probably near base of OSRR.
33	094L 032	JN95-8-1	621375	6517100	DMr	Ba				Coarse-grained barite bed, 2 to 3 cm thick, in black siliceous mudstone and chert.
34	094L 033	JN95-14-1	619375	6515865	DMr	Ba				Calcareous barite with small chert nodules, interbedded with chert and slate.
35	094L 033	CRFe95-2-6	619600	6517550	DMr	Ba				Weakly baritic limestone, with small black chert nodules, in cherty siltstone.
36	094L 034	JN95-10-10	614950	6518150	DMr	Ba				Calcareous barite bed, 1.5 m thick, with small black chert nodules, in chert and siltstone.
37	094L 035	FFe95-29-11	612245	6517120	DMr	Ba				Dark grey, feld, baritic limestone with chert nodules, 0.5 m thick, in argillite and slate.
38		CRFe95-1-1	611000	6517400	DMr	Ba				Baritic chert and limestone.
39		CRFe95-1-3	610000	6517750	DMr	Ba				Bed of baritic chert or argillite.
40	094L 036	FFe95-47-8	609285	6519200	DMr	Ba				Dark grey, baritic limestone with chert nodules, up to 1.5 m thick, in slate and argillite.
41	094L 037	CRFe95-38-1-2	614750	6521900	DMr	Ba				Black, feld, calcareous barite, more than 1 m thick, in slate.
42	094L 038 Chief	FFe95-46-11/12	615600	6524955	DMr	Ba				Massive to flaggy, 2-m thick bed of crystalline calcareous barite, in argillite of unit DMr.
43	094L 039	FFe95-46-1	616000	6525775	DMr	Ba				Feld, bedded, calcareous barite, 1.5 m thick, in dark grey argillite.
44	094L 039	JN95-13A-12	615175	6527225	DMr	Fe				Rusty, siliceous slate with disseminated pyrite.
45	094L 040	JN95-13-6	613400	6526275	DMr	Ba				Thin, massive to laminated baritic siltstone, in pyritic carbonaceous mudstone and slate.
46	094L 041 Horn 5	CRFe95-44-3	610260	6527260	OSRR	Ba				Baritic limestone lenses, 0.5 to 1 m thick, with barite clasts and rosettes, in siltstone and slate.
47	094L 042	FFe95-41-3	607700	6524535	OSRR	Ba				Argillite layer, 0.5 m thick, with up to 3% barite rosettes; also baritic limestone lenses.

¹Bolded MINFILE numbers indicate the coded MINFILE locally. Non bolded MINFILE numbers represent associated mineral occurrences. Mineral occurrences without MINFILE numbers do not qualify for inclusion in the MINFILE database.

Geological Survey Branch
Geoscience Map 1998-9

Geological Survey of Canada

GEOLGY BETWEEN GATAGA RIVER AND TERMINUS MOUNTAIN, NORTHERN ROCKY MOUNTAINS, BRITISH COLUMBIA

NTS 94L/7, 8, 9, 10, 11, 14 and 15
by Filippo Ferri, JoAnne Nelson, Chris Rees

SCALE 1:100 000

0 1 2 3 4 5 kilometres

LAYERED ROCKS

- CENOZOIC**
- QUATERNARY**
- QAL** Area of thick alluvium and glacial deposits.
- PALEOZOIC**
- SILURIAN TO LOWER MISSISSIPPIAN**
- SMER** Undivided Upper Road River and Eam groups.
- MIDDLE DEVONIAN TO LOWER MISSISSIPPIAN**
- EARN GROUP**
Grey to blue or silvery blue-grey weathering, dark grey to black carbonaceous slate, blocky siltstone to argillite, siliceous slate, cherty argillite and chert. Slate, calcareous slate and silty slate; grey to silvery grey, buff and orange weathering; commonly aligned to laminated. Lesser grey, thin bedded to lenticular limestone. Rare, grey to dark grey chert-quartz sandstone to pebble conglomerate. Sandstone is locally cross-laminated. Rare grey limestone, fine to coarsely recrystallized with argillaceous partings and locally replaced by barite or witherite. Local bedded grey to black calcareous barite to baritic limestone with black chert nodules; thin beds of disseminated or radiating barite crystals in slate and siltstone; rarely pyritic.
- CAMBRIAN TO DEVONIAN**
- VD** Undivided Kechika and Road River groups.
- ORDOVICIAN TO DEVONIAN**
- ROAD RIVER GROUP**
Undivided Road River Group.
- ORDOVICIAN TO DEVONIAN**
- ROAD RIVER GROUP**
- LOWER SILURIAN TO MIDDLE DEVONIAN**
- SDRR** Upper Part: SILURIAN SILTSTONE grey to greenish-grey, buff-brown to orange weathering, flaggy, dolomitic, bedded to planar bedded siltstone. Locally interbedded with, or containing sections of grey to dark grey slate and silty slate. Lesser grey to orange weathering, grey, thin to moderately bedded dolomite to limestone. Top of section locally contains grey to grey-brown, micritic argillaceous limestone, and varicoloured chert to argillaceous chert.
- LOWER ORDOVICIAN TO LOWER SILURIAN**
- OSRR** Lower Part: Black to blue grey weathering, dark grey to black carbonaceous and locally argillaceous slate, siliceous slate. Minor brown and orange weathering, grey laminated siltstone. Locally interlayered with tan to orange weathering, thin and planar laminated grey limestone with rare authigenic barite crystals, and dark grey to black, thin to moderately bedded chert to siliceous argillite.
- UPPER CAMBRIAN AND ORDOVICIAN**
- VO KR** Undivided Kechika and lower Road River groups.
- UPPER CAMBRIAN TO LOWER ORDOVICIAN**
- KECHIKA GROUP**
NORTHEASTERN PART OF MAP AREA, NORTH OF GATAGA RIVER AND BETWEEN BROWNIE AND TERMINUS MOUNTAINS. Lower Part: Grey to black slate and silty slate. Minor grey and orange-weathering, thin to moderately bedded, limestone to calcareous slate. Rare orange-weathering dolomite and doloburled siltstone. Basal metre locally characterized by green slate or orange weathering dolomitic slate with barite crystals. Upper Part: Dark grey to black slate to silty slate, rare grey limestone lenses.
- MIDDLE TO UPPER? CAMBRIAN**
- lc** Massive to thickly bedded, grey to tan-weathering, grey to white limestone. Micritic to finely recrystallized. Local buff to orange weathering massive dolomite. May contain sections of massive to cross-bedded sandy limestone and dolomite with cross-bedded quartzite to quartz sandstone. Lesser carbonate breccia. Carbonate southeast of Nelson Lake may be, in part, Lower Cambrian.
- lcs** Thin to moderately bedded, grey and brown to tan-weathering, grey siltstone, slate and quartz sandstone, interlayered with lesser grey to buff-weathering sandy limestone, sandy dolomite, dolomite and grey argillaceous limestone.
- MIDDLE CAMBRIAN**
- lcm** Maroon and pale olive green, laminated siltstone to calcareous siltstone and slate, maroon to pinkish limestone, sandy limestone, grey to brown calcareous quartz sandstone to quartzite with horizons of sandy limestone or orange weathering dolomite. Locally, distinctive grey to maroon limestone-pebble conglomerate and rare quartz-pebble conglomerate.
- LOWER TO UPPER? CAMBRIAN**
- ls** Interbedded grey-green to dark grey slate to silty slate and brown to beige weathering, flaggy, grey micaceous quartz-sandstone to siltstone. Thinly to moderately layered or laminated. Slates may contain colour banding or striping. Local quartzite and quartz sandstone, grey to buff-weathering sandy limestone, sandy dolomite, dolomite and dark grey argillaceous limestone. Minor carbonate breccia. May be in part or entirely equivalent to l, sc, and c.
- lsq** Grey, beige to white quartzite, massive to thickly bedded.
- lsia** Oolitic siltstone? or horizons of grey-brown weathering archaeocyathid-bearing limestone. Locally oolitic.
- lsib** Interlayered buff to brown or tan weathering limestone, sandy limestone to calcareous sandstone and quartzite. Rare grey limestone breccia.
- lsc** Generally interbedded intervals of grey to white quartzite, quartz sandstone, calcareous or dolomitic quartz sandstone; moderately to thickly bedded siltstone, slate, play limestone to silty limestone; thinly to thickly bedded grey limestone, dolomite. May be in part or entirely equivalent to l, s.
- l** Grey to buff-grey limestone and lesser dolomite, thinly to massive bedded; locally sandy, oolitic, argillaceous and may contain archaeocyathids.
- LOWER CAMBRIAN?**
- lq** Quartzite and quartz sandstone, white to brown-weathering, white, brown to beige, thick to massively bedded; may be calcareous and cross-bedded. Lesser grey siltstone and sandy siltstone, and orange-weathering, cross-bedded limestone and sandy limestone. Basal section contains thick-bedded, tan to white, massive to cross-bedded quartzite.
- PROTEROZOIC**
- UPPER PROTEROZOIC**
- HYLAND GROUP?**
Gataga Volcanics, mafic member: Green, weakly to moderately well bedded ash and lithic tuff. Basalt tuff; massive agglomerate with orange weathering ferro-carbonate matrix, laminated volcanic wackes, siltstone and minor limestone. Basaltic, vesicular and amygdaloidal pillow lava, pillow breccia and flow breccia.
- Gm** Gataga Volcanics, felsic member: Silvery grey-green to light green sericite schist, quartz-feldspar-lithic tuff, lapilli tuff or agglomerate locally with rusty-brown weathering calcareous matrix.
- Gf** In core of Gataga Anticline: Cream to beige weathering, light grey to grey, massive to thickly bedded quartzite and calcareous quartzite. Minor thin interbeds of pale yellowish-green, laminated luffaceous? slate at contact with Gataga Volcanics.
- l** In footwall of Gataga Thrust Fault: Cream to beige weathering, light grey to grey, thin to thickly bedded or massive quartzite to calcareous quartz sandstone. Locally weakly or cross-bedded. Can grade into or be interlayered with massive, light grey to grey fine crystalline limestone to sandy limestone, which may contain orange weathering lenses of dolomite; massive, buff to grey weathering, grey dolomite and rare thin horizons of olive green and maroon slate.
- Units of Uncertain Age**
- ORDOVICIAN TO LOWER SILURIAN OR MIDDLE DEVONIAN TO LOWER MISSISSIPPIAN**
- Lower Road River Group or Eam Group** Black to dark grey carbonaceous slate to siltstone interlayered with grey to dark grey cherty limestone to chert. Locally contains thin layers of pale barite grey to mid-grey crystalline limestone.
- CAMBRIAN OR UPPER PROTEROZOIC**
- l** Upper Gataga Volcanics: Light grey to buff to brown weathering, light green to green foliated tuff, crystal lithic tuff to agglomerate; matrix is locally calcareous. Interbedded with dark green to green basalt or amygdaloidal basalt; locally pyroxene? phyllite. Minor sections of grey, micritic limestone and green slate.
- l** Grey to rusty brown weathering, light grey to grey to greenish grey slate or banded micaceous slate. May contain thin horizons or lenses of light grey, micaceous coarse siltstone to quartz sandstone and chert-quartzite. Contains thin horizons of luffaceous.
- l** Cream weathering, grey limestone to sandy limestone; locally dolomitic. Massive to thinly bedded with algal structures locally developed. Buff to orange weathering at base. Thin interlayers of grey to grey brown chert and calcareous quartzite. Thin horizons of green slate and chert-quartzite.
- l** Interbedded maroon and green slate to siltstone. May contain laminae or lenses of coarse siltstone to fine sandstone. May contain thin horizons of green luffaceous volcanics.
- l** Buff to cream weathering, grey, finely recrystallized limestone to dolomitic limestone. Massive to thickly bedded. Locally laminated to cross-laminated. Contains thin layers of green and maroon slate.