

Geology of the Murphy Lake Area NTS 93A/03

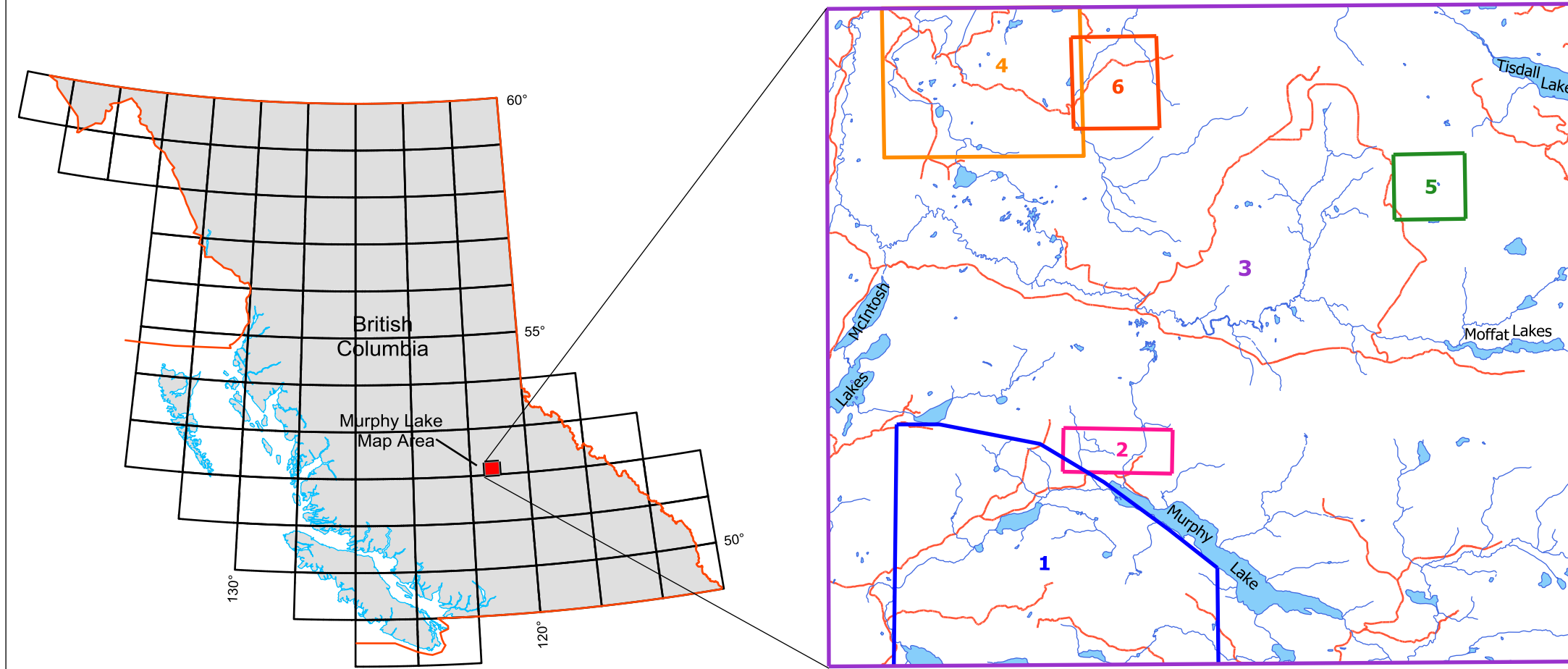
Geology by: Paul Scharizza, Kimberley Bell, and Sandra Bayliss
Digital Cartography: K. Bell and P. Scharizza

Scale 1:50 000
0 5
kilometres

- QUATERNARY**
- Qal** Unconsolidated glacial, fluvial and alluvial deposits
- QUATERNARY(?)**
- Qv** Basalt; common mantle and crustal xenoliths
- MIOCENE - PIOCENE**
- Chicoist Group**
 - MPCv** Olivine basalt
- Eocene**
- Kamloops Group**
 - Ekv** Andesite, basalt and volcanic breccia; lesser amounts of conglomerate and sandstone
- LATE TRIASSIC - JURASSIC ?**
- TJlp** Coarse, crowded plagioclase porphyry
 - Tjplp** Pyroxene-plagioclase porphyry
 - TJd** Hornblende-phyric diorite
- EARLY JURASSIC**
- Ejpd** Diorite, gabbro, hornblende clinopyroxenite, quartz diorite and intrusion breccia
 - Ejqlp** Takomkane batholith: quartz-feldspar porphyry
 - Ejgd** Takomkane batholith, Schoolhouse Lake unit: K-feldspar megacrystic hornblende-biotite granodiorite; locally includes monzogranite and tonalite
 - EJg** Takomkane batholith, Woodgum Creek unit: hornblende-biotite granodiorite, monzogranite, quartz monzonite and quartz monzodiorite
- LATE TRIASSIC - EARLY JURASSIC**
- TJgmd** Takomkane batholith, Boss Creek unit: hornblende-biotite quartz monzodiorite and granodiorite; lesser amounts of quartz diorite and diorite
- LATE TRIASSIC**
- LTmd** Spout Lake Pluton and related rocks: pyroxene-biotite monzodiorite and monzonite; locally includes monzogabbro, diorite, syenite and clinopyroxenite; LTmdg: mainly monzogabbro and diorite
 - Nicola Group**
 - uTNpb2** Feldspathic sandstone, conglomeratic sandstone, polyolithic conglomerate and breccia
 - uTNpb1** Polyolithic breccia; minor amounts of feldspathic sandstone, siltstone and conglomeratic sandstone
 - uTNsvb** Pyroxene-feldspar phryic basalt, pillowed basalt and breccia with mainly pyroxene-phyric basalt fragments; locally includes pyroxene-feldspar sandstone, gritty sandstone and siltstone
 - uTNsv** Volcanic breccia with feldspar and feldspar-pyroxene-phyric fragments; minor amounts of volcanic sandstone

- SYMBOLS**
- Geological contact (defined, approximate, inferred)
- Fault (inferred)
- Bedding, (tops unknown, inclined)
- Schistosity (inclined)
- Mineral occurrence (Table 2)
- Assay sample (Table 1)
- Field station
- Limit of Quaternary cover
- Limit of Geological Mapping
- Topographic contour (20 metre intervals, 100m intervals)
- Road (major gravel trunk road, all others)

Geological interpretation based mainly on mapping by the British Columbia Geological Survey in 2008. Additional sources of information shown below.



Additional Sources of Information

- Aulis, R. (1993): Geological and Geochemical Surveys on the Lac La Hache Property, Cariboo Mining Division, NTS 93A/03W; BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 23 685, 17 pages.
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- Came, J. and Main, C. (1985): Geological and Geochemical Report on the Ravilof Group, Cariboo Mining Division, NTS 93A/03W & 93A/06W, BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 13 741, 18 pages.
- Rebic, Z. (1981): Geological and Geochemical Report on the Tisdall Lake Group, Horsefly, British Columbia, Cariboo Mining Division, NTS 93A/03E; BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 09 370, 34 pages.
- Wahl, H. (2006): Geological and Geochemical Report on the Megaton Property, Cariboo Mining Division, NTS 93A/03W; BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 28 743, 53 pages.

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1:50 000 topographic base produced from TRIM database supplied by LandData B.C.
Transverse Mercator Projection, Zone 10, North American Datum 1983 (Canada)

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TABLE 1: ASSAY DATA; SAMPLES COLLECTED DURING 2008 FIELD SEASON

Element Units			Mo	Cu	Pb	Zn	Ag	Ni	Co	Fe	As	Sb	Bi	P	Cr	Ba	B	W	Hg	Au**	Pt**	Pd**
Method			ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	FAIC	FAIC	FAIC
Lab			ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ARMS	ACM	ACM	ACM
Detect Limit			0.01	0.01	0.01	0.1	2	0.1	0.1	0.01	0.1	0.02	0.02	0.001	0.5	0.5	20	0.1	5	2	3	2
Sample	Easting	Northing	Description																			
07PSC-12	617837	5766256	mag-Ksp-epidote-altered monzogabbro																			
08PSC-70	611121	5789048	pyritic sandstone																			
08PSC-87	605408	5770238	mal-ilmonite in pillow basalt																			
08PSC-89	620028	5785144	calc-silicate alteration																			
08PSC-127	619044	5767338	Ksp-epidote alteration																			
08PSC-176	611634	5788519	epidote-hematite-calcite-tourmaline alteration																			
08PSC-204	607116	5771918	rusty basalt																			
08PSC-256	610309	5785345	py-silica-altered granodiorite																			
08PSC-257	610647	5788418	pyritic sandstone																			
08PSC-260	610356	5790793	sandstone with py-cpy-quartz veinlets																			
08KBE-15	635290	5766550	epidote-Ksp-epidote vein in granodiorite																			
08KBE-16	635324	5765939	epidote-Ksp-epidote vein in granodiorite																			
08KBE-94	630604	5784910	py-altered volcanic breccia																			
08KBE-120	629118	5788581	py-epidote-chlorite-altered basalt																			
08KBE-140	629208	5783309	quartz monzodiorite with disseminated cpy																			
08SBA-17	619194	5772651	epidote-Ksp-epidote vein in monzodiorite																			
08SBA-16	619568	5772838	quartz-epidote-Ksp-epidote veins with py, cpy, mal, mag																			
08SBA-50	613993	5762503	rusty monzodiorite with mal																			

Rock samples jaw crushed, split, & steel milled at GSB, Victoria. ARMS = Aqua regia digestion - ICPMS (1 gram sample). FAIC = Fire assay (30 gram sample)-inductively coupled plasma emission spectrometry finish. ACM = ACME Analytical, Vancouver.

TABLE 2: MINERAL OCCURRENCES

Name	MINFILE No.	Easting	Northing	Commodities	Description	Reference
Bory	093A 063	613740	5770210	Cu	disseminated cpy	AR 3232, 23089
Cleo	093A 044	615840	5768340	Cu	disseminated cpy	AR 3387
Deerhorn	093A 204	611250	5791160	Cu, Au	cpy in quartz-carbonate veins and stockwork breccias	AR 27330
Granite Mountain		626260	575170	Cu	cpy, mal along quartz veins within local shear zones	AR 29405
Harrison Creek		619568	5772838	Cu	py, cpy, mal, mag along quartz-Ksp-epidote veins	Stn 08SBA-19
Luky Jack		629800	5784960	Zn, Cu	sp, cpy, py in quartz veins and along fractures	AR 25733, 27384
Megabuck	093A 078	610356	5790793	Cu, Au	cpy (born) within qtz veinlets, along fractures, and as disseminations	AR 5237, 28823
Megaton		615965	5789657	Cu	mal, az, nCu, born, cpy along fractures, as disseminations, and in quartz veins	AR 27157, 28743
Murphy Lake	093A 073	619030	5765640	Cu (Au, Mo)	cpy, py, along fractures, as disseminations, and locally in chl-qtz veins	AR 25368
Rodeo		629208	5783309	Cu	cpy, mal, born as disseminations, blebs, fracture coatings	AR 25733
Rover		612020	5764190	Cu	disseminated cpy, born	AR 949
SE zone		613120	5788180	Cu, Mo, Au	cpy, mo in quartz veins, along fractures and as disseminations	www.fjordindex.com
South Road		614030	5787560	Cu, Mo	py, cpy, mo along fractures	AR 4697, 949
Spellbound	093A 205	612670	5791200	Cu	py, cpy in quartz stockwork associated with tourmaline-epidote alteration	AR 25084
Takom	093A 206	610230	5788220	Cu, Au	py, cpy in quartz veins, along fractures and as disseminations	AR 26838
						AR 54118, 28419, 28823

Table Abbreviations:

AR-Assessment Report

Stn-Station

az-azurite

born-bornite

chl-chlorite

cpy-chalcopyrite

Ksp-kalopyrite

mal-magnetite

mal-malachite

mo-molybdenite

nCu-native copper

py-pyrite

sph-sphalerite