

Geology of the Timothy Lake Area

NTS 92P/14

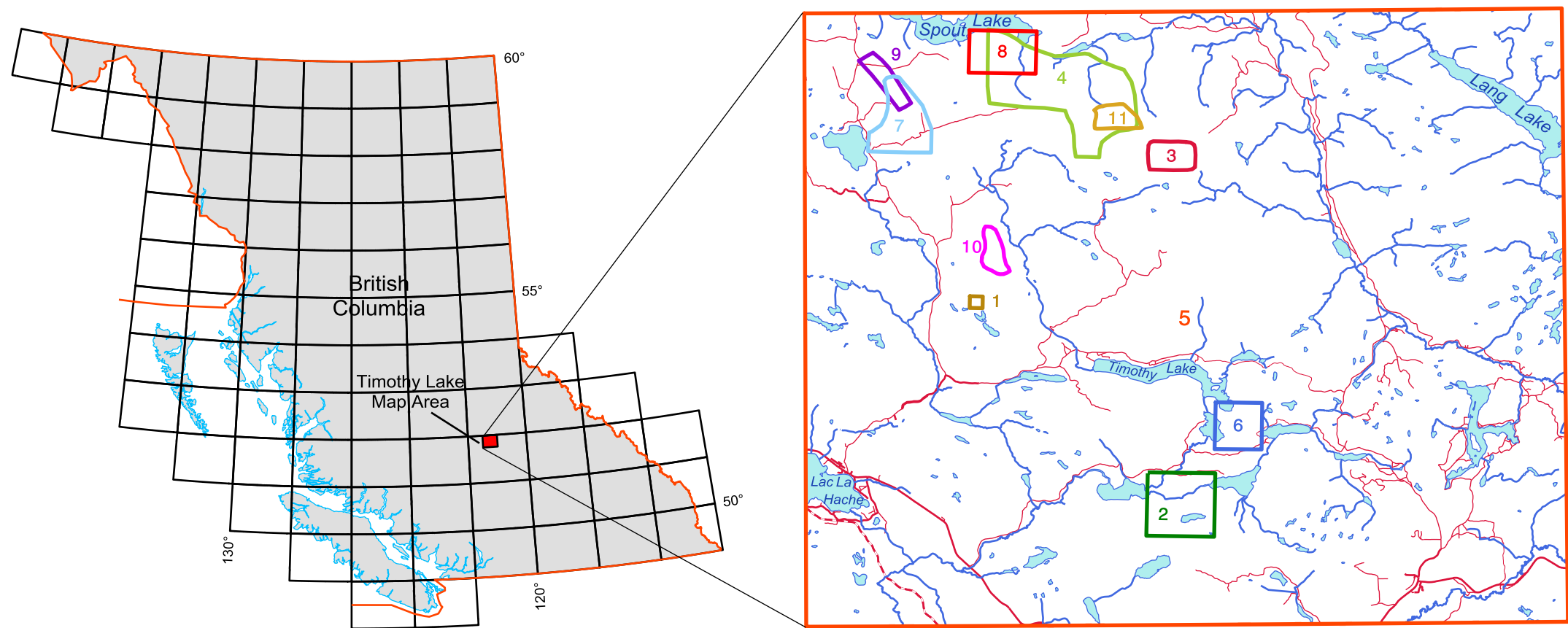
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Scale 1:50 000

LEGEND

Exposed :	Inferred under Qal
QUATERNARY	
Qal	Unconsolidated glacial, fluvial and alluvial deposits
QUATERNARY(?)	
Qv	Basalt; common xenoliths of spinel ilmenite
MIOCENE - PIOCENE	
MPCv	Olivine-phyric basalt
Eocene(?)	
Edi	Diorite
Eocene	
Ekv	Skull Hill Formation: andesite, basalt, volcanic breccia; lesser amounts of dacite, conglomerate, sandstone
EARLY JURASSIC	
Ejgd	Takomkane Batholith, Schoolhouse Lake Unit: hornblende-biotite granodiorite and monzogranite
LATE TRIASSIC - EARLY JURASSIC	
Tjgm	Porphyritic and equigranular quartz monzonite
Tjmd	Monzoniorite, monzonite, diorite; locally includes syenite, gabbro, pyroxenite, quartz monzoniorite
Tjmsd	Spout Lake pluton: monzoniorite, diorite, quartz monzoniorite
Tjgb	Gabbro
MIDDLE AND LATE TRIASSIC	
uTNrs	Red sandstone-conglomerate unit; red, purple and green sandstone, polyolithic conglomerate and breccia; locally includes pyroxene-phyric basalt and flow breccia
uTNpb	Polyolithic breccia unit; green, grey, locally maroon polyolithic breccia, conglomerate, conglomeratic sandstone, sandstone
uTNsv	Volcaniclastic succession: volcanic breccia with mainly pyroxene-phyric basalt fragments; sandstone, conglomerate, siltstone, pyroxene-phyric basalt, calcareous sandstone
uTNsl	Limestone
SYMBOLS	
Geological contact (defined, approximate, inferred)	
Fault (inferred)	
Bedding, tops known (horizontal, inclined), tops unknown (inclined, vertical)	
Schistosity (inclined, vertical)	
Mineral occurrence (Table 2)	
Assay sample (Table 1)	
Field station (shown only where not indicated by another symbol)	
Limit of Quaternary cover	
Topographic contour (20 metre intervals, 100m intervals)	
Road (paved, major gravel trunk road, all others)	
Highway number	
Railway Track	

Geological interpretation based mainly on mapping by the BC Geological Survey in 2007
Additional sources of information shown below



Additional Sources of Information

- Aulis, R.J. (1992) Diamond drilling report, Plum property, Plum 1 to 5 mineral claims, NTS 92P/14, Clinton Mining Division; BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 22 557, 15 pages.
- Blair, D.E. (1995) Geological report on the Spring Lake property, Lac La Hache, British Columbia, NTS 92P/14W/14E, Clinton Mining Division; BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 28 655, 60 pages.
- Blair, D.E. (2001) Assessment report on the Tam property, Lac La Hache, British Columbia, NTS 92P/14W/14E, Clinton Mining Division; BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 28 655, 60 pages.
- Callaghan, B. (2005) Assessment report on drilling and trenching, 2005 to 2005, on the Lac La Hache property, Clinton Mining Division, NTS 92P/14W, BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 28 655, 60 pages.
- Campbell, R.B. and Tipper, H.W. (1971) Bonaparte Lake map area, British Columbia; Geological Survey of Canada, Memoir 383, 100 pages.
- Gamble, D. (1983a) Guchon Explorers Limited, summary of percussion drilling and induced polarization geophysical surveys on the Ty 2 claim, Clinton Mining Division, NTS 92P/14E; BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 11 985, 94 pages.
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- Hodgson, C.J. and DePaol, G.M. (1972) 1971 geological, geochemical and geophysical report, Spout Lake copper property, Clinton and Cariboo Mining divisions, NTS 92P/14 and 93A/3, BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 3690, 59 pages.
- Morrison, M.S. (2006) Diamond drilling assessment report on the Rall claim group, Lac La Hache area, Clinton Mining Division; BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 28 655, 60 pages.
- Renfrew, L.C. (1979) Geological and geochemical report on the Western, Western 2, Western 3, Rainbow 1, Rainbow 2, Rainbow 3 mineral claims, Clinton Mining Division; BC Ministry of Energy, Mines and Petroleum Resources, Assessment Report 7256, 11 pages.
- Whitaker, R.J. (1996) The geology, geochronology and mineralization of the Ann property, An Early Jurassic alkalic porphyry system near Lac La Hache, B.C., unpublished B.Sc. thesis, The University of British Columbia, 65 pages.

Recommended citation:
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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)

TABLE 1: ASSAY DATA; SAMPLES COLLECTED DURING 2007 FIELD SEASON

Map Reference	Sample	Easting	Northing	Rock Type	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Fe %	As ppm	Sb ppm	Bi ppm	P ppm	Cr ppm	Ba ppm	B ppm	W ppm	Hg ppm	Au ppm	Pt ppm	Pd ppm
1	07JBL-23	625586	573704	Gossan	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	1	0.2	5	2	3	2
2	07JBL-56	604080	5754258	Miocene basalt boulders	1.18	45.86	1.6	58.8	31	207.9	42.7	6.15	0.2	0.04	0.03	0.21	48.9	52.4	<20	<1	<5	11	5	3
3	07JBL-69	625624	5749243	Faulted monzogranite; Takomkane Batholith	0.63	3.77	1.98	17.8	9	3.5	3.8	1.06	3.5	0.15	<0.2	0.035	60.5	101.7	<20	<1	<5	7	<3	<2
4	07JBL-72	623024	5753050	Weathered granodiorite; Takomkane Batholith	0.24	15.24	1.36	20.7	8	2.5	3.6	1	1.4	0.06	0.03	0.042	25.5	144.2	<20	3.1	<5	6	<3	<2
5	07JBL-93	621982	5753892	Gossan	0.24	8.04	2.26	75	16	4.7	27.5	3.54	28.1	0.05	0.03	0.296	12.7	281.1	<20	<1	13	8	4	13
6	07JBL-104	623427	5753514	Rusted granite; Takomkane Batholith	0.17	46.56	2.5	17.6	12	2.3	3.6	1.71	3.2	0.16	0.02	0.058	37.2	126.1	<20	0.9	<5	8	3	<2
7	07JBL-107	622058	5753705	Rusted granite dike	0.11	1.81	1.13	12.8	2	2.8	3.2	0.71	1	0.04	<0.2	0.029	58	30.8	<20	<1	18	10	8	5
8	07JBL-131	626026	5760816	Rusty granodiorite; Takomkane Batholith	0.12	4.78	1.4	21.3	4	2.7	3.3	1.16	0.7	0.05	<0.2	0.039	62.3	104.8	<20	<1	<5	6	<3	<2
9	07JBL-136	624713	5753189	Gossan	1.04	54.92	16.45	107.4	104	54.3	16.5	3.39	9.2	0.43	0.17	0.071	45.6	63.2	<20	<1	31	13	<3	6
10	07JBL-139-1	626994	5747581	Quartz porphyry dike; py	0.98	9.58	6.53	8.1	208	3	2.6	0.93	2.9	1.04	1.57	0.054	39.9	310.9	<20	0.3	24	11	<3	<2
11	07JBL-139-2	626994	5747581	Quartz porphyry dike; py	0.95	10.43	6.61	8.1	193	3.2	2.6	0.89	3.2	1.23	1.12	0.051	46.1	356.2	<20	0.5	34	14	12	5
12	07JBL-172	613738	5740947	Disseminated py. cpy in Nicola Group volcanic breccia	1.41	690	58.68	254.6	1254	12.9	24.4	5.54	2.5	0.45	0.11	0.047	19.9	438.4	<20	<1	17	2	3	<2
13	07JBL-207	615299	5763247	Peach 1 showing: cpy in Nicola sandstone	6.76	3366	2.5	37.9	2048	9.8	35.7	4.63	24.9	1.11	0.19	0.213	27.6	28.4	<20	0.4	25	286	9	97
14	07JBL-221	608485	5740016	ks-ep-altered andesite; Nicola Group	0.16	46.21	1.07	68.9	16	48.2	27.7	3.96	16.7	0.23	<0.2	0.049	69.5	15.6	<20	<1	<5	5	<3	<2
15	07PSC-66	617558	5758577	Mineralized zone; cpy, mal, in monzoniorite	7.89	>10000	4.68	32.9	25372	6.3	18.3	11.47	1.7	2.37	4.21	0.017	58.7	16.7	<20	>100	134	3634	12	3
16	07PSC-73	611705	5760840	WC occurrence; skarn; cpy, mal, mag	4.76	>10000	1.19	36	7037	69.5	67	14.45	25.4	1	0.09	0.138	59.8	9.4	<20	1.1	8	167	12	79
17	07PSC-235	616015	5756893	Miracle showing: altered monzoniorite, mal	1	6025	7.38	99.1	5160	7.3	27.2	5.83	18.3	0.25	0.06	0.245	18.7	21	<20	0.2	10	826	<3	19
18	07PSC-322	620975	5760695	Nemrud occurrence; mineralized skarn	0.16	7975	2	47.4	8612	9.1	6.2	2.56	7.6	0.18	14.43	0.127	96.9	16.9	<20	<1	<5	146	34	26

Rock samples jaw crushed & split at GSB, Victoria. Steel milled at Acme. ARMS = Aqua regia digestion - ICPSMS (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	AR reference
Ann North	062P 002	616150	5759180	Cu, Au	cpy, py, born, chc, ten, nCu, mal in fractures, veins and as disseminations; ks, qz, mag, cc, tm	26476, 28332
Aurizon - Discovery	062P 153	617820	5759760	Cu, Au	py, cpy, tel in veins and stockwork breccias; qz, cc, ks, ep	23975
Aurizon - North	062P 153	617558	5758577	Cu, Au	cpy, mal as clots and disseminations in fracture zones; cc, ep, ks	str 07PSC-66
Beaver Dam		624540	5742940	Cu	Cu in quartz diorite; ks	3657
Club		611780	5756720	Cu	mal in altered breccia and sandstone; ks, ep	18589
Cyan - NE area	062P 121	617400	5754780	Cu	nCu, mal as disseminations and fracture fillings; mal, lim, cpy in shear zones	23517, 25650
Cyan - SW area	062P 121	616210	5753660	Cu	nCu in vesicles; mal disseminated along fractures	22517
Don-Tennantite		614323	5758856	Cu, Au	cpy, mal along fractures and faults; cc, mag, tm, ks, ep	str 07PSC-249; 28332
Harvey Zone		615440	5758890	Cu, Au	py, cpy as disseminations and fracture and vein fillings; mag, ks, ep, tm	27017
Jody Zone		615560	5757600	Cu, Au	cpy along fractures and faults; mag, ks, chl	21982
Mac	062P 032	625300	5738900	Cu, Mo	py, cpy, mo as disseminations and fracture fillings	16586, 22603
Math - NW	062P 133	627270	5747730	Cu, Mo	disseminated cpy, mal; qz, ser, py	13254
Math - SE	062P 133	628360	5746340	Mo	py, mo within quartz stockwork	4647
Miracle - central	062P 124	615800	5756450	Cu, Au	py, cpy (born, tel) as disseminations and fracture and vein stockworks; ks	23976
Miracle - discovery	062P 124	616020	5756890	Cu, Au	py, cpy, mal along fractures and faults; ks, ep, hem, spec, lim	3815, 21982
Nemrud	062P 003	620980	5760320	Cu, Au, Ag	skarn; born (cpy, nCu, mal, py); ep, gt, di	23466, 24139
NK Zone		616360	5758490	Cu, Au	cpy, born, py, mal, nCu along fractures and as disseminations; mag, bi, chl, ep, ab, ks	26476
Northeast-Mag Zone		615250	5759510	Cu	py, cpy as disseminations and fracture and vein fillings; mag, ks, ep, tm	27289
Peach 1	062P 001	615280	5758300	Cu, Au	cpy, py (born, mal, az, nCu) in fracture and vein stockworks; ks, ep, mag, bi, tm	3815, 21982
Peach 2 - NE	062P 034	616450	5757760	Cu, Au	py, cpy, born in shears, fractures and narrow veins; ks, ep, mag, bi	3815, 28332
Peach 3	062P 035	617020	5757530	Cu	py, cpy as disseminations and along fractures	3815
Peach 5	062P 115	616170	5760030	Cu	cpy, mal in porphyritic monzonite and monzoniorite; ks, ep	3815
Peach-Melba	062P 108	614220	5760170	Cu, Au	py, cpy as disseminations and along fractures; ks, bi, ep, mag, hem	23966, 25368, 28332
Rail		606160	5759820	Cu	cpy, born, nCu as blebs and disseminations; bi, ks, chl	28221
Red	062P 152	611720	5759610	Cu	cpy, py, mal along fractures; mag, chl, ep, cc	28063
Soda Lake		614760	5739860	Cu	py, cpy as veins and disseminations; cc, ep	11390
Spring Lake	062P 114	620100	5739680	Cu, Au, Ag	py, cpy, born (nCu, mal) in fractures, veins and as disseminations; ks, ep, chl, mag, qz, ser	23965
SS	062P 004	614480	5762070	Cu	born, cpy, py, mal in shears; mag	1704
Tim 1	062P 122	620320	5756280	Cu, Au, Ag	cpy, py, born in vein and fracture stockworks and as disseminations; ep, ks	4030, 26655
Tim 2	062P 122	620180	5755400	Cu	cpy, py in vein and fracture stockworks; ks, ep, cc, mag	4030
Tim 3	062P 122	620390	5755560	Cu, Ag	cpy, py, mal in vein and fracture stockworks; ep, ks, mag	4030
Timothy Creek	062P 033	611960	5751400	Pb, Cu, Zn, Ag, Au	skarn; cpy, sph, py, qz, cc as veins and fracture-fillings in a shear zone	5067, 7256
WC - North Zone	062P 120	611800	5761230	Cu	garnet; mag; cpy (py (born, cov); gt, ep, cc, ks, tm, di, ac, sp, sc	3690, 23966, 28332
WC - South Zone	062P 120	611880	5760860	Cu, Au	skarn; mag, cpy, py (born, cov); gt, ep, cc, ks, tm, di, ac, sp, sc	23966, 28332