

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 1: Geochronological Data for Sheet 1 - Parts of Carmacks (115I) and Glenlyon (105L)

MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	.ATITUDE	ONGITUDE
1	97VIK-50	109	0.7	U/Pb	Zircon	Igneous Crystallization	4 fractions, age is single concordant fraction.	dyke from Dickson Stock, Mt. Nansen Group (?)	Plutonic	quartz-feldspar porphyry dyke	Mortensen, J.K., Appel, V.L. and Hart, C.J.R.	2003	Geological and U-Pb age constraints on base and precious metal vein systems in the Mount Nansen area, eastern Dawson Range, Yukon	Yukon Exploration and Geology 2002, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada 0 165 174	62.04921	-137.1066
2	86-C-1172	69	1.7	K/Ar	Whole Rock	Cooling	Very good radiogenic analysis	Mount Nansen Group or Carmacks Group?	Plutonic	Weakly to moderately altered quartz-feldspar porphyry	Hunt, P.A. and Roddick, J.C.	1991	A compilation of K-Ar ages: report 20	Radiogenic Age and Isotopic Studies: Report 4, Geological Survey of Canada, Paper 90-2 0 113 143	62.04999	-137.1167
3	SYA82-130	122.9	1.9	K/Ar	Adularia	Cooling	Good radiogenic analysis, but age is anomalously old for typically Mid-Late Cretaceous Mount Nansen mineralization. Adularia possibly contained excess radiogenic Ar - age is considered unreliable.	Heustis Vein	Hydrothermal	Au-Ag-bearing vein cutting metamorphic rocks	Hunt, P.A. and Roddick, J.C.	1987	A compilation of K-Ar ages: Report 17	Radiogenic Age and Isotopic Studies: Report 1, Geological Survey of Canada, Paper 87-2 0 143 210	62.05	-137.15
4	97VIK-33	108.4	1.4	U/Pb	Zircon	Igneous Crystallization	Age is lower intercept of 2 pt. regression; lower fraction overlaps concordia. A 3rd concordant fraction suspected of Pb loss. Upper intercept at 2.76 Ga.	dyke from Dickson stock, Mt. Nansen Group (?)	Plutonic	quartz-feldspar porphyry dyke	Mortensen, J.K., Appel, V.L. and Hart, C.J.R.	2003	Geological and U-Pb age constraints on base and precious metal vein systems in the Mount Nansen area, eastern Dawson Range, Yukon	Yukon Exploration and Geology 2002, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada 0 165 174	62.05223	-137.1441
5	97VIK-41	107.9	0.9	U/Pb	Zircon	Igneous Crystallization	3 concordant to nearly-concordant fractions. Age is oldest concordant fraction.	dyke from Dickson Stock, Mount Nansen Group (?)	Plutonic	quartz-feldspar porphyry dyke	Mortensen, J.K., Appel, V.L. and Hart, C.J.R.	2003	Geological and U-Pb age constraints on base and precious metal vein systems in the Mount Nansen area, eastern Dawson Range, Yukon	Yukon Exploration and Geology 2002, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada 0 165 174	62.05251	-137.1547
6	97VIK-47	108.3	0.7	U/Pb	Zircon	Igneous Crystallization	Age is lower intercept of 2 pt. regression; lower fraction nearly concordant. 3rd fraction suspected of Pb loss. Upper intercept at 1.64 Ga.	Dickson Stock, Mount Nansen Group (?)	Plutonic	Hypabyssal quartz-feldspar porphyry stock	Mortensen, J.K., Appel, V.L. and Hart, C.J.R.	2003	Geological and U-Pb age constraints on base and precious metal vein systems in the Mount Nansen area, eastern Dawson Range, Yukon	Yukon Exploration and Geology 2002, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada 0 165 174	62.05625	-137.1454
7	97VIK-48	211.4	3.3	U/Pb	Zircon, Titanite	Igneous Crystallization	2 concordant overlapping titanite fractions; age is range of both fractions. Older (203 to 219 Ma) near-concordant zircon fractions scatter widely near concordia in lead loss pattern.	Dickson Zone	Plutonic	Medium-grained equigranular fresh biotite-hornblende granodiorite	Mortensen, J.K., Appel, V.L. and Hart, C.J.R.	2003	Geological and U-Pb age constraints on base and precious metal vein systems in the Mount Nansen area, eastern Dawson Range, Yukon	Yukon Exploration and Geology 2002, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada 0 165 174	62.05626	-137.2018
8	14 0	68	4.4	K/Ar	Biotite	Igneous Crystallization	Very good radiogenic analysis - age is consistent with other K/Ar ages for this suite.	Unit #13(?), Carmacks Group Volcanics	Volcanic	Trachybasalt	Grond, H.C., Churchill, S.J., Armstrong, R.L., Harakal, J.E. and Nixon, G.T.	1984	Late Cretaceous age of the Hutshi, Mount Nansen, and Carmacks groups, southwestern Yukon Territory and northwestern British Columbia	Canadian Journal of Earth Sciences 21 554 558	62.06861	-135.9467
9	12-2d	73.1	5	K/Ar	Whole Rock	Igneous Crystallization	Excellent radiogenic analysis - age is consistent with other K/Ar ages for this suite.	Unit #14, Carmacks Group Volcanics	Volcanic	Alkali basalt	Grond, H.C., Churchill, S.J., Armstrong, R.L., Harakal, J.E. and Nixon, G.T.	1984	Late Cretaceous age of the Hutshi, Mount Nansen, and Carmacks groups, southwestern Yukon Territory and northwestern British Columbia	Canadian Journal of Earth Sciences 21 554 558	62.07	-136.4083
10	SYA79-58	70.5	2.2	K/Ar	Biotite	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Biotite has ~2% chlorite contamination. Slightly K-depleted (6.33 wt. %), however this seems to be a reliable age.		Volcanic	Feldspar porphyry host rock for Cu-Mo veinlets at Rusk Creek prospect	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.07389	-137.2553
11	02MC107-2	342.8	2.2	U/Pb	Zircon	Igneous Crystallization	N/A	Moose formation of Boswell assemblage (Quesnellia)	Plutonic	fine-grained Qtz diorite; plagi phenocrysts ~3-5 mm; ~ 2% Qtz phenos; comagmatic with basalt (awesome magma mingling textures!!!)	Colpron, M., Mortensen, J.K.	2003		unpublished	62.07919	-135.0659
12	166876	73.4	1.3	K/Ar	Whole Rock	Igneous Crystallization	Age calculated with constants from Steiger and Jager (1977). Note that there was excessive atmospheric Ar in the sample (66.4%) and that the actual age may be somewhat older.	Carmacks Volcanics?	Volcanic	Medium-grained crystalline basalt probably related to Carmacks Group event. Contains plagioclase (An 50-60%) and augite	Hunt, P.A. and Roddick, J.C.	1992	A compilation of K-Ar and 40Ar-39Ar ages: Report 22	Radiogenic Age and Isotopic Studies: Report 6, Geological Survey of Canada, Paper 92-2 0 179 226	62.08092	-135.3947
13	86-C-1162	61.2	1.2	K/Ar	Whole Rock	Cooling	Good radiogenic analysis	Mount Nansen Group or Carmacks Group	Plutonic	Weakly to moderately altered biotite-plagioclase porphyry	Hunt, P.A. and Roddick, J.C.	1991	A compilation of K-Ar ages: report 20	Radiogenic Age and Isotopic Studies: Report 4, Geological Survey of Canada, Paper 90-2 0 113 143	62.08333	-137.2667
14	86-C-1166	69.7	1.4	K/Ar	Whole Rock	Reset	Age from Hunt and Roddick (1991). Excellent radiogenic analysis - age is much younger than U-Pb zircon age for same sample (108 +/- 4.4 Ma; Mortensen and Carlson, 1986) and has likely been disturbed by alteration and/or a later tectonothermal event.	Mount Nansen Group	Plutonic	Weakly to moderately altered quartz-feldspar porphyry dyke spatially associated with Au-Ag mineralization at the Brown-McDade mine	Mortensen, J.K. and Carlson, G.E.	1986		unpublished	62.08333	-137.45
15	86-C-1166	108	4.4	U/Pb	Zircon	Igneous Crystallization	Age from Mortensen and Carlson (1986, unpublished data).	Mount Nansen Group	Plutonic	Weakly to moderately altered quartz-feldspar porphyry dyke spatially associated with Au-Ag mineralization at the Brown-McDade mine	Mortensen, J.K. and Carlson, G.E.	1986		unpublished	62.08333	-137.45
16	00MC173	93.5	3	U/Pb	Zircon	Igneous Crystallization	4 fractions off concordia scattered between 92-95 Ma; fraction closest to concordia @ ca. 93.3 Ma	Cassiar suite?	Plutonic	K-spar phenocrysts in groundmass of fine- to medium-grained Qtz, Plagi and Bt; Qtz is smoky; unfoliated	Colpron, M., Mortensen, J.K.	2001		unpublished	62.08901	-134.6558
17	DS97-90	69.46	0.6	Ar/Ar	K-Feldspar	Mineralization	Monitor used: MMhbl (hornblende, 520 +/- 2 Ma, Samson and Alexander 1987). Well defined plateau over ~90% of 39Ar released (16 of 21 steps). Age is consistent with an isochron correlation age of 68.3 +/- 0.8 Ma.	Dawson Range Mt. Nansen occurrence, hosted by Prospector Mountain Plutonic Suite	Hydrothermal	potassic alteration - K-feldspar	Selby, D., Nesbitt, B.E., Creaser, R.A., Reynolds, P.H. and Muehlenbachs, K.	2001	Evidence for a nonmagmatic component in potassic hydrothermal fluids of porphyry Cu-Au-Mo systems, Yukon, Canada	Geochimica et Cosmochimica Acta 65 571 587	62.09167	-137.2055
18	DS97-97	71.05	0.26	Re/Os	Molybdenite	Mineralization	Control monitor used: HLP-5 moly powder (Re-Os age 220.73 +/- 0.29 Ma). 187Re decay constant used: 1.666 x 10exp-11/yr (Smoliar et al., 1996).	Dawson Range Mt. Nansen occurrence, hosted by Prospector Mountain Plutonic Suite	Hydrothermal	Potassic alteration, Qtz-ksp-cpy-moly A-type vein	Selby, D. and Creaser, R.A.	2001	Late and Mid-Cretaceous mineralization in the northern Canadian Cordillera: constraints from Re-Os molybdenite dates	Economic Geology 96 1461 1467	62.09169	-137.2056
19	DS97-89	69.77	0.5	Ar/Ar	K-Feldspar	Alteration	Monitor used: MMhbl (hornblende, 520 +/- 2 Ma, Samson and Alexander 1987). Well defined plateau over ~90% of 39Ar released (16 of 21 steps). Age is consistent with an isochron correlation age of 68.2 +/- 0.7 Ma.	Dawson Range Mt. Nansen occurrence, hosted by Prospector Mountain Plutonic Suite	Hydrothermal	potassic alteration - K-feldspar	Selby, D., Nesbitt, B.E., Creaser, R.A., Reynolds, P.H. and Muehlenbachs, K.	2001	Evidence for a nonmagmatic component in potassic hydrothermal fluids of porphyry Cu-Au-Mo systems, Yukon, Canada	Geochimica et Cosmochimica Acta 65 571 587	62.09176	-137.2057
20	DS97-87	69.36	0.7	Ar/Ar	K-Feldspar	Alteration	Monitor used: MMhbl (hornblende, 520 +/- 2 Ma, Samson and Alexander 1987). Well defined plateau over ~88% of 39Ar released (16 of 21 steps). Age is consistent with an isochron correlation age of 69.3 +/- 0.7 Ma.	Dawson Range Mt. Nansen occurrence, hosted by Prospector Mountain Plutonic Suite	Hydrothermal	potassic alteration - K-feldspar	Selby, D., Nesbitt, B.E., Creaser, R.A., Reynolds, P.H. and Muehlenbachs, K.	2001	Evidence for a nonmagmatic component in potassic hydrothermal fluids of porphyry Cu-Au-Mo systems, Yukon, Canada	Geochimica et Cosmochimica Acta 65 571 587	62.09212	-137.2054
21	MLB-88-181	92	1.3	U/Pb	Zircon	Igneous Crystallization	Unpublished data.		Volcanic	Felsic tuff band within immature clastic sedimentary rocks	Mortensen, J.K. and Jackson, L.E.	1989		unpublished	62.09279	-135.3137
22	01MC230-1	349	0.7	U/Pb	Zircon	Igneous Crystallization	2 overlapping concordant fractions; fraction B is most precise @ 349 Ma	Telegraph Suite? (YTT)	Plutonic	coarse-grained tonalite; phenocrysts of Hbl (?) now completely chloritized; rock is extensively epidotized and contains 3-5% pyrite; weakly foliated and boudinaged; intrudes 01MC230-2	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.10346	-134.513
23	01MC230-2	348.5	1.2	U/Pb	Zircon	Igneous Crystallization	5 concordant fractions; minor Pb loss for some fractions; A + C are oldest @ 348.5 Ma	Telegraph Suite? (YTT)	Plutonic	strongly foliated, fine-grained, Plagi-Ms-Qtz-Hbl-Bt schist; Intrudes metasediments of the Snowcap Assemblage	Colpron, M., Mortensen, J.K.	2001		unpublished	62.10346	-134.513
24	04MC003-2	187.1	0.7	U/Pb	Zircon	Igneous Crystallization	3 point concordia	Whitehorse trough	Volcanic	ash tuff in Tanglefoot formation (Laberge Group)	Colpron, M. and Friedman, R.M.	2008	U-Pb zircon ages for the Nordenskiöld formation (Laberge Group) and Cretaceous intrusive rocks, Whitehorse trough, Yukon	Yukon Exploration and Geology 2007, Yukon Geological Survey 139-151	62.10362	-136.1255
25	86-C-1149	93.7	1.5	K/Ar	Whole Rock	Cooling	Excellent radiogenic analysis - age is slightly younger than most K/Ar cooling ages for this suite, perhaps attributable to Ar loss during alteration.	Mount Nansen Group	Volcanic	Trachyte - weakly altered aphyric felsic flow	Hunt, P.A. and Roddick, J.C.	1991	A compilation of K-Ar ages: report 20	Radiogenic Age and Isotopic Studies: Report 4, Geological Survey of Canada, Paper 90-2 0 113 143	62.11667	-137.3333
26	02JN098	313.8	1.7	U/Pb	Zircon	Igneous Crystallization	3 concordant fractions	Boswell assemblage (Quesnellia)	Volcanic	rhyolite breccia	Colpron, M. and Mortensen, J.K.	2003		unpublished	62.14371	-135.5407
27	T-420	159.1	10.18	Ar/Ar	Biotite	Cooling	Plateau age; 42.6% 39Ar. Spectra strongly disturbed.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.14805	-134.8052
28	T-420	192.3	2.82	Ar/Ar	Muscovite	Cooling	Plateau age, 86.2% 39Ar.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.14805	-134.8052
29	T-408	190.7	5.66	Ar/Ar	Muscovite	Cooling	Plateau age, 75.7% 39Ar.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.15807	-134.8656

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MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	.ATITUDE	ONGITUDE
30	C-1125	105	2	U/Pb	Zircon	Igneous Crystallization	Age is based on one concordant analysis. A Rb/Sr Wr-mineral age of 106 +/- 0.8 Ma was obtained for this sample and sample P-168.	Dawson Range batholith (Whitehorse-Coffee Creek Suite)	Plutonic	Unfoliated biotite-hornblende granodiorite of Casino granodiorite	Carlson, G.E.	1987	Geology and Mount Nansen (115 I/3) and Stoddart Creek (115 I/6) map areas.	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1987-2. 0 179 0	62.16666	-137.3833
31	C-1136	61	0	U/Pb	Zircon	Igneous Crystallization	Excellent quality zircons. 206/238 age estimated from a single discordant analysis. Much older 207/206 age of 280 Ma probably a result of contamination during crystallization.	Bow Creek granite	Plutonic	Pink-weathering qtz-fsp-porphyritic border phase of the granitic pluton, likely related to Carmacks Group volcanics	Carlson, G.E.	1987	Geology and Mount Nansen (115 I/3) and Stoddart Creek (115 I/6) map areas.	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1987-2. 0 179 0	62.16895	-137.2465
32	SS-04b	189.8	2.96	Ar/Ar	Muscovite	Cooling	Plateau age: 76.8% 39Ar.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.16979	-134.9392
33	99MC001-3	340.2	2.1	U/Pb	Zircon	Igneous Crystallization	4 pt regression, MSWD=0.5, one fraction concordant.	Little Salmon; hosts Government showing	Volcanic	Quartz-feldspar porphyritic dacitic schist	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.19194	-134.6078
34	RO-116	193.4	2.48	Ar/Ar	Muscovite	Cooling	Plateau age, 68.4% 39Ar.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.19433	-134.6315
35	99MC171	94.5	1.5	U/Pb	Zircon	Igneous Crystallization	Unpublished data. 5 near-concordant fractions scattered between 93 and 96 Ma.	unnamed pluton	Plutonic	Medium-grained equigranular biotite granite	Colpron, M. and Mortensen, J.K.	1999		unpublished	62.19437	-134.8853
36	T-302	191.1	1.8	Ar/Ar	Muscovite	Cooling	Plateau age, 67.5% 39Ar. Spectra slightly disturbed.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.19576	-134.9424
37	T-302	189.6	2.16	Ar/Ar	Muscovite	Cooling	Plateau age, 73.7% 39Ar. Repeated analysis.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.19576	-134.9424
38	RO-113	191.5	1.88	Ar/Ar	Muscovite	Cooling	Plateau age, 67.4% 39Ar.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.19695	-134.5781
39	RO-502	85.6	1	Ar/Ar	K-Feldspar	Cooling	Plateau age, 87.9% 39Ar.	unnamed pluton	Plutonic	Alkali granite phase containing abundant pink microperthite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.19784	-134.8678
40	RO-105	161.5	4.12	Ar/Ar	Biotite	Cooling	Plateau age, 53.5% 39Ar. Spectra disturbed (diffusion loss?)	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.19969	-134.5447
41	MLB-88-185	56.6	0.9	K/Ar	Biotite	Cooling	Age is from Mortensen & Jackson (1989, unpublished data).	Little Salmon Lake Granite	Plutonic	Biotite quartz monzonite	Mortensen, J.K. and Jackson, L.E.	1989		unpublished	62.20034	-135.0807
42	MLB-88-185	60.1	0.8	K/Ar	Biotite	Cooling	Age from Hunt & Roddick (1992). Good radiogenic analysis - age is consistent with other Eocene bodies in the region. This sample also gave a K/Ar biotite age of 56.6 +/- 0.9 Ma (Mortensen and Jackson, 1989, unpublished).	Little Salmon Lake Granite	Plutonic	Biotite quartz monzonite	Mortensen, J.K. and Jackson, L.E.	1989		unpublished	62.20034	-135.0807
43	T-242	184.4	7.72	Ar/Ar	Muscovite	Cooling	Plateau age, 82.9% 39Ar. Spectra slightly disturbed.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.20057	-134.9901
44	J-12688-R-6	56.3	0.2	U/Pb	Zircon	Igneous Crystallization	Age from Mortensen and Jackson (1989, unpublished data). No details available.	Small plug west of Little Salmon Lake	Plutonic	Quartz-plagioclase-hornblende porphyry	Mortensen, J.K. and Jackson, L.E.	1989		unpublished	62.20124	-135.0817
45	J-12688-R-6	67.7	3.3	K/Ar	Hornblende	Cooling	Age is from Hunt & Roddick (1992), calculated using constants from Steiger and Jager (1977). Age is anomalously old compared to U-Pb zircon age for same sample (56.3 +/- 0.2 Ma). Excess Ar?	Small plug west of Little Salmon Lake	Plutonic	Quartz-plagioclase-hornblende porphyry	Mortensen, J.K. and Jackson, L.E.	1989		unpublished	62.20124	-135.0817
46	99MC014	338.5	1	U/Pb	Zircon	Igneous Crystallization	Single concordant fraction.	Little Salmon, intrudes Snowcap assemblage	Plutonic	Fine-grained foliated strongly-lineated quartz diorite to granodiorite	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.20291	-134.7571
47	T-178	170.8	3.76	Ar/Ar	Biotite	Cooling	Plateau age, 63.3% 39Ar. Spectra slightly disturbed.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.2038	-134.697
48	T-178	191.6	0.8	Ar/Ar	Muscovite	Cooling	Plateau age, 74.9% 39Ar.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.2038	-134.697
49	RO-128	187.5	3.62	Ar/Ar	Muscovite	Cooling	Plateau age, 69.1% 39Ar.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.20413	-134.7371
50	T-203	186.9	3.08	Ar/Ar	Muscovite	Cooling	Plateau age, 80% 39Ar.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.20661	-134.9227
51	MLB-88-182	57	0.8	K/Ar	Biotite	Cooling	Excellent radiogenic analysis - age is consistent with other Eocene bodies in the region.		Plutonic	Biotite-plagioclase-hornblende porphyry dyke 1.5-2.0 m wide cutting amygdaloidal, ol-cpx-phyric basalt	Hunt, P.A. and Roddick, J.C.	1992	A compilation of K-Ar ages, Report 21	Radiogenic Age and Isotopic Studies: Report 5: Geological Survey of Canada, Paper 91-2 0 207 261	62.20662	-135.0865
52	T-170	233.1	10.06	Ar/Ar	Muscovite	Cooling	Plateau age, 61.1% 39Ar. Spectra is disturbed.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.20772	-134.5654
53	RO-133b	185.6	2.96	Ar/Ar	Muscovite	Cooling	Plateau age, 68.1% 39Ar.	Yukon-Tanana terrane	Metamorphic	tectonite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.20868	-134.7859
54	T-461	99.4	5.82	Ar/Ar	Muscovite	Cooling	Two plateau ages, 52.9% 39Ar; 2nd at 134.3 Ma. Strongly disturbed spectra - Ar loss during pluton emplacement suspected.	unnamed pluton	Plutonic	granite	Oliver, D.H.	1996	Structural, kinematic, and thermochronometric studies of the Teslin Suture Zone, south-central Yukon Territory	Unpublished Ph.D. thesis, Texas University, Austin, Texas 0 231 1344	62.21724	-134.8806
55	TOE79-40-18	110	8	K/Ar	Hornblende	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains with no visible contamination. Only 46% of the Ar was radiogenic, however the age agrees with other K/Ar ages from the same body further westward.	Whitehorse-Coffee Creek Suite	Plutonic	Fresh massive hbl-bt granodiorite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.23331	-137.2417
56	86-C-795	107.9	1.6	K/Ar	Hornblende	Cooling	Good analysis - age is consistent with being part of the Mount Nansen Group	Mount Nansen Group	Plutonic	Hbl-fspar porphyry - subvolcanic feeder to Mount Nansen flows	Hunt, P.A. and Roddick, J.C.	1991	A compilation of K-Ar ages: report 20	Radiogenic Age and Isotopic Studies: Report 4, Geological Survey of Canada, Paper 90-2 0 113 143	62.23333	-137.35
57	99MC227	193	0	U/Pb	Titanite	Cooling	Younger of two concordant titanite fractions; other fraction is concordant at 199 Ma.	Tatchun batholith	Plutonic	Medium-grained hornblende tonalite: unfoliated	Colpron, M. and Mortensen, J.K.	1999		unpublished	62.24565	-135.3949
58	99MC227	197.1	0.4	U/Pb	Zircon	Igneous Crystallization	Age is for a single concordant fraction.	Tatchun batholith	Plutonic	Medium-grained hornblende tonalite: unfoliated	Colpron, M. and Mortensen, J.K.	1999		unpublished	62.24565	-135.3949
59	00MC005	339.4	0.9	U/Pb	Zircon	Igneous Crystallization	fraction B concordant - weighted average of B+C = 342.4 +/- 6 Ma	Tatmain plutonic suite (YTT)	Plutonic	fine to coarse-grained augite gabbro: unfoliated; intrudes Drury grit and base of Little Salmon fm	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.25131	-134.5867
60	SYA-78-185	142	10	K/Ar	Hornblende	Cooling	Age was calculated using constants from Steiger and Jager (1977). Clean, unaltered, uncontaminated grains. Only 61.1% radiogenic Ar. Age is anomalously young compared to other dates from the pluton. Reason for the large uncertainty is unclear.	Big Creek Syenite	Plutonic	Coarse-grained hornblende quartz monzonite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 15	Geological Survey of Canada, Paper 81-2. 0 1 56	62.25972	-137.1192
61	86-D-300	184	2	U/Pb	Titanite	Cooling	Age from Mortensen and Carlson (1986, unpublished data).	Big Creek Syenite	Plutonic	Coarse-grained hornblende monzonite/syenite	Mortensen, J.K. and Carlson, G.E.	1986		unpublished	62.2667	-137.1167

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 1: Geochronological Data for Sheet 1 - Parts of Carmacks (115I) and Glenlyon (105L)

MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	.ATITUDE	ONGITUDE
62	86-D-300	188.8	3.8	K/Ar	Hornblende	Cooling	Age from Hunt and Roddick (1991). 45% atmospheric Ar was present in the analysis but the age is still within the range of K/Ar ages obtained for this pluton.	Big Creek Syenite	Plutonic	Coarse-grained hornblende monzonite/syenite	Mortensen, J.K. and Carlson, G.E.	1986		unpublished	62.2667	-137.1167
63	86-D-300	197	1	U/Pb	Zircon	Igneous Crystallization	Age from Mortensen and Carlson (1986, unpublished data).	Big Creek Syenite	Plutonic	Coarse-grained hornblende monzonite/syenite	Mortensen, J.K. and Carlson, G.E.	1986		unpublished	62.2667	-137.1167
64	T079-31-16	109	3	K/Ar	Whole Rock	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Only fresh aphanitic material was used - excellent radiogenic analysis.	Mount Nansen Group	Volcanic	Mauve-grey felsic volcanics	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.275	-137.5
65	F85-33B	79	6.2	K/Ar	Whole Rock	Cooling	Age calculated using constants from Steiger and Jager. Only 56% radiogenic Ar in the analysis. Because the sample was so altered it is unclear whether this age reflects age of emplacement or alteration - may be related to Carmacks volcanism.	Carmacks Group Volcanics?	Plutonic	Hydrothermally altered rhyolite dyke spatially associated with precious metal mineralization	McInnes, B.I.A., Goodfellow, W.D., Crocket, J.H. and McNutt, R.H.	1988	Geology, geochemistry and geochronology of subvolcanic intrusions associated with gold deposits at Freegold Mountain, Dawson Range, Yukon	Current Research, Part E, Geological Survey of Canada, Paper 88-1E 0 137 151	62.28668	-137.1091
66	02CR033-1	196.1	1.8	Ar/Ar	Hornblende	Cooling	Inverse isochron age (MSWD = 1.0); excess Ar	Yukon-Tanana terrane, Simpson Range plutonic suite	Metamorphic	K-feldspar megacrystic granodiorite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.28957	-135.3623
67	TB218	108.7	0.36	U/Pb	Zircon	Igneous Crystallization	weighted average of 206/238 ages for 3 overlapping concordant fractions	Whitehorse plutonic suite	Plutonic	dark green to black feldspar porphyritic trachyte dyke	Binell Betsi, T. and Bennett, V.	2010	New U-Pb age constraints at Freegold Mountain: Evidence for multiple phases of polymetallic mid- to Late Cretaceous mineralization	Yukon Exploration and Geology 2009, Yukon Geological Survey 57-84	62.29334	-136.9778
68	SYA-78-179	85.2	2.6	K/Ar	Biotite	Cooling	Age calculated using constants from Steiger and Jager (1977). Brown biotite with traces of chlorite alteration and hornblende impurity. Grains contained only 4.81 wt. % K.	Seymour Creek Stock	Plutonic	Quartz Monzonite (3% biotite)	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 15	Geological Survey of Canada, Paper 81-2. 0 1 56	62.29444	-137.2017
69	02CR030-1	346.8	1.3	U/Pb	Zircon	Igneous Crystallization	one concordant fraction	Little Kalzas suite (YTT)	Plutonic	foliated and lineated diorite gneiss; Ms-Qtz-Pl-Bt?-Grt?; mafic minerals appear chloritized; medium-grained	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.29853	-135.0893
70	TOC79-18-9	152	7	K/Ar	Hornblende	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains - apparently good analysis but age is anomalously young compared to other ages for the same body. Probably thermally reset.	Big Creek Syenite	Plutonic	Massive porphyritic syenite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.3	-137.325
71	02MC020	215	3.8	Ar/Ar	Hornblende	Igneous Crystallization	one aliquot show evidence of Ar-loss	Little Kalzas suite (YTT)	Plutonic	Tonalite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.30063	-135.166
72	02MC020	193.3	1.3	Ar/Ar	Biotite	Cooling	plateau with some evidence of later thermal overprint	Little Kalzas suite (YTT)	Plutonic	Tonalite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.30063	-135.166
73	99MC206	346.8	0.8	U/Pb	Zircon	Detrital	Age is for a reversely discordant fraction; other fractions display inheritance.	Little Salmon	Metasedimentary	Medium-grained strongly foliated plagioclase-phyric crystal tuff	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.30722	-134.7114
74	RL02-5-4B	207	11	Ar/Ar	Hornblende	Cooling	ragged looking grains with possible alteration; inverse isochron (MSWD=2.2) indicates excess Ar (40Ar/36Ar=725±43); low K content causes large errors	Little Salmon formation (YTT)	Metamorphic	relic Hbl phenocrysts in metabasalt	Colpron, M and Villeneuve, M.	2003		Unpublished	62.31644	-134.8704
75	Stoddart	93.6	1.5	Re/Os	Molybdenite	Mineralization	model age cited in Bineli Betsi and Bennett (2010), YEG 2009; no data presented	Stoddart deposit, Mount Freegold	Hydrothermal	porphyry-style Cu-Mo-W mineralization	Geospec Consultant Ltd.	2008	Re-Os isotpic analyses and age dating of molybdenite for Northern Freegold Resources Ltd.	unpublished	62.32084	-137.1767
76	TB369	97.9	0.4	U/Pb	Zircon	Igneous Crystallization	4 concordant analyses spread between 162 Ma and 78 Ma; age of 97.9 Ma most consistent with geological relationships and other geochronological constraints	Whitehorse plutonic suite	Plutonic	aplite dyke overprinted by Qtz-Cpy-Mo veins (sampled for Stoddart Re-Os age) but cutting Stoddart granite	Binell Betsi, T. and Bennett, V.	2010	New U-Pb age constraints at Freegold Mountain: Evidence for multiple phases of polymetallic mid- to Late Cretaceous mineralization	Yukon Exploration and Geology 2009, Yukon Geological Survey 57-84	62.32084	-137.1767
77	TB038	76.86	0.86	U/Pb	Zircon	Igneous Crystallization	22 concordant analyses	Prospector Mountain suite	Plutonic	weakly mineralized porphyritic andesite dyke intruding Stoddart granite	Binell Betsi, T. and Bennett, V.	2010	New U-Pb age constraints at Freegold Mountain: Evidence for multiple phases of polymetallic mid- to Late Cretaceous mineralization	Yukon Exploration and Geology 2009, Yukon Geological Survey 57-84	62.32084	-137.1767
78	Bow Creek granite	68.25	0.9	U/Pb	Zircon	Igneous Crystallization	23 concordant analyses	Carmacks suite?	Plutonic	medium-grained equigranular granite	Binell Betsi, T. and Bennett, V.	2010	New U-Pb age constraints at Freegold Mountain: Evidence for multiple phases of polymetallic mid- to Late Cretaceous mineralization	Yukon Exploration and Geology 2009, Yukon Geological Survey 57-84	62.32084	-137.1767
79	02DM031-1	186.5	1.1	Ar/Ar	Muscovite	Cooling	plateau age	Kelly pluton (Quesnellia)	Metamorphic	foliated Granite; strongly foliated Ms +/- Bt granite gneiss; intrudes Semenof amphibolite W of Big Salmon Fault	Colpron, M. and Villeneuve, M.	2002		unpublished	62.32804	-135.4014
80	02DM031-1	184.9	1.2	Ar/Ar	Biotite	Cooling	plateau age	Kelly pluton (Quesnellia)	Metamorphic	foliated Granite; strongly foliated Ms +/- Bt granite gneiss; intrudes Semenof amphibolite W of Big Salmon Fault	Colpron, M. and Villeneuve, M.	2002		unpublished	62.32804	-135.4014
81	02DM031-1	306.8	0.6	U/Pb	Zircon	Igneous Crystallization	4 fractions on or near concordia; fraction D is youngest and most concordant @ 306.8 Ma	Kelly pluton (Quesnellia)	Plutonic	foliated Granite; strongly foliated Ms +/- Bt granite gneiss; intrudes Semenof amphibolite W of Big Salmon Fault	Colpron, M., Mortensen, J.K.	2003		unpublished	62.32804	-135.4014
82	TB174	104.5	0.17	U/Pb	Zircon	Igneous Crystallization	5 fractions analyzed, 3 overlapping concordant	Whitehorse plutonic suite	Plutonic	yellowish brown to pink feldspar porphyritic trachydacite dyke cutting strongly altered plutonic rocks	Binell Betsi, T. and Bennett, V.	2010	New U-Pb age constraints at Freegold Mountain: Evidence for multiple phases of polymetallic mid- to Late Cretaceous mineralization	Yukon Exploration and Geology 2009, Yukon Geological Survey 57-84	62.33256	-137.2663
83	TB183	105.7	0.22	U/Pb	Zircon	Igneous Crystallization	5 fractions analyzed, 3 overlapping concordant	Whitehorse plutonic suite	Plutonic	fine-grained, equigranular monzonite dyke intruding coarse-grained granite	Binell Betsi, T. and Bennett, V.	2010	New U-Pb age constraints at Freegold Mountain: Evidence for multiple phases of polymetallic mid- to Late Cretaceous mineralization	Yukon Exploration and Geology 2009, Yukon Geological Survey 57-84	62.33256	-137.2663
84	TB181	75.15	0.23	U/Pb	Zircon	Igneous Crystallization	4 fractions analyzed, 2 overlapping concordant	Prospector Mountain suite	Plutonic	purple quart-feldspar porphyritic rhyolite dyke intruding altered granitoid	Binell Betsi, T. and Bennett, V.	2010	New U-Pb age constraints at Freegold Mountain: Evidence for multiple phases of polymetallic mid- to Late Cretaceous mineralization	Yukon Exploration and Geology 2009, Yukon Geological Survey 57-84	62.33256	-137.2663
85	TB022	105.5	0.2	U/Pb	Zircon	Igneous Crystallization	5 fractions analyzed, 3 overlapping concordant	Whitehorse plutonic suite	Plutonic	rhyolite porphyry dyke cutting Revenue Creek monzodiorite	Binell Betsi, T. and Bennett, V.	2010	New U-Pb age constraints at Freegold Mountain: Evidence for multiple phases of polymetallic mid- to Late Cretaceous mineralization	Yukon Exploration and Geology 2009, Yukon Geological Survey 57-84	62.3427	-137.274
86	TB022 (VB)	107.06	0.68	U/Pb	Zircon	Igneous Crystallization	31 concordant analyses	Whitehorse plutonic suite (Revenue Creek monzodiorite)	Plutonic	coarse-grained hornblende monzodiorite	Binell Betsi, T. and Bennett, V.	2010	New U-Pb age constraints at Freegold Mountain: Evidence for multiple phases of polymetallic mid- to Late Cretaceous mineralization	Yukon Exploration and Geology 2009, Yukon Geological Survey 57-84	62.3427	-137.274
87	90-1-344-355	197.3	1.6	U/Pb	Zircon	Igneous Crystallization	concordia age	Granite Mountain batholith	Plutonic	K-felspar porphyritic granodiorite	Tafti, R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.34889	-136.6936
88	90-1-344-355	191.26	0.81	Ar/Ar	Hornblende	Cooling	plateau age, 86.5% of 39Ar	Granite Mountain batholith	Plutonic	K-felspar porphyritic granodiorite	Tafti, R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.34889	-136.6936
89	71-17-1111	197.9	0.5	U/Pb	Zircon	Igneous Crystallization	concordia age	Granite Mountain batholith	Plutonic	Plagioclase-phyric diorite	Tafti, R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.34889	-136.6936

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 1: Geochronological Data for Sheet 1 - Parts of Carmacks (115I) and Glenlyon (105L)

MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	.ATITUDE	ONGITUDE
90	90-2-338-345	198.6	2.7	U/Pb	Zircon	Igneous Crystallization	concordia age	Granite Mountain batholith	Plutonic	foliated granodiorite	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.34889	-136.6936
91	90-WC-1-287	198.5	3.5	U/Pb	Zircon	Igneous Crystallization	concordia age	Granite Mountain batholith	Plutonic	mineralized orthogneiss	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.34889	-136.6936
92	03-RT-6b	193.5	1.5	U/Pb	Titanite	Metamorphism	concordia age	Granite Mountain batholith	Metamorphic	amphibolite/biotite schist	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.34889	-136.6936
93	02DM030-1	194.8	1.7	Ar/Ar	Hornblende	Cooling	plateau age; high Ca/K ratio	Kelly pluton (Quesnellia)	Metamorphic	Diorite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.35432	-135.4404
94	02DM030-1	177.9	1.2	Ar/Ar	Biotite	Cooling	plateau age	Kelly pluton (Quesnellia)	Metamorphic	Diorite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.35432	-135.4404
95	02DM001-3	350.5	1.8	U/Pb	Zircon	Igneous Crystallization	three overlapping concordant fractions	Drury Formation (Lokken member) (YTT)	Volcanic	foliated quartz-feldspar porphyry; intercalated with Drury psammite	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.36796	-134.8699
96	02MC030-1	193.6	1.6	Ar/Ar	Hornblende	Cooling	excess Ar (40Ar/36Ar = 562±16); inverse isochron	Tatchun batholith	Plutonic	very coarse-grained Hbl (+/- Bt) granodiorite to qtz monzonite; Hbl up to 1 cm in qtz + plag matrix 2-3 mm	Colpron, M. and Villeneuve, M.	2002		unpublished	62.37737	-135.6629
97	02MC030-1	188.6	1.1	Ar/Ar	Biotite	Cooling	minor Ar-loss in low temperature steps; plateau	Tatchun batholith	Plutonic	very coarse-grained Hbl (+/- Bt) granodiorite to qtz monzonite; Hbl up to 1 cm in qtz + plag matrix 2-3 mm	Colpron, M. and Villeneuve, M.	2002		unpublished	62.37737	-135.6629
98	02MC030-1	199.5	3	U/Pb	Zircon	Igneous Crystallization	4 fractions along discordant array; most concordant fractions has measured 206/238 age of 199.5 Ma	Tatchun batholith (phase C)	Plutonic	very coarse-grained Hbl (+/- Bt) granodiorite to qtz monzonite; Hbl up to 1 cm in qtz + plag matrix 2-3 mm	Colpron, M. and Villeneuve, M.	2005		unpublished	62.37737	-135.6629
99	02MC030-1	204.7	4.3	U/Pb	Titanite	Igneous Crystallization	average of 3 206/238 ages	Tatchun batholith (phase C)	Plutonic	very coarse-grained Hbl (+/- Bt) granodiorite to qtz monzonite; Hbl up to 1 cm in qtz + plag matrix 2-3 mm	Colpron, M. and Villeneuve, M.	2005		unpublished	62.37737	-135.6629
100	TOE79-35-10	160	3	K/Ar	Biotite	Cooling	Age calculated using constants from Steiger and Jager (1977). Biotite contains ~10% chlorite and <2% hornblende contamination. Good analysis; age is consistent with that of hornblende from the same rock.	Tatchun Batholith	Plutonic	Well-foliated porphyritic granite-granodiorite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.38333	-136.1083
101	TOE79-35-10	162	8	K/Ar	Hornblende	Cooling	Age calculated using constants from Steiger and Jager (1977). Radiogenic Ar was only 43.1%. The age is relatively imprecise but is consistent with that of biotite from the same rock.	Tatchun Batholith	Plutonic	Well-foliated porphyritic granite-granodiorite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.38333	-136.1083
102	02MC016	96.2	1.8	U/Pb	Zircon	Igneous Crystallization	3 concordant fractions	Safety Pin suite	Plutonic	Kspar porphyritic Bt granite	Colpron, M., Mortensen, J.K.	2003		unpublished	62.4012	-135.1747
103	02MC037-2	206.9	0.7	U/Pb	Zircon	Igneous Crystallization	1 concordant fraction (B); A has Pb loss and C contains inheritance	Tatchun batholith ?	Plutonic	Quartz-Feldspar Porphyry intruding augite porphyritic basalt of Semenof formation	Colpron, M., Mortensen, J.K.	2003		unpublished	62.40265	-135.9653
104	86-C-1154	102.7	1.7	K/Ar	Biotite	Cooling	Age from Hunt and Roddick (1991). Low K-content in biotite (5.5%) likely due to minor chlorite alteration. 44% atmospheric Ar was present in analysis. This age is consistent with other mid-Cretaceous cooling ages obtained for this batholith.	Dawson Range Batholith; Coffee Creek Granite (Whitehorse-Coffee Creek Suite)	Plutonic	Biotite granodiorite	Mortensen, J.K.	1989		unpublished	62.41666	-137.4834
105	86-C-1154	107.9	1.2	U/Pb	Zircon	Igneous Crystallization	From Mortensen (1989, unpublished). Age is consistent with other crystallization ages for this plutonic suite.	Dawson Range Batholith; Coffee Creek Granite (Whitehorse-Coffee Creek Suite)	Plutonic	Biotite granodiorite	Mortensen, J.K.	1989		unpublished	62.41666	-137.4834
106	02MC130-1	186.4	2.1	Ar/Ar	Hornblende	Cooling	noisy 4 step plateau with 95% of gas; Low K c	Moose formation of Boswell assemblage (Quesnellia)	Metamorphic	amphibolite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.4304	-135.6283
107	02MC130-1	181.6	1.1	Ar/Ar	Biotite	Cooling	plateau	Moose formation of Boswell assemblage (Quesnellia)	Metamorphic	amphibolite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.4304	-135.6283
108	TO79-30-14	142	10	K/Ar	Hornblende	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains. Radiogenic Ar = 69.1%; age is relatively imprecise but consistent with age of the Tatchun Batholith (see GSC 81-70).	Granite Mountain Batholith	Plutonic	Well-foliated mesocratic equigranular biotite-hornblende granodiorite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.44167	-137.05
109	02MC131	182.2	1.2	Ar/Ar	Muscovite	Cooling	3 step plateau with 82% of gas; remaining ste	Yukon-Tanana terrane, Snowcap assemblage	Metamorphic	psammitic schist	Colpron, M. and Villeneuve, M.	2002		unpublished	62.47772	-135.2421
110	02MC131	129.8	0.8	Ar/Ar	Biotite	Cooling	plateau with 92% of gas	Yukon-Tanana terrane, Snowcap assemblage	Metamorphic	psammitic schist	Colpron, M. and Villeneuve, M.	2002		unpublished	62.47772	-135.2421
111	TO79-25-2	144	3	K/Ar	Biotite	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered biotite. Excellent analysis.	Klotassin Suite; Tatchun Batholith	Plutonic	Well-foliated porphyritic granite-granodiorite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.54166	-136.3333
112	02MC129-1	192.4	2.6	Ar/Ar	Hornblende	Cooling	good plateau age, although 70% of gas release	Yukon-Tanana terrane, Snowcap assemblage	Metamorphic	amphibolite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.54466	-135.6924
113	02MC129-1	192.1	1.4	Ar/Ar	Muscovite	Cooling	plateau	Yukon-Tanana terrane, Snowcap assemblage	Metamorphic	amphibolite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.54466	-135.6924
114	02MC129-1	184.8	1.4	Ar/Ar	Biotite	Cooling	pseudo-plateau; clear partial Ar loss pattern	Yukon-Tanana terrane, Snowcap assemblage	Metamorphic	amphibolite	Colpron, M. and Villeneuve, M.	2002		unpublished	62.54466	-135.6924
115	02MC098-1	196.8	1.2	Ar/Ar	Muscovite	Cooling	inverse isochron indicates age of 196.2± 1.2	Little Kalzas suite (YTT)	Plutonic	strongly lineated Ms + Bt granite; intrudes upper part of Snowcap assemblage	Colpron, M. and Villeneuve, M.	2002		unpublished	62.55499	-135.4034
116	02MC098-1	191.3	1.2	Ar/Ar	Biotite	Cooling		Little Kalzas suite (YTT)	Plutonic	strongly lineated Ms + Bt granite; intrudes upper part of Snowcap assemblage	Colpron, M. and Villeneuve, M.	2002		unpublished	62.55499	-135.4034
117	02MC098-1	347.2	1	U/Pb	Zircon	Igneous Crystallization	four fractions analyzed; one concordant fraction	Little Kalzas suite (YTT)	Plutonic	strongly lineated Ms + Bt granite; intrudes upper part of Snowcap assemblage	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.55499	-135.4034
118	02MC128	195.4	1.2	Ar/Ar	Biotite	Cooling	plateau with minor evidence of Ar-loss in the	Tatmain batholith	Metamorphic	fine-grained qtz diorite; plag	Colpron, M. and Villeneuve, M.	2002		unpublished	62.59317	-135.6653
119	C 0	192	3	U/Pb	Zircon	Igneous Crystallization	207/235 age of 1 concordant fraction. Pb loss during a later thermal event (see K/Ar age) may have occurred (hence discordance of a 2nd fraction), and thus age may be a minimum. Age is consistent with crystallization ages of other Klotassin suite plu	Minto Pluton	Plutonic	Bt-hbl granodiorite	Tempelman-Kluit, D.J. and Wanless, R.K.	1980	Zircon ages for the Pelly Gneiss and Klotassin granodiorite in western Yukon	Canadian Journal of Earth Sciences 17 297 306	62.6	-137.25
120	94-17-246	183	1.5	Ar/Ar	Muscovite	Cooling	plateau age, 73.5% of 39Ar	Minto pluton	Plutonic	K-felspar porphyritic granodiorite	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.60917	-137.2383
121	96-1-365	181.9	1.7	Ar/Ar	Muscovite	Cooling	plateau age, 83.8% of 39Ar	Minto pluton	Plutonic	Plagioclase-phyric diorite	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.60917	-137.2383
122	01-8-113-114	192.4	0.9	Ar/Ar	Biotite	Cooling	plateau age, 89.7% of 39Ar	Minto pluton	Plutonic	K-felspar porphyritic granodiorite	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.60917	-137.2383

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 1: Geochronological Data for Sheet 1 - Parts of Carmacks (115I) and Glenlyon (105L)

MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	.ATITUDE	ONGITUDE
123	96-1-286-306	197.2	2.1	U/Pb	Zircon	Igneous Crystallization	concordia age	Minto pluton	Plutonic	garnet-bearing mineralized gneiss	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.60917	-137.2383
124	94-6-183.2	196.2	1.8	U/Pb	Zircon	Igneous Crystallization	concordia age	Minto pluton	Plutonic	mineralized orthogneiss	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.60917	-137.2383
125	94-17-293	186	1.4	Ar/Ar	Biotite	Cooling	plateau age, 88.9% of 39Ar	Minto pluton	Plutonic	siliceous ore	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.60917	-137.2383
126	02-RT-4	195.5	0.7	U/Pb	Zircon	Igneous Crystallization	concordia age	Minto pluton	Plutonic	granitic dike with miarolitic cavities	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.62115	-137.2211
127	02-RT-5	194.8	2.3	U/Pb	Titanite	Metamorphism	concordia age	Minto pluton	Plutonic	mafic xenolith	Tafti. R.	2005	Nature and origin of the Early Jurassic copper (-gold) deposits at Minto and Williams Creek, Carmacks Copper Belt, western Yukon: examples of deformed porphyry deposits	M.Sc. thesis, University of British Columbia	62.62463	-137.2106
128	02MC127	194.4	1.2	Ar/Ar	Biotite	Cooling	plateau with minor evidence of Ar-loss in the	Tatmain batholith	Metamorphic	fine-grained qtz diorite; plag	Colpron, M. and Villeneuve, M.	2002		unpublished	62.65123	-135.7954
129	02DM083-1	260.3	0.8	U/Pb	Zircon	Igneous Crystallization	three fractions analyzed; two concordant fractions	Slide Mountain	Plutonic	Monzonite/gabbro klippe on Cassiar terrane	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.67624	-135.3006
130	00T1004	356.4	1	U/Pb	Zircon	Igneous Crystallization	four fractions analyzed; two overlapping concordant fractions; a single titanite fraction gives overlapping age of 357.9 ± 1.9 Ma	Ragged pluton (YTT)	Plutonic	unfoliated K-feldspar porphyritic augite syenite; intrudes Snowcap Complex; cut by Tatmain batholith	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.6826	-135.6084
131	TO74-74A	63.5	3.1	K/Ar	Biotite	Cooling	Age given was calculated using constants from Steiger and Jager (1977). Clean unaltered brown biotite with no visible contamination.	Carmacks Group	Volcanic	Fresh biotite-phyric basalt correlated with Carmacks Group	Wanless, R.K., Stevens, R.D., Lachance, G.R. and Delabio, R.N.	1979	Age determinations and geological studies, K-Ar isotopic ages, report 14	Geological Survey of Canada, Paper 79-2 0 1 67	62.725	-136.2167
132	260689-R5	2.078	0.055	K/Ar	Whole Rock	Igneous Crystallization	83% atmos. Ar in analysis. Age is inconsistent with paleomagnetic dating (anomalously old) likely due to excess Ar from mantle-derived xenoliths/crysts, or to fractionation of atmospheric Ar during sample bake-out. Error on age far too conservative.	Selkirk Volcanics	Volcanic	Highly fractured vesicular olivine basalt with abundant ultramafic nodules and pebbles of wall rocks	Jackson, L.E., Barendregt, R.W., Baker, J. and Irving, E.	1996	Early Pleistocene volcanism and glaciation in central Yukon: a new chronology from field studies and paleomagnetism	Canadian Journal of Earth Sciences 33 904 916	62.74019	-137.2781
133	300689-R2	3.92	0.11	K/Ar	Whole Rock	Cooling	79% atmos. Ar in analysis. Age is inconsistent with paleomagnetic dating (anomalously old) likely due to excess Ar from mantle-derived xenoliths/crysts, or to fractionation of atmospheric Ar during sample bake-out. Error on age far too conservative.	Selkirk Volcanics	Volcanic	Fine grained dark grey pillow basalt	Hunt, P.A. and Roddick, J.C.	1992	A compilation of K-Ar and 40Ar-39Ar ages: Report 22	Radiogenic Age and Isotopic Studies: Report 6, Geological Survey of Canada, Paper 92-2 0 179 226	62.74938	-137.2651
134	YR99	3.21	0.07	Ar/Ar	Whole Rock	Igneous Crystallization	plateau age	Fort Selkirk volcanics	Volcanic	basalt	Nelson, F.E., Barendregt, R.W. and Villeneuve, M.	2009	Stratigraphy of the Fort Selkirk Volcanogenic Complex in central Yukon and its paleoclimatic significance: Ar/Ar and paleomagnetic data	Canadian Journal of Earth Sciences 46 381-401	62.7554	-137.2872
135	290689-R2	2.36	0.09	K/Ar	Whole Rock	Igneous Crystallization	89% atmos. Ar in analysis. Age is inconsistent with paleomagnetic dating (anomalously old) likely due to excess Ar from mantle-derived xenoliths/crysts, or to fractionation of atmospheric Ar during sample bake-out. Error on age far too conservative.	Selkirk Volcanics	Volcanic	Amygdaloidal basalt containing ultramafic nodules	Jackson, L.E., Barendregt, R.W., Baker, J. and Irving, E.	1996	Early Pleistocene volcanism and glaciation in central Yukon: a new chronology from field studies and paleomagnetism	Canadian Journal of Earth Sciences 33 904 916	62.7562	-137.2871
136	02DM058-1	191	1.2	Ar/Ar	Muscovite	Cooling	plateau age	Little Kalzas suite (YTT)	Metamorphic	foliated, equigranular granite; medium- to coarse-grained; fine-grained Bt + Ms	Colpron, M. and Villeneuve, M.	2002		unpublished	62.75727	-136.0927
137	02DM058-1	346.5	2.5	U/Pb	Zircon	Igneous Crystallization	weighted average of 4 Pb-Pb ages; minimum age 339.1 Ma	Little Kalzas suite (YTT)	Metamorphic	foliated, equigranular granite; medium- to coarse-grained; fine-grained Bt + Ms	Colpron, M., Mortensen, J.K.	2003		unpublished	62.75727	-136.0927
138	02DM058-1	187	1.3	Ar/Ar	Biotite	Cooling	plateau age	Little Kalzas suite (YTT)	Metamorphic	foliated, equigranular granite; medium- to coarse-grained; fine-grained Bt + Ms	Colpron, M. and Villeneuve, M.	2003		unpublished	62.75727	-136.0927
139	98MC195	339.5	1.3	U/Pb	Zircon	Igneous Crystallization	2 concordant fractions. Sample also gave a Ar/Ar hbl age of 343.7 +/- 3.2 Ma (Colpron and Villeneuve, 1998, unpub. data).	Tatmain Batholith	Metamorphic	Medium-grained equigranular hornblende-biotite quartz diorite; massive intrusion, lower greenschist to lower amphibolite grade	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.77422	-135.7512
140	98MC195	343.7	3.2	Ar/Ar	Hornblende	Cooling	Monitor used: FCT-SAN (28.03 Ma, Renne et al., 1994). Well-defined reproducible plateaus over 99% of gas released. Sample also gave a U/Pb zircon age of 339.5 +/- 1.3 Ma (Colpron and Mortensen, 1999, unpub. data).	Tatmain Batholith	Metamorphic	Medium-grained equigranular hornblende-biotite quartz diorite; massive intrusion, lower greenschist to lower amphibolite grade	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.77422	-135.7512
141	UB82-683	1.35	0.22	K/Ar	Whole Rock	Igneous Crystallization	85% atmospheric Ar in analysis. This is likely a maximum age estimate due to possible excess Ar from mantle-derived xenoliths/crysts, or to fractionation of atmospheric Ar during sample bake-out.	Selkirk Volcanics	Volcanic	basalt lava flow, mag-reversed	Westgate, J.A.	1989	Isothermal plateau fission-track ages of hydrated glass shards from silicic tephra beds	Earth and Planetary Science Letters 95 226 234	62.78333	-137.4
142	UB82-983a	1.6	0.16	K/Ar	Whole Rock	Igneous Crystallization	40% atmospheric Ar in analysis. This is likely a maximum age estimate due to possible excess Ar from mantle-derived xenoliths/crysts, or to fractionation of atmospheric Ar during sample bake-out.	Selkirk Volcanics	Volcanic	basalt lava flow, mag-reversed	Westgate, J.A.	1989	Isothermal plateau fission-track ages of hydrated glass shards from silicic tephra beds	Earth and Planetary Science Letters 95 226 234	62.78333	-137.4
143	UT 82	1.54	0.54	Fission Track	Whole Rock (Glass)	Igneous Crystallization	Age is from Westgate (1989). Isothermal plateau correction made - age is consistent with K/Ar dating of samples from stratigraphically below and above this sample	Fort Selkirk Tephra, Selkirk Volcanics	Volcanic	Silicic volcanic ash/tephra overlying glacial deposits and is itself overlain by basalt flows dated at 1.1- 1.5 Ma	Naeser, N.D., Westgate, J.A., Hughes, O.L. and Pewe, T.L.	1982	Fission-track ages of late Cenozoic distal tephra beds in the Yukon Territory and Alaska	Canadian Journal of Earth Sciences 19 2167 2178	62.78333	-137.4
144	UT 82	0.86	0.18	Fission Track	Whole Rock (Glass)	Igneous Crystallization	Excellent age determination, from Naeser et al. (1982). However, no isothermal plateau correction was made and the age is younger than other fission track ages for these lavas.	Fort Selkirk Tephra, Selkirk Volcanics	Volcanic	Silicic volcanic ash/tephra overlying glacial deposits and is itself overlain by basalt flows dated at 1.1- 1.5 Ma	Westgate, J.A.	1989	Isothermal plateau fission-track ages of hydrated glass shards from silicic tephra beds	Earth and Planetary Science Letters 95 226 234	62.78333	-137.4
145	UT 82	1.01	0.34	Fission Track	Whole Rock (Glass)	Igneous Crystallization	Age is from Westgate (1989). No isothermal plateau correction made - age is anomalously young and is not consistent with K/Ar ages for samples stratigraphically above and below this sample.	Fort Selkirk Tephra, Selkirk Volcanics	Volcanic	Silicic volcanic ash/tephra overlying glacial deposits and is itself overlain by basalt flows dated at 1.1- 1.5 Ma	Westgate, J.A.	1989	Isothermal plateau fission-track ages of hydrated glass shards from silicic tephra beds	Earth and Planetary Science Letters 95 226 234	62.78333	-137.4
146	UT 82	1.19	0.22	Fission Track	Whole Rock (Glass)	Igneous Crystallization	Age is from Westgate (1989). No isothermal plateau correction made - age is anomalously young and is not consistent with K/Ar ages for samples stratigraphically above and below this sample.	Fort Selkirk Tephra, Selkirk Volcanics	Volcanic	Silicic volcanic ash/tephra overlying glacial deposits and is itself overlain by basalt flows dated at 1.1- 1.5 Ma	Westgate, J.A.	1989	Isothermal plateau fission-track ages of hydrated glass shards from silicic tephra beds	Earth and Planetary Science Letters 95 226 234	62.78333	-137.4
147	UT 82	1.43	0.52	Fission Track	Whole Rock (Glass)	Igneous Crystallization	Age is from Westgate (1989). Isothermal plateau correction made - age is consistent with K/Ar dating of samples from stratigraphically below and above this sample	Fort Selkirk Tephra, Selkirk Volcanics	Volcanic	Silicic volcanic ash/tephra overlying glacial deposits and is itself overlain by basalt flows dated at 1.1- 1.5 Ma	Westgate, J.A.	1989	Isothermal plateau fission-track ages of hydrated glass shards from silicic tephra beds	Earth and Planetary Science Letters 95 226 234	62.78333	-137.4
148	VNCH-12	1.37	0.04	Ar/Ar	Whole Rock	Igneous Crystallization	plateau age	Fort Selkirk volcanics	Volcanic	basalt	Nelson, F.E., Barendregt, R.W. and Villeneuve, M.	2009	Stratigraphy of the Fort Selkirk Volcanogenic Complex in central Yukon and its paleoclimatic significance: Ar/Ar and paleomagnetic data	Canadian Journal of Earth Sciences 46 381-401	62.78821	-137.4094

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 1: Geochronological Data for Sheet 1 - Parts of Carmacks (115I) and Glenlyon (105L)

MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	.ATITUDE	ONGITUDE
149	YR97	1.33	0.07	Ar/Ar	Whole Rock	Igneous Crystallization	plateau age	Fort Selkirk volcanics	Volcanic	basalt	Nelson, F.E., Barendregt, R.W. and Villeneuve, M.	2009	Stratigraphy of the Fort Selkirk Volcanogenic Complex in central Yukon and its paleoclimatic significance: Ar/Ar and paleomagnetic data	Canadian Journal of Earth Sciences 46 381-401	62.78844	-137.4013
150	VNCH-13	1.82	0.03	Ar/Ar	Whole Rock	Igneous Crystallization	plateau age	Fort Selkirk volcanics	Volcanic	basalt	Nelson, F.E., Barendregt, R.W. and Villeneuve, M.	2009	Stratigraphy of the Fort Selkirk Volcanogenic Complex in central Yukon and its paleoclimatic significance: Ar/Ar and paleomagnetic data	Canadian Journal of Earth Sciences 46 381-401	62.78911	-137.4092
151	99MC065	347.8	4	U/Pb	Zircon	Igneous Crystallization	Weighted mean of 4 discordant fractions; see sample 98MC195 for more reliable age of same pluton.	Tatlain batholith	Plutonic	Medium-grained equigranular granite; unfoliated	Colpron, M. and Mortensen, J.K.	1999		unpublished	62.79072	-135.9722
152	UB82-783a	1.47	0.22	K/Ar	Whole Rock	Igneous Crystallization	81% atmospheric Ar in analysis. This is likely a maximum age estimate due to possible excess Ar from mantle-derived xenoliths/crysts, or to fractionation of atmospheric Ar during sample bake-out.	Selkirk Volcanics	Volcanic	basalt lava flow	Westgate, J.A.	1989	Isothermal plateau fission-track ages of hydrated glass shards from silicic tephra beds	Earth and Planetary Science Letters 95 226 234	62.79225	-137.3974
153	UB82-683p	1.35	0.16	K/Ar	Whole Rock	Igneous Crystallization	62% atmospheric Ar in analysis. This is likely a maximum age estimate due to possible excess Ar from mantle-derived xenoliths/crysts, or to fractionation of atmospheric Ar during sample bake-out.	Selkirk Volcanics	Volcanic	basalt lava flow	Westgate, J.A.	1989	Isothermal plateau fission-track ages of hydrated glass shards from silicic tephra beds	Earth and Planetary Science Letters 95 226 234	62.81182	-137.4504
154	010789-R1	1.276	0.34	K/Ar	Whole Rock	Igneous Crystallization	Age is consistent with other ages for these lavas (<2 Ma), but due to the high amount of atmospheric Ar (74%) the age is a maximum estimate at best.	Selkirk Volcanics	Volcanic	Base of olivine basalt flow overlying glacial deposits	Jackson, L.E., Barendregt, R.W., Baker, J. and Irving, E.	1996	Early Pleistocene volcanism and glaciation in central Yukon: a new chronology from field studies and paleomagnetism	Canadian Journal of Earth Sciences 33 904 916	62.81444	-137.4544
155	UT 81	0.84	0.13	Fission Track	Whole Rock (Glass)	Igneous Crystallization	Excellent age determination - age is indistinguishable from zircon fission track age. M.L. Silberman (pers. comm.) obtained a whole rock K/Ar age of 1.08 +/- 0.05 Ma for overlying Selkirk basalts.	Fort Selkirk tephra, Selkirk Volcanics	Volcanic	Volcanic ash overlying glacial deposits and is itself overlain by basalt flows dated at 1.1-1.5 Ma	Naeser, N.D., Westgate, J.A., Hughes, O.L. and Pewe, T.L.	1982	Fission-track ages of late Cenozoic distal tephra beds in the Yukon Territory and Alaska	Canadian Journal of Earth Sciences 19 2167 2178	62.81666	-137.45
156	UT 81	0.94	0.4	Fission Track	Zircon	Igneous Crystallization	Excellent age determination - age is indistinguishable from glass fission track age. M.L. Silberman (pers. comm.) obtained a whole rock K/Ar age of 1.08 +/- 0.05 Ma for overlying Selkirk basalts.	Fort Selkirk tephra, Selkirk Volcanics	Volcanic	Volcanic ash overlying glacial deposits and is itself overlain by basalt flows dated at 1.1-1.5 Ma	Naeser, N.D., Westgate, J.A., Hughes, O.L. and Pewe, T.L.	1982	Fission-track ages of late Cenozoic distal tephra beds in the Yukon Territory and Alaska	Canadian Journal of Earth Sciences 19 2167 2178	62.81666	-137.45
157	Above UT 81	1.08	0.05	K/Ar	Whole Rock	Igneous Crystallization	No analytical data available	Selkirk Volcanics	Volcanic	Basalt overlies ash (sample UT 81) which in turn overlies glacial deposits	Naeser, N.D., Westgate, J.A., Hughes, O.L. and Pewe, T.L.	1982	Fission-track ages of late Cenozoic distal tephra beds in the Yukon Territory and Alaska	Canadian Journal of Earth Sciences 19 2167 2178	62.81667	-137.45
158	TO79-25-5	204	4	K/Ar	Biotite	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains, no chlorite contamination. Excellent radiogenic analysis.	Tatlain Batholith	Plutonic	Massive coarsely megacrystic biotite quartz monzonite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.84166	-136.1917
159	SE VM-2	0.91	0.1	K/Ar	Whole Rock	Igneous Crystallization	Unpublished data	Volcano Mountain	Volcanic	basalt, southerly trending flow	Souther, J.G. and Armstrong, R.L.	1974		unpublished	62.89583	-137.4167
160	98MC196d	347	0	U/Pb	Zircon	Igneous Crystallization	lower intercept of 2-pt regression.	Little Kalzas	Plutonic	K-feldspar megacrystic granite; strongly foliated	Colpron, M. and Mortensen, J.K.	1999		unpublished	62.89731	-135.5505
161	25887R1	54.9	1.7	U/Pb	Zircon	Igneous Crystallization	Unpublished data.		Plutonic	Rhyolite porphyry: shallow intrusion or flow complex intruding schists	Mortensen, J.K. and Jackson, L.E.	1989		unpublished	62.90215	-135.7339
162	98MC125	345.8	1	U/Pb	Zircon	Igneous Crystallization	Age is single concordant fraction. Remaining 3 fractions discordant, align with concordant fraction albeit poorly	Little Kalzas	Metamorphic	Light-green quartz-muscovite schist	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.91558	-135.6452
163	98MC035a	193.73	1.9	Ar/Ar	Muscovite	Reset	Age from Colpron and Villeneuve (1998, unpub.). Monitor used: FCT-SAN (28.34 Ma, Renne et al., 1998). Slightly stepped spectra, but steps overlap within error. Plateau age based on 79% of gas released and 11 of 16 steps.	Yukon-Tanana Terrane Dillweed orthogneiss	Metamorphic	Medium-grained strongly-foliated quartz dioritic orthogneiss	Colpron, M. and Villeneuve, M.	1998		unpublished	62.92308	-135.8923
164	98MC035a	343.1	1.2	U/Pb	Zircon	Igneous Crystallization	Age from Colpron and Mortensen (1999, unpublished data). Lower intercept of a 5 pt. regression, MSWD=6.9.	Yukon-Tanana Terrane Dillweed orthogneiss	Metamorphic	Medium-grained strongly-foliated quartz dioritic orthogneiss	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.92308	-135.8923
165	SE VM-3	1.07	0.08	K/Ar	Whole Rock	Igneous Crystallization	Unpublished data		Volcanic	Basalt, northerly trending flow on Volcano Mountain	Souther, J.G. and Armstrong, R.L.	1974		unpublished	62.925	-137.3667
166	TOR79-23-9	74.4	3	K/Ar	Hornblende	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Grains are rimmed by a thin rind of opaques. However, still a decent analysis - age is consistent with Carmacks Group ages.	Carmacks Group Volcanics	Volcanic	Pink hornblende porphyry with an aphanitic pink groundmass	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	62.93333	-136.1917
167	98MC111	216.4	2.1	Ar/Ar	Biotite	Cooling	From Colpron and Villeneuve (1998, unpub.) Monitor used: FCT-SAN (28.03 Ma, Renne et al., 1994). Slightly chloritized biotite. Ar loss in low temp steps, but higher temp. plateaus reproducible across 2 aliquots (61% of gas released, 10 of 15 steps).	Yukon-Tanana Terrane Little Kalzas Orthogneiss	Metamorphic	Strongly-foliated biotite granite to tonalite	Colpron, M. and Villeneuve, M.	1998		unpublished	62.93342	-135.6166
168	98MC111	344	1.5	U/Pb	Zircon	Igneous Crystallization	Age from Colpron and Mortensen (1999, unpublished data). Lower intercept of a 4-pt regression through discordant fractions (MSWD=15: high).	Yukon-Tanana Terrane Little Kalzas Orthogneiss	Metamorphic	Strongly-foliated biotite granite to tonalite	Colpron, M. and Mortensen, J.K.	1998		unpublished	62.93342	-135.6166
169	98MC054a	190.7	1.9	Ar/Ar	Hornblende	Cooling	Age from Colpron and Villeneuve (1998). Slightly noisy downward-stepping spectra. Age is for plateaus from 2 of 3 aliquots comprising 56% of total released gas, 10 of 23 steps. Plateau age is consistent with inv. isochron age.	Yukon-Tanana Terrane Cornolio pluton	Plutonic	Undeformed quartz monzonite, lower greenschist to lower amphibolite grade	Colpron, M. and Villeneuve, M.	1998		unpublished	62.94218	-135.8166
170	98MC054a	194.9	1.9	Ar/Ar	Biotite	Cooling	Age from Colpron and Villeneuve (1998). Somewhat disturbed hump-shaped spectra. Age calculated from the highest temp. steps from 2 of 3 aliquots (60% gas). "Plateau" areas not flat, but plateau age is consistent with inv. isochron age.	Yukon-Tanana Terrane Cornolio pluton	Plutonic	Undeformed quartz monzonite, lower greenschist to lower amphibolite grade	Colpron, M. and Villeneuve, M.	1998		unpublished	62.94218	-135.8166
171	98MC054a	264.2	1	U/Pb	Zircon	Igneous Crystallization	Age from Colpron and Mortensen (1999, unpublished data). Discordant fractions: age is lower intercept of 3 pt regression.	Yukon-Tanana Terrane Cornolio pluton	Plutonic	Undeformed quartz monzonite, lower greenschist to lower amphibolite grade	Colpron, M. and Mortensen, J.K.	1998		unpublished	62.94218	-135.8166
172	98MC063a	344.5	5.2	U/Pb	Zircon	Igneous Crystallization	Weighted mean of 4 discordant Pb/Pb ages.	Little Kalzas	Volcanic	rhyolite	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.94227	-135.7748
173	98MC119	346.2	1.8	U/Pb	Zircon	Igneous Crystallization	2 concordant fractions.	Little Kalzas	Plutonic	granodiorite hornblende biotite granodiorite, variably foliated, fine- to medium-grained, contains abundant xenoliths	Colpron, M., Mortensen, J.K., Gehrels, G.E. and Villeneuve, M.	2006	Basement complex, Carboniferous magmatism and Paleozoic deformation in Yukon-Tanana terrane of central Yukon: Field, geochemical, and geochronological constraints from Glenlyon map area	Geological Association of Canada, Special Paper 45	62.95864	-135.6667
174	CL-46-660-700_M-CL-	108.1	0.2	U/Pb	Zircon	Igneous Crystallization	N/A	Clear Lake deposit (dyke)	Plutonic	Otz-fspar porphyry dyke that cuts felsic tuffs and sedimentary rocks in drill core at the Clear Lake deposit	Mortensen, J.K., Grapes, K.J. and Jonasson, I.R.	1987	Unpublished data	unpublished	62.7844	-135.1433

Note: This compilation of geochronological data for Whitehorse trough and surrounding areas is based in part on YukonAge 2004 (Breitsprecher and Mortensen, 2004). It includes additional recently published ages, as well as a number of unpublished ages acquired by the Yukon Geological Survey. Sampling localities have been verified for most samples and corrections have been made where required, correcting in some cases errors in original database.

Breitsprecher, K., and Mortensen, J. K., 2004, Yukonage 2004: A database of isotopic age determinations for rock units from Yukon Territory, Canada: Yukon Geological Survey.

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 2: Geochronological Data for Sheet 2 - Laberge (105E) and Parts of Aishihik (115H) and Quiet Lake (105F)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
1	TO79-40-3	118	3	K/Ar	Biotite	Cooling	Age calculated using constants from Steiger and Jager (1977). ~9% chlorite contamination. K-depleted (Wt. % K = 5.94).		Plutonic	Massive fresh biotite-hornblende granodiorite; intrudes volcanic rocks that have been correlated with Mt. Nansen Group	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.025	-134.675
2	93CH-T22	75.1	2.5	K/Ar	Whole Rock	Reset	Age calculated using constants from Steiger and Jager (1977). Very low K in sample (0.23 wt.%) and low radiogenic Ar (59%) in the analysis. No thermal event of this age has been recognized in this area, therefore the age may be suspect.	Joe Mountain volcanic complex	Volcanic	andesite flow	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	61.04334	-134.5833
3	TO79-14-12	80	2.3	K/Ar	Whole Rock	Cooling	Age calculated using constants from Steiger and Jager (1977). Fresh unaltered sample; radiogenic Ar = 66.1%. This analysis contradicts an earlier theory that these volcanics are younger than Carmacks Group rocks.		Volcanic	Mauve-coloured, faintly banded, aphanitic dacite with 1-2% flakes of biotite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.11667	-134.1
4	TO75-31-17	85.3	3.1	K/Ar	Biotite	Cooling	Age given was calculated using constants from Steiger and Jager (1977). Biotite contains about 5% chlorite contamination.	Quiet Lake Batholith	Plutonic	Granodiorite: from a series of concordant and discordant plutons (K-Ar ages vary from 70 to 100 Ma) that intrude strata in a large area of central Yukon.	Wanless, R.K., Stevens, R.D., Lachance, G.R. and Delabio, R.N.	1979	Age determinations and geological studies, K-Ar isotopic ages, report 14	Geological Survey of Canada, Paper 79-2 0 1 67	61.13333	-133.5083
5	01MC205	347.4	1.2	U/Pb	Zircon	Igneous Crystallization	3 concordant fractions + 3 fractions w/ Pb loss; fractions B is most precise @ 347.4 Ma	Moose formation of Boswell assemblage (Quesnellia)	Volcanic	coarse quartz porphyry: weak foliation & carbonate alteration; Intrudes andesite of the Moose formation and has same deformation and metamorphic setting as the volcanics.	Simard, R.-L., Colpron, M. and Mortensen, J.K.	2003	Geological map of southern Semenof Hills (part of NTS 105E/1, 7, 8), south-central Yukon (1:50,000 scale)	Yukon Geological Survey, Open File 2003-12	61.14505	-134.2227
6	23-Mar	69.1	5.2	K/Ar	Plagioclase	Igneous Crystallization	Satisfactory analysis (66% radiogenic Ar) - age is consistent with other K/Ar ages for this suite.	Carmacks Group Volcanics	Volcanic	Calc-alkaline andesite, originally interpreted as Mount Nansen Group	Grond, H.C., Churchill, S.J., Armstrong, R.L., Harakal, J.E. and Nixon, G.T.	1984	Late Cretaceous age of the Hutshi, Mount Nansen, and Carmacks groups, southwestern Yukon Territory and northwestern British Columbia	Canadian Journal of Earth Sciences 21 554 558	61.15222	-135.6175
7	22-00	72.4	5	K/Ar	Whole Rock	Igneous Crystallization	Very good radiogenic analysis - age is consistent with other K/Ar ages for this suite.	Carmacks Group Volcanics	Volcanic	Calc-alkaline andesite, originally interpreted as Mount Nansen Group	Grond, H.C., Churchill, S.J., Armstrong, R.L., Harakal, J.E. and Nixon, G.T.	1984	Late Cretaceous age of the Hutshi, Mount Nansen, and Carmacks groups, southwestern Yukon Territory and northwestern British Columbia	Canadian Journal of Earth Sciences 21 554 558	61.16916	-135.6336
8	03RLS-07-1b	352.1	1	U/Pb	Zircon	Igneous Crystallization	3 fractions analyzed; C concordant @ 352.1 Ma	Moose formation of Boswell assemblage (Quesnellia)	Plutonic	quartz porphyry	Simard, R.-L., Colpron, M. and Mortensen, J.K.	2003		unpublished	61.22156	-134.3215
9	TO72-342	163.8	7	K/Ar	Biotite	Igneous Crystallization	Age recalculated using constants from Steiger and Jager (1977). Grains contain 15% chlorite, however, age is consistent with other ages from this suite (see GSC Nos. 76-153, 154).	pink quartz monzonite suite (Long Lake Suite?)	Plutonic	Weakly foliated pink porphyritic biotite quartz monzonite	Wanless, R.K., Stevens, R.D., Lachance, G.R. and Delabio, R.N.	1978	Age determinations and geological studies, K-Ar isotopic ages, report 13	Geological Survey of Canada, Paper 77-2 0 1 60	61.22222	-136.3
10	RL02-28-10	359	3	U/Pb	Zircon	Igneous Crystallization	5 fractions analyzed; 2 concordant at 359 Ma; 3 show evidence of Pb loss	Moose formation of Boswell assemblage (Quesnellia)	Plutonic	quartz porphyry	Simard, R.-L., Colpron, M. and Mortensen, J.K.	2003	Geological map of southern Semenof Hills (part of NTS 105E/1, 7, 8), south-central Yukon (1:50,000 scale)	Yukon Geological Survey, Open File 2003-12	61.26207	-134.4066
11	TO79-10-4	186	50	K/Ar	Hornblende	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains - good analysis.	Teslin Crossing stock, cuts the Laberge Group	Plutonic	Crowded hornblende-biotite-feldspar porphyry - main phase of the intrusion	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.27499	-134.75
12	TO79-8-6	181	4	K/Ar	Biotite	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains with no visible contamination. K content of the biotite was slightly low (6.14 wt. %); however, still a good analysis.	Teslin Crossing stock, cuts the Laberge Group	Plutonic	Porphyry Dyke Teslin Crossing stock intrudes Laberge Group; sample from a biotite-feldspar porphyry dyke cutting the stock	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.3	-134.825
13	TO79-8-6A	173	4	K/Ar	Biotite	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered very small concentrate of biotite with slightly low K content (6.2 wt. %). Only 16.6% of the Ar was radiogenic so this age should be considered highly suspect.	Teslin Crossing stock, cuts the Laberge Group	Plutonic	Pinkish biotite-augite syenite - main phase of the intrusion	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.3	-134.825
14	TOE79-7-4	200	9	K/Ar	Hornblende	Igneous Crystallization	Age was calculated using constants from Steiger and Jager (1977). Clean unaltered grains with no visible contamination. Somewhat imprecise age; radiogenic Ar = 66.3%.	Nordenskiold Dacite (Long Lake Plutonic Suite)	Volcanic	Dacitic crystal tuff interlayered with Laberge Group sandstones.	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.30316	-135.8377
15	08EW316	360.5	3.7	U/Pb	Zircon	Igneous Crystallization	Age calculaged from the weighted mean of 4 LA-ICPMS analyses	Yukon-Tanana terrane	Plutonic	K-feldspar augen, two-mica granite	Westberg, E.	2010	The tectonometamorphic and structural evolution of the yukon-Tanana and cassiar terranes in the Mendocina creek area: Implications for the tectonic framework of south-central Yukon	Westberg, E. 2010. M.Sc. Thesis. Simon Fraser University.	61.30879	-133.8783
16	04MC034-1	351	1	U/Pb	Zircon	Igneous Crystallization	N/A	Yukon Tanana Terrane	Plutonic	Hbl-Bt granodiorite orthogneiss	Carr, S.D., and Colpron, M.	2005		unpublished	61.31	-134.2
17	DC-3	243	2	U/Pb	Zircon	Igneous Crystallization	N/A	foliated pegmatite	Plutonic	foliated pegmatite	Carr, S.D., unpublished	2000		unpublished	61.31	-134.17
18	LV-181	195.2	0.8	Ar/Ar	Muscovite	Cooling	Age is from Hansen et al. (1991). Monitor used: Fe-mica (307.3 Ma). Isochron age for white mica incorporating 8 of 12 steps (MSWD=5.6). The WR-plag Rb/Sr age of 182 +/- 8 Ma for this sample is not consistent with this more robust Ar/Ar age.	Yukon-Tanana Terrane	Metamorphic	albite-muscovite mylonitic quartzite	Hansen, V.L., Heizler, M.T. and Harrison, T.M.	1991	Mesozoic thermal evolution of the Yukon-Tanana composite terrane: New evidence from 40Ar/39Ar data	Tectonics 10 51 76	61.31067	-134.2335
19	LV-195	188	26	Ar/Ar	Hornblende	Cooling	Monitor used: Fe-mica (307.3 Ma). This is an isochron age incorporating 7 of 14 steps (MSWD=6.4), but the data cluster and the intercepts are ambiguous The age spectrum is complex (hump-shaped, 225 Ma at peak). See General Notes.	Yukon-Tanana Terrane	Metamorphic	Garnet-clinozoisite-albite amphibolite gneiss	Hansen, V.L., Heizler, M.T. and Harrison, T.M.	1991	Mesozoic thermal evolution of the Yukon-Tanana composite terrane: New evidence from 40Ar/39Ar data	Tectonics 10 51 76	61.31383	-134.1852
20	LV-197	195.3	1.8	Ar/Ar	Muscovite	Cooling	Age is from Hansen et al. (1991). Monitor used: Fe-mica (307.3 Ma). This is an isochron age incorporating 10 of 12 steps (MSWD=30.2). It is roughly consistent with the spectrum age and is considered the best age estimate.	Yukon-Tanana Terrane	Metamorphic	garnet-clinozoisite-muscovite-albite mylonitic gneiss	Hansen, V.L., Mortensen, J.K. and Armstrong, R.L.	1989	U-Pb, Rb-Sr, and K-Ar isotopic constraints for ductile deformation and related metamorphism in the Teslin suture zone, Yukon-Tanana terrane, south-central Yukon Territory	Canadian Journal of Earth Sciences 26 2224 2235	61.31599	-134.1727
21	LV-197	213	14	K/Ar	Muscovite	Cooling	Age is from Hansen et al. (1989). Slight depletion of K in sample (6.43 wt.%). Excellent radiogenic analysis - age is within error of the Rb/Sr wr-musc age for this sample. Not consistent with an Ar/Ar musc age of 195.3 +/- 0.9 Ma.	Yukon-Tanana Terrane	Metamorphic	garnet-clinozoisite-muscovite-albite mylonitic gneiss	Hansen, V.L., Mortensen, J.K. and Armstrong, R.L.	1989	U-Pb, Rb-Sr, and K-Ar isotopic constraints for ductile deformation and related metamorphism in the Teslin suture zone, Yukon-Tanana terrane, south-central Yukon Territory	Canadian Journal of Earth Sciences 26 2224 2235	61.31599	-134.1727
22	LV-203	98.1	1.2	Ar/Ar	Biotite	Cooling	Age from Hansen et al. (1991). Monitor used: Fe-mica (307.3 Ma). This is an isochron age (MSWD=6.3) incorporating 17 of 19 steps; it is roughly consistent with the spectrum age and is considered the best age estimate for dextral ductile deformation.	Yukon-Tanana Terrane	Metamorphic	two-mica granodiorite orthogneiss	Hansen, V.L., Mortensen, J.K. and Armstrong, R.L.	1989	U-Pb, Rb-Sr, and K-Ar isotopic constraints for ductile deformation and related metamorphism in the Teslin suture zone, Yukon-Tanana terrane, south-central Yukon Territory	Canadian Journal of Earth Sciences 26 2224 2235	61.31633	-134.0782
23	LV-203	369	0	U/Pb	Zircon	Igneous Crystallization	Age from Hansen et al. (1989). 5 discordant fractions form a roughly linear array. Age is lower intercept of regr. through youngest 207/206 fraction (elongate needles - 576.5 Ma) with the most discordant fraction.	Yukon-Tanana Terrane	Metamorphic	two-mica granodiorite orthogneiss	Hansen, V.L., Mortensen, J.K. and Armstrong, R.L.	1989	U-Pb, Rb-Sr, and K-Ar isotopic constraints for ductile deformation and related metamorphism in the Teslin suture zone, Yukon-Tanana terrane, south-central Yukon Territory	Canadian Journal of Earth Sciences 26 2224 2235	61.31633	-134.0782
24	TO79-4-1b	56.5	3	K/Ar	Hornblende	Cooling	Age was calculated using constants from Steiger and Jager (1977). Fresh hbl with a trace of biotite contamination. Radiogenic Ar = 61.6%.	Bunker Hill plug	Plutonic	Light grey aphanitic felsic porphyry plug intruding Laberge Group	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.33333	-135.775
25	04MC101-3	260	2	U/Pb	Zircon	Igneous Crystallization	N/A	Yukon Tanana Terrane	Plutonic	foliated fine-grained felsite dike	Carr, S.D., and Colpron, M.	2005		unpublished	61.34	-134.12

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 2: Geochronological Data for Sheet 2 - Laberge (105E) and Parts of Aishihik (115H) and Quiet Lake (105F)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
26	04MC080-1	190.2	1.1	Ar/Ar	Muscovite	Cooling	plateau age, 100% of 39Ar; inverse isochron age 190.3 +/- 1.1 Ma	Yukon-Tanana terrane	Plutonic	Moderately foliated coarse-grained Ms granite; occurs as small lens ~3 m-wide at contact between greenstone and peridotite. Ms flakes up to ~1 cm; locally up to 2% Py. Inferred to be part of same suite as 04MC104-1	Colpron, M. and Ullrich, T.	2005		unpublished	61.34535	-134.1392
27	04MC126-1	191.5	1.1	Ar/Ar	Muscovite	Cooling	plateau age, 98.7% of 39Ar; inverse isochron age 191.8 +/- 1.4 Ma	Yukon-Tanana terrane	Metamorphic	Ms-bearing Qtz vein, up to 30 cm-thick, occur along dominant foliation in Qtz-Ms-Bt schist, graphitic phyllite and metatonalite	Colpron, M. and Ullrich, T.	2005		unpublished	61.34918	-134.2821
28	08EW225	359.4	4.4	U/Pb	Zircon	Igneous Crystallization	Age calculated as the weighted mean of 6 LA-ICPMs analyses	Yukon-Tanana terrane	Plutonic	K-feldspar augen, two-mica granite	Westberg, E.	2010	The tectonometamorphic and structural evolution of the yukon-Tanana and cassiar terranes in the Mendocina creek area: Implications for the tectonic framework of south-central Yukon	Westberg, E. 2010. M.Sc. Thesis. Simon Fraser University.	61.35133	-133.952
29	08EWCAMP 2	348	3.8	U/Pb	Zircon	Igneous Crystallization	Age calculated from the weighted mean of 6 LA-ICPMS analyses	Yukon-Tanana terrane	Plutonic	K-feldspar augen, two-mica granite	Westberg, E.	2010	The tectonometamorphic and structural evolution of the yukon-Tanana and cassiar terranes in the Mendocina creek area: Implications for the tectonic framework of south-central Yukon	Westberg, E. 2010. M.Sc. Thesis. Simon Fraser University.	61.35898	-133.7905
30	04MC104-1	190.7	1.1	Ar/Ar	Muscovite	Cooling	plateau age, 93.2% of 39Ar; inverse isochron age 191 +/- 1.8 Ma	Yukon-Tanana terrane	Plutonic	Weakly to moderately foliated, medium-grained granite. Occurs as on small plug (~100-200 m across) and related dike swarm to NW. Dikes are locally boudinaged; syn- to late-tectonic with respect to dominant fabric. Intruding meta-tonalite	Colpron, M. and Ullrich, T.	2005		unpublished	61.40941	-134.2766
31	08EW352	352	3.3	U/Pb	Zircon	Igneous Crystallization	Age calcaluged from the weighted mean of 7 LA-ICPMS analyses	Yukon-Tanana terrane	Plutonic	K-feldspar augen, two-mica granite	Westberg, E.	2010	The tectonometamorphic and structural evolution of the yukon-Tanana and cassiar terranes in the Mendocina creek area: Implications for the tectonic framework of south-central Yukon	Westberg, E. 2010. M.Sc. Thesis. Simon Fraser University.	61.42862	-133.726
32	DC-110	97.1	0.4	Ar/Ar	Muscovite	Cooling	Monitor used: Fe-mica (307.3 Ma). This is an isochron age (MSWD=2.3) incorporating 8 of 11 steps. It is consistent with the spectrum age and is considered the best age estimate for dextral ductile deformation along the d'Abbadie Fault.	Yukon-Tanana Terrane	Metamorphic	peraluminous two-mica granodioritic orthogneiss	Hansen, V.L., Heizler, M.T. and Harrison, T.M.	1991	Mesozoic thermal evolution of the Yukon-Tanana composite terrane: New evidence from 40Ar/39Ar data	Tectonics 10 51 76	61.43433	-134.1163
33	DW-318	194.6	3.8	Ar/Ar	Muscovite	Cooling	Age from Hansen et al. (1991). Monitor used: Fe-mica (307.3 Ma). Isochron age for white mica incorporating 7 of 10 steps (MSWD=14).	Yukon-Tanana Terrane	Metamorphic	Mylonitic garnet-muscovite-albite gneiss	Hansen, V.L., Mortensen, J.K. and Armstrong, R.L.	1989	U-Pb, Rb-Sr, and K-Ar isotopic constraints for ductile deformation and related metamorphism in the Teslin suture zone, Yukon-Tanana terrane, south-central Yukon Territory	Canadian Journal of Earth Sciences 26 2224 2235	61.44099	-134.2928
34	DW-318	198	14	K/Ar	Muscovite	Cooling	Age from Hansen et al. (1989). Good radiogenic analysis - age is consistent with other K/Ar ages for metamorphic rocks in the area.	Yukon-Tanana Terrane	Metamorphic	Mylonitic garnet-muscovite-albite gneiss	Hansen, V.L., Mortensen, J.K. and Armstrong, R.L.	1989	U-Pb, Rb-Sr, and K-Ar isotopic constraints for ductile deformation and related metamorphism in the Teslin suture zone, Yukon-Tanana terrane, south-central Yukon Territory	Canadian Journal of Earth Sciences 26 2224 2235	61.44099	-134.2928
35	DW-282	191	14	K/Ar	Muscovite	Cooling	Age from Hansen et al. (1989). Excellent radiogenic analysis - age is consistent with the Rb/Sr whole-rock-musc age and with other K/Ar ages for metaseds west of the D'Abbadie Fault.	Yukon-Tanana Terrane	Metamorphic	Mylonitic garnet-clinozoisite-muscovite-biotite-albite gneiss (metasedimentary)	Hansen, V.L., Mortensen, J.K. and Armstrong, R.L.	1989	U-Pb, Rb-Sr, and K-Ar isotopic constraints for ductile deformation and related metamorphism in the Teslin suture zone, Yukon-Tanana terrane, south-central Yukon Territory	Canadian Journal of Earth Sciences 26 2224 2235	61.44099	-134.0782
36	DW-282	191.3	0.6	Ar/Ar	Muscovite	Cooling	Age from Hansen et al. (1991). Monitor used: Fe-mica (307.3 Ma). This is an isochron age incorporating 7 of 10 steps (MSWD=1). It agrees well with the spectrum age and is considered the best minimum age estimate for metamorphism.	Yukon-Tanana Terrane	Metamorphic	Mylonitic garnet-clinozoisite-muscovite-biotite-albite gneiss (metasedimentary)	Hansen, V.L., Mortensen, J.K. and Armstrong, R.L.	1989	U-Pb, Rb-Sr, and K-Ar isotopic constraints for ductile deformation and related metamorphism in the Teslin suture zone, Yukon-Tanana terrane, south-central Yukon Territory	Canadian Journal of Earth Sciences 26 2224 2235	61.44099	-134.0782
37	DW-282	191.3	0.6	Ar/Ar	Muscovite	Cooling	Age from Hansen et al. (1991). Monitor used: Fe-mica (307.3 Ma). This is an isochron age incorporating 7 of 10 steps (MSWD=1). It agrees well with the spectrum age and is considered the best minimum age estimate for metamorphism.	Yukon-Tanana Terrane	Metamorphic	Mylonitic garnet-clinozoisite-muscovite-biotite-albite gneiss (metasedimentary)	Hansen, V.L., Heizler, M.T. and Harrison, T.M.	1991	Mesozoic thermal evolution of the Yukon-Tanana composite terrane: New evidence from 40Ar/39Ar data	Tectonics 10 51 76	61.44099	-134.0782
38	T075-26-7	76.7	3.4	K/Ar	Biotite	Cooling	Age given was calculated using constants from Steiger and Jager (1977). Dark brown biotite with about 4% chlorite alteration.	Cassiar Suite; Dycer Creek Stock	Plutonic	Quartz monzonite: from a series of concordant and discordant plutons (K-Ar ages vary from 70 to 100 Ma) that intrude strata in a large area of central Yukon.	Wanless, R.K., Stevens, R.D., Lachance, G.R. and Delabio, R.N.	1979	Age determinations and geological studies, K-Ar isotopic ages, report 14	Geological Survey of Canada, Paper 79-2 0 1 67	61.44166	-133.8833
39	DC-2	355	7	U/Pb	Zircon	Igneous Crystallization		Little Lake granite	Plutonic	K-spar augen, two-micas granite orthogneiss	Gallagher, C., Carr, S.D. and Brown, R.L.	1999	U-Pb geochronologic evidence of Early Cretaceous large-scale folding in the Dycer Creek area, Pelly Mountains, Yukon	Lithoprobe Slave-Northern Cordillera Lithospheric Evolution (SNORCLE) Transect and Cordilleran Tectonics Tectonics Workshop Meeting (March 5-7), University of Calgary, Lithoprobe Report No.69 0 237 249	61.45	-134.04
40	CG97-712	112.3	1.3	U/Pb	Monazite	Igneous Crystallization	Four slightly discordant, overlapping fractions. Age is weighted average 207/235 age of all four. One analyzed zircon fraction was discordant, interpreted to contain Proterozoic Pb component.	Dycer Creek Stock	Plutonic	Coarse-grained biotite quartz monzonite	Gallagher, C., Carr, S.D. and Brown, R.L.	1999	U-Pb geochronologic evidence of Early Cretaceous large-scale folding in the Dycer Creek area, Pelly Mountains, Yukon	Lithoprobe Slave-Northern Cordillera Lithospheric Evolution (SNORCLE) Transect and Cordilleran Tectonics Tectonics Workshop Meeting (March 5-7), University of Calgary, Lithoprobe Report No.69 0 237 249	61.45727	-134.0339
41	T075-25-11	88.1	3.2	K/Ar	Biotite	Cooling	Age given was calculated using constants from Steiger and Jager (1977). Relatively clean fresh biotite with about 1% chlorite alteration.	Nisutlin Batholith	Plutonic	Quartz monzonite: from a series of concordant and discordant plutons (K-Ar ages vary from 70 to 100 Ma) that intrude strata in a large area of central Yukon.	Wanless, R.K., Stevens, R.D., Lachance, G.R. and Delabio, R.N.	1979	Age determinations and geological studies, K-Ar isotopic ages, report 14	Geological Survey of Canada, Paper 79-2 0 1 67	61.47083	-133.5667
42	T079-15-5	164	10	K/Ar	Hornblende	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains with no visible contamination. Good analysis.	intrusion along Teslin fault	Plutonic	Hornblende-feldspar porphyry dyke that intrudes Laberge Group and Lewes River Group but not Tantalus Group	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.475	-134.8333
43	DE-397	108	3	K/Ar	Biotite	Cooling	From Hansen et al. (1989) and Hunt & Roddick (1988). Satisfactory analysis (7.142 wt.% K, 63% radiogenic Ar). Age is much younger than the Rb/Sr wr-musc isochron age for this sample, but consistent with the bt Ar/Ar age.	Yukon-Tanana Terrane	Metamorphic	Two-mica granodioritic orthogneiss	Hunt, P.A. and Roddick, J.C.	1988	A compilation of K-Ar ages: Report 18	Radiogenic Age and Isotopic Studies: Report 2, Geological Survey of Canada, Paper 88-2 0 127 153	61.48417	-134.019
44	DE-397	108.5	0.2	Ar/Ar	Biotite	Cooling	Age from Hansen et al. (1991). Monitor used: Fe-mica (307.3 Ma). This is an isochron age (MSWD=5.1) incorporating 6 of 9 steps. It is consistent with the spectrum age and is considered the best age estimate.	Yukon-Tanana Terrane	Metamorphic	Two-mica granodioritic orthogneiss	Hunt, P.A. and Roddick, J.C.	1988	A compilation of K-Ar ages: Report 18	Radiogenic Age and Isotopic Studies: Report 2, Geological Survey of Canada, Paper 88-2 0 127 153	61.48417	-134.019
45	DE-397	117.7	0.4	Ar/Ar	Muscovite	Cooling	Age from Hansen et al. (1991). Monitor used: Fe-mica (307.3 Ma). This is an isochron age (MSWD=8.3) incorporating 9 of 10 steps. It is consistent with the spectrum age.	Yukon-Tanana Terrane	Metamorphic	Two-mica granodioritic orthogneiss	Hunt, P.A. and Roddick, J.C.	1988	A compilation of K-Ar ages: Report 18	Radiogenic Age and Isotopic Studies: Report 2, Geological Survey of Canada, Paper 88-2 0 127 153	61.48417	-134.019
46	DE-397	355	25	U/Pb	Zircon	Igneous Crystallization	From Hansen et al. (1989). 6 frags., rough linear array: complex systematics (inher. + Pb loss). Regr. through 5 abraded frags - lower int. of 353.4 +/-26.1 Ma. Based on this and other regressions, 355 +/- 25 Ma is the estimated xllization age.	Yukon-Tanana Terrane	Metamorphic	Two-mica granodioritic orthogneiss	Hunt, P.A. and Roddick, J.C.	1988	A compilation of K-Ar ages: Report 18	Radiogenic Age and Isotopic Studies: Report 2, Geological Survey of Canada, Paper 88-2 0 127 153	61.48417	-134.019
47	MLB-89-364	51.8	0.9	K/Ar	Whole Rock	No Age	Age is unreliable - rock is slightly but pervasively altered. 40.1% atmospheric Ar was present in the analysis, and most likely there was significant excess argon to produce this anomalously old age. Selkirk lavas are typically <2 Ma.	Selkirk Lavas	Volcanic	Columnar-jointed, vesicular, slightly altered olivine basalt - vesicles are commonly lined with zeolites	Hunt, P.A. and Roddick, J.C.	1992	A compilation of K-Ar ages, Report 21	Radiogenic Age and Isotopic Studies: Report 5; Geological Survey of Canada, Paper 91-2 0 207 261	61.48666	-135.9283

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 2: Geochronological Data for Sheet 2 - Laberge (105E) and Parts of Aishihik (115H) and Quiet Lake (105F)																	
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE		LATITUDE	ONGITUDE
48	07EW079	359.3	1	U/Pb	Zircon		Igneous Crystallization Age calculated via ICPMS wet chemical solution from 3 zircon of identical LA-ICP-MS ages	Yukon-Tanana terrane	Plutonic	K-feldspar augen, two-mica granite	Westberg, E.	2010	The tectonometamorphic and structural evolution of the yukon-Tanana and cassiar terranes in the Mendocina creek area: Implications for the tectonic framework of south-central Yukon	Westberg, E. 2010. M.Sc. Thesis. Simon Fraser University.		61.50013	-133.8707
49	YT95-BS082	357.8	1.6	U/Pb	Zircon		Igneous Crystallization Three fractions; age is weighted average of the 207/235 and 206/238 ages for a single concordant fraction.	Mendocina Orthogneiss	Metamorphic	two-mica granite	Gallagher, C., Carr, S.D. and Brown, R.L.	1999	U-Pb geochronologic evidence of Early Cretaceous large-scale folding in the Dycer Creek area, Pelly Mountains, Yukon	Lithoprobe Slave-Northern Cordillera Lithospheric Evolution (SNORCLE) Transect and Cordilleran Tectonics Tectonics Workshop Meeting (March 5-7), University of Calgary, Lithoprobe Report No.69 0 237 249		61.50285	-134.1379
50	DE-332	115.1	1.2	Ar/Ar	Muscovite		Cooling Monitor used: Fe-mica (307.3 Ma). This is an isochron age incorporating 8 of 11 steps (MSWD=48.1). Age is consistent with the spectrum age, but does not agree with the 147 Ma Ar/Ar hbl age for sample DE-333 from same locale.	Yukon-Tanana Terrane	Metamorphic	Garnet-muscovite-biotite schist	Hansen, V.L., Heizler, M.T. and Harrison, T.M.	1991	Mesozoic thermal evolution of the Yukon-Tanana composite terrane: New evidence from 40Ar/39Ar data	Tectonics 10 51 76		61.51133	-134.0532
51	DE-333	146.8	4.9	Ar/Ar	Hornblende		Cooling Monitor used: Fe-mica (307.3 Ma). Noisy plateau across ~70% of 39Ar, last 8 of 18 steps. Significant Ar loss in first 30% of released gas. Age does not agree with the 115 Ma Ar/Ar musc age for sample DE-332 from same locale.	Yukon-Tanana Terrane	Metamorphic	Garnet-hornblende-muscovite-biotite schist	Hansen, V.L., Heizler, M.T. and Harrison, T.M.	1991	Mesozoic thermal evolution of the Yukon-Tanana composite terrane: New evidence from 40Ar/39Ar data	Tectonics 10 51 76		61.51133	-134.0532
52	DE-330	109.5	0.6	Ar/Ar	Biotite		Cooling Age from Hansen et al. (1991). Monitor used: Fe-mica (307.3 Ma). Isochron age incorporating 8 of 9 steps (MSWD=12.8). Agrees well with the spectrum age and is considered the best age estimate for metamorphism.	Yukon-Tanana Terrane	Metamorphic	two-mica granitic orthogneiss	Hansen, V.L., Mortensen, J.K. and Armstrong, R.L.	1989	U-Pb, Rb-Sr, and K-Ar isotopic constraints for ductile deformation and related metamorphism in the Teslin suture zone, Yukon-Tanana terrane, south-central Yukon Territory	Canadian Journal of Earth Sciences 26 2224 2235		61.51333	-134.056
53	YT95-BS107	95.7	0.6	U/Pb	Monazite		Igneous Crystallization Weighted average 207/235 age of three slightly discordant fractions (two overlap each other). Zircons were also analyzed, but all displayed Proterozoic inheritance and did not yield an age.	Last Peak Granite	Plutonic	Fine-grained light-grey quartz K-feldspar megacrystic plagioclase granite	Gallagher, C., Carr, S.D. and Brown, R.L.	1999	U-Pb geochronologic evidence of Early Cretaceous large-scale folding in the Dycer Creek area, Pelly Mountains, Yukon	Lithoprobe Slave-Northern Cordillera Lithospheric Evolution (SNORCLE) Transect and Cordilleran Tectonics Tectonics Workshop Meeting (March 5-7), University of Calgary, Lithoprobe Report No.69 0 237 249		61.52985	-134.1482
55	MK-97-kl-gr1	267	10	U/Pb	Zircon		Peak Metamorphic No analytical data provided. Lower intercept age for a 3-pt regression (MSWD=0.2); 2 of the fractions are (nearly-)concordant and the third is discordant. Large error is due to small amount of Pb analyzed.	Dunite klippe	Plutonic	Deformed muscovite granite	De Keijzer, M., Williams, P.F. and Carr, S.D.	2000	Reflections on Lithoprobe-SNORCLE Line 31 in light of the structure of the Teslin zone in the Last Peak area (NTS map 105E/9), southern Yukon Territory	Lithoprobe Slave-Northern Cordillera Lithospheric Evolution (SNORCLE) Transect and Cordilleran Tectonics Tectonics Workshop Meeting (February 25-27), University of Calgary, Lithoprobe Report No.72. 0 114 121		61.5894	-134.0562
56	TO79-22-1	83.4	2.1	K/Ar	Whole Rock		Cooling Age calculated using constants from Steiger and Jager (1977). Presumably the aphanitic homogeneous groundmass was analyzed. Age is considerably older than the ca. 70 Ma Carmacks Volcanics, thus the rocks may be a different distinct unit.	Originally correlated with Carmacks Group Volcanics	Volcanic	Pink feldspar-biotite porphyry with an aphanitic felsic groundmass	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56		61.60833	-134.9
57	PB-4-64	204	34	K/Ar	Hornblende		Cooling Age recalibrated to Steiger and Jager (1977). Some grains had altered fractures. Grains contained fine opaque, trace biotite, and ~5% quartz contamination. Poor analysis (25% radiogenic Ar) - age is highly imprecise.	Whitehorse trough	Plutonic	Granitic cobble from the Laberge Group - undeformed, massive, equigranular, medium grained granodiorite	Wanless, R.K., Stevens, R.D., Lachance, G.R. and Edmonds, C.M.	1968	K-Ar isotopic ages, Report 8	Age determinations and geological studies, Geological Survey of Canada, Paper 67-2A 0 11 141		61.61666	-135.8833
58	94BSR-A	235.82	1	Ar/Ar	Muscovite		Cooling White mica (40-60 mesh size). Spectrum shows slight downstepping in age with temp. Age based on 2 concordant final steps (19% 39Ar released). Weighted/integrated age for all steps: 239 +/- 1 Ma. Age reflects later exhumation.	Last Peak Eclogite	Metamorphic	eclogite	Erdmer, P., Ghent, E.D., Archibald, D.A. and Stout, M.Z.	1998	Paleozoic and Mesozoic high-pressure metamorphism at the margin of ancestral North America in central Yukon	Geological Society of America Bulletin 110 615 629		61.61667	-134.4167
59	PE80-BSR	269	2	U/Pb	Zircon		Igneous Crystallization Decay constants from Jaffey et al. (1971). 5 fractions, all concordant or near-concordant. Weighted 206/238 age. Age is consistent with cooling ages obtained for the Faro eclogites. Zircons had very low Th/U (0.012-0.016), probably of metamorphic ori	Last Peak Eclogite	Metamorphic	eclogite	Creaser, R.A., Heaman, L.M. and Erdmer, P.	1997	Timing of high-pressure metamorphism in the Yukon-Tanana Terrane, Canadian Cordillera: constraints from U-Pb zircon dating of eclogite from the Teslin tectonic zone	Canadian Journal of Earth Sciences 34 709 715		61.61667	-134.4167
60	TO72-399	178.1	8	K/Ar	Hornblende		Cooling Age recalculated using constants from Steiger and Jager (1977). Clean unaltered grains - good analysis.	Laberge Conglomerate	Plutonic	Boulder of probable Klotassin Suite hornblende granodiorite	Wanless, R.K., Stevens, R.D., Lachance, G.R. and Delabio, R.N.	1978	Age determinations and geological studies, K-Ar isotopic ages, report 13	Geological Survey of Canada, Paper 77-2 0 1 60		61.62499	-135.8833
61	TO79-5-8	64	2.1	K/Ar	Whole Rock		Cooling Age was calculated using constants from Steiger and Jager (1977). Good analysis - age is considered fairly reliable.	Carmacks Group Volcanics	Volcanic	Medium-grey aphanitic intermediate volcanic	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56		61.6655	-135.9764
62	06GGA158	188.1	0.4	U/Pb	Zircon		Igneous Crystallization 3 point concordia	Whitehorse trough	Volcanic	medium-grained crystal lithic tuff; Nordenskiöld formation (Laberge Group)	Colpron, M. and Friedman, R.M.	2008	U-Pb zircon ages for the Nordenskiöld formation (Laberge Group) and Cretaceous intrusive rocks, Whitehorse trough, Yukon	Yukon Exploration and Geology 2007, Yukon Geological Survey 139-151		61.68627	-135.5971
63	MK-96-31-7	331.5	2	U/Pb	Zircon		Peak Metamorphic No analytical data provided. Age is from a single near-concordant fraction (3 fractions in all).	Cassiar Terrane	Metamorphic	3-m wide foliated and lineated biotite-muscovite leucocratic augen orthogneiss at contact of unit PM and unit QFM	De Keijzer, M., Williams, P.F. and Carr, S.D.	2000	Reflections on Lithoprobe-SNORCLE Line 31 in light of the structure of the Teslin zone in the Last Peak area (NTS map 105E/9), southern Yukon Territory	Lithoprobe Slave-Northern Cordillera Lithospheric Evolution (SNORCLE) Transect and Cordilleran Tectonics Tectonics Workshop Meeting (February 25-27), University of Calgary, Lithoprobe Report No.72. 0 114 121		61.69194	-134.0861
64	MK-96-29-8	109	3	U/Pb	Zircon		Igneous Crystallization No analytical data provided. Lower intercept of two 3-pt regressions (5 fractions in all). Both regressions include 2 concordant to near-concordant fractions which coincide with the intercept.	Cassiar Terrane	Volcanic	Medium- to fine-grained andesitic dyke with quartzite xenoliths	De Keijzer, M., Williams, P.F. and Carr, S.D.	2000	Reflections on Lithoprobe-SNORCLE Line 31 in light of the structure of the Teslin zone in the Last Peak area (NTS map 105E/9), southern Yukon Territory	Lithoprobe Slave-Northern Cordillera Lithospheric Evolution (SNORCLE) Transect and Cordilleran Tectonics Tectonics Workshop Meeting (February 25-27), University of Calgary, Lithoprobe Report No.72. 0 114 121		61.69349	-134.1173
65	QM-87-92	187.7	0.6	U/Pb	Titanite		Cooling 2 concordant overlapping fractions. Because the pluton is miarolitic with discordant contacts and an associated dyke swarm, it was likely shallowly emplaced and cooled quickly, thus this age should be close to the actual emplacement age.	Long Lake plutonic suite; intrudes foliated phase of Aishihik batholith	Plutonic	Weathered, weakly-foliated, medium-grained, locally miarolitic pink quartz monzonite	Johnston, S.T., Mortensen, J.K. and Erdmer, P.	1996	Igneous and metaigneous age constraints for the Aishihik metamorphic suite, southwest Yukon	Canadian Journal of Earth Sciences 33 1543 1555		61.69866	-136.2725
66	QM-87-92	192	0	U/Pb	Zircon		Igneous Crystallization 9 discordant non-linear fractions; age is upper limit of 185-192 Ma range of all the 206/238 ages. Scatter is due to post-crystallization Pb loss and inheritance. Age range is consistent with the titanite cooling age.	Long Lake plutonic suite; intrudes foliated phase of Aishihik batholith	Plutonic	Weathered, weakly-foliated, medium-grained, locally miarolitic pink quartz monzonite	Johnston, S.T., Mortensen, J.K. and Erdmer, P.	1996	Igneous and metaigneous age constraints for the Aishihik metamorphic suite, southwest Yukon	Canadian Journal of Earth Sciences 33 1543 1555		61.69866	-136.2725
67	MK-96-26-2	109	3	U/Pb	Monazite		Igneous Crystallization No analytical data provided. Average 207/235 age of two nearly concordant fractions. 4 zircon fractions also analyzed but did not yield a meaningful age (strong inheritance).	d'Abbadie Pluton	Plutonic	Muscovite granite	De Keijzer, M., Williams, P.F. and Carr, S.D.	2000	Reflections on Lithoprobe-SNORCLE Line 31 in light of the structure of the Teslin zone in the Last Peak area (NTS map 105E/9), southern Yukon Territory	Lithoprobe Slave-Northern Cordillera Lithospheric Evolution (SNORCLE) Transect and Cordilleran Tectonics Tectonics Workshop Meeting (February 25-27), University of Calgary, Lithoprobe Report No.72. 0 114 121		61.69938	-134.0575
68	TO79-17-5	187	10	K/Ar	Hornblende		Igneous Crystallization Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains with no visible contamination - good radiogenic analysis but somewhat imprecise.	Nordenskiöld Dacite (Long Lake Plutonic Suite)	Volcanic	Dacitic crystal tuff interlayered with Laberge Group sandstones.	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56		61.78349	-135.6396
69	06GGA239	187.2	0.4	U/Pb	Zircon		Igneous Crystallization 2 point concordia	Whitehorse trough	Volcanic	fine-grained crystal lithic tuff; Nordenskiöld formation (Laberge Group)	Colpron, M. and Friedman, R.M.	2008	U-Pb zircon ages for the Nordenskiöld formation (Laberge Group) and Cretaceous intrusive rocks, Whitehorse trough, Yukon	Yukon Exploration and Geology 2007, Yukon Geological Survey 139-151		61.7998	-136.0422
70	01MC296	207.7	0.4	U/Pb	Zircon		Igneous Crystallization fraction B concordant @ 207.7 Ma; 3 other fractions near concordia interpreted to contain minor inherited components	Headless plug	Plutonic	undeformed Hbl diorite; Intrudes volcanoclastic rocks assigned to the Semenof formation; Hbl for this body yielded K-Ar date of 216 Ma (Tempelman-Kluit, 1984; GSC OF-1101)	Colpron, M., Mortensen, J.K.	2002		unpublished		62.815	-134.7847

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 2: Geochronological Data for Sheet 2 - Laberge (105E) and Parts of Aishihik (115H) and Quiet Lake (105F)

MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
71	TO79-20-2	216	14	K/Ar	Hornblende	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains with no visible contamination. Radiogenic Ar = 65.9%; fairly imprecise analysis.	Lokken Batholith?	Plutonic	Massive light grey hornblende-quartz diorite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.81666	-134.7833
72	06MC023	186.5	0.3	U/Pb	Zircon	Igneous Crystallization	5 point concordia	Whitehorse trough	Volcanic	medium-grained crystal lithic tuff; Nordenskiold formation (Laberge Group)	Colpron, M. and Friedman, R.M.	2008	U-Pb zircon ages for the Nordenskiold formation (Laberge Group) and Cretaceous intrusive rocks, Whitehorse trough, Yukon	Yukon Exploration and Geology 2007, Yukon Geological Survey 139-151	61.8228	-135.6999
73	TO79-16-3	209	9	K/Ar	Hornblende	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains with no visible contamination - good radiogenic analysis but somewhat imprecise.	Nordenskiold Dacite (Long Lake Plutonic Suite)	Volcanic	Dacitic crystal tuff interlayered with Laberge Group sandstones.	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.825	-135.6917
74	TO79-19-5	116	3	K/Ar	Whole Rock	Igneous Crystallization	Age was calculated using constants from Steiger and Jager (1977). Good radiogenic analysis.	Mt. Nansen Group	Volcanic	Light grey, aphanitic, flow banded rhyolite	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.83333	-135.5333
75	06MC059	112.8	0.2	U/Pb	Zircon	Crystallization	4 point concordia	Whitehorse trough	Plutonic	Medium- to coarse-grained porphyritic granite; quartz, feldspar, hornblende, biotite. Intrudes sandstone of the Tanglefoot formation (Laberge Group). Sample is most quartz-rich phase of a body which is predominantly quartz diorite.	Colpron, M. and Friedman, R.M.	2008	U-Pb zircon ages for the Nordenskiold formation (Laberge Group) and Cretaceous intrusive rocks, Whitehorse trough, Yukon	Yukon Exploration and Geology 2007, Yukon Geological Survey 139-151	61.85609	-135.9974
76	TOE79-24-10	199	32	K/Ar	Hornblende	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains; however, very low K content (0.24 wt. %), and radiogenic Ar was only 66.8%. Age is thus suspect and obviously very imprecise.	Laberge Group	Volcanic	Intermediate volcanic with scattered hbl phenocrysts (up to 2 mm long)	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.87081	-135.1618
77	TO79-23-3	185	8	K/Ar	Hornblende	Cooling	Age calculated using constants from Steiger and Jager (1977). Clean unaltered grains - good analysis.	Lokken Batholith	Plutonic	Massive hornblende granodiorite to quartz diorite with a weak planar fabric defined by aligned hornblendes	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	61.925	-134.5833
78	15-1e	67.9	4.6	K/Ar	Whole Rock	Igneous Crystallization	Satisfactory analysis (63% radiogenic Ar) - age is consistent with other K/Ar ages for this suite.	Unit #13(?), Carmacks Group Volcanics	Volcanic	Andesite	Grond, H.C., Churchill, S.J., Armstrong, R.L., Harakal, J.E. and Nixon, G.T.	1984	Late Cretaceous age of the Hutshi, Mount Nansen, and Carmacks groups, southwestern Yukon Territory and northwestern British Columbia	Canadian Journal of Earth Sciences 21 554 558	61.97112	-136.2005

Note: This compilation of geochronological data for Whitehorse trough and surrounding areas is based in part on YukonAge 2004 (Breitsprecher and Mortensen, 2004). It includes additional recently published ages, as well as a number of unpublished ages acquired by the Yukon Geological Survey. Sampling localities have been verified for most samples and corrections have been made where required, correcting in some cases errors in original database.

Breitsprecher, K., and Mortensen, J. K., 2004, Yukonage 2004: A database of isotopic age determinations for rock units from Yukon Territory, Canada: Yukon Geological Survey.

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 3: Geochronological Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
1	94CH-52-1	78.3	0.2	U/Pb	Zircon	Igneous Crystallization	3 very U-rich (~3000 ppm) fractions: 206/238 age based on one concordant fraction, other two overlap concordia. Post-xllization Pb loss may have pulled all 3 fractions down along concordia and this age may thus be a minimum age estimate.	Open Creek volcanics	Volcanic	quartz-phyric dacite lava flow	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.00833	-134.0033
2	Y88-5A	64.5	1.8	K/Ar	Whole Rock	Reset	Excellent radiogenic analysis - age is consistent with reset K/Ar age of sample Y88-5B from same location.	Montana Mountain volcanic suite	Volcanic	dacite tuff	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.02999	-134.6917
3	Y88-5A	97.5	3.8	U/Pb	Zircon	Igneous Crystallization	1 concordant, 1 nearly conc. fraction, both give similar 207/206 ages - very minor Pb loss. Upper intercept age for regression through both (MSWD=0.83). Error limits include	Montana Mountain volcanic suite	Volcanic	dacite tuff	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.02999	-134.6917
4	Y88-5B	65.1	2.3	K/Ar	Whole Rock	Reset	Excellent radiogenic analysis - age is consistent with reset K/Ar age of sample Y88-5A from same location.	Montana Mountain volcanic suite	Volcanic	dacite tuff	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.02999	-134.6917
5	Y88CHT-15	163	12	K/Ar	Hornblende	Cooling	This is an age quoted from R.L. Armstrong (unpublished data). No analytical data presented in thesis. Age is disturbed (younger than stratigraphic age).	clast in Laberge Group	Plutonic	Porphyritic hornblende megacrystic andesite clast	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.03083	-134.755
6	Y88-21	78.3	2.7	K/Ar	Hornblende	Reset	Fairly good analysis (0.573 wt. % K, 78% radiogenic Ar). Reset (?) K/Ar ages for other plutons of this suite are 93-96 Ma (e.g. Carbon Hill, Mt. McIntyre, and Mt. Granger).	Montana Mountain pluton, Mount McIntyre Plutonic Suite	Plutonic	Medium-grained equigranular hbl-bt quartz monzonite, intrudes contact between northern Stikinia and Cache Creek Terrane	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.09499	-134.7
7	Y88-21	106.5	0.5	U/Pb	Zircon	Igneous Crystallization	206/238 age for the oldest and least U-rich of 3 concordant fractions. May be a minimum age if Pb loss occurred. Age is consistent with other U/Pb ages for this suite.	Montana Mountain pluton, Mount McIntyre Plutonic Suite	Plutonic	Medium-grained equigranular hbl-bt quartz monzonite, intrudes contact between northern Stikinia and Cache Creek Terrane	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.09499	-134.7
8	GGA-91-40-11C	172.1	2	Ar/Ar	Hornblende	Cooling	Age is from Hunt & Roddick (1994) and is based on the following 2 heating steps (99% cumulative gas released): 172.2 +/- 1.2 Ma (75% gas) and 172.1 +/- 2.1 Ma (24% gas). These 2 steps are in excellent agreement.	(intrudes Cache Creek terrane) Mt. Bryde pluton	Plutonic	Medium-grained equigranular biotite-hornblende quartz monzodiorite (10% biotite, 15% hornblende), mafics are fresh	Hunt, P.A. and Roddick, J.C.	1994	A compilation of K-Ar and 40Ar-39Ar ages: Report 24	Radiogenic age and isotopic studies: Report 8: Geological Survey of Canada Current Research 1994-F 0 125 155	60.12611	-133.1945
9	GGA-91-40-11C	172.7	1.8	Ar/Ar	Biotite	Cooling	Wt. % K in the biotite was only 4.55. Age is from Hunt & Roddick (1994), and is based on the following 2 heating steps (97% cumulative gas released): 172.7 +/- 1.1 Ma (51% gas) and 172.8 +/- 0.8 Ma (46% gas). These 2 steps are in excellent agreement.	(intrudes Cache Creek terrane) Mt. Bryde pluton	Plutonic	Medium-grained equigranular biotite-hornblende quartz monzodiorite (10% biotite, 15% hornblende), mafics are fresh	Hunt, P.A. and Roddick, J.C.	1994	A compilation of K-Ar and 40Ar-39Ar ages: Report 24	Radiogenic age and isotopic studies: Report 8: Geological Survey of Canada Current Research 1994-F 0 125 155	60.12611	-133.1945
10	GGA-91-40-11C	175.7	1.4	U/Pb	Zircon	Igneous Crystallization	Age from Gordey et al. (1998). 3 fracs, all overlap; slightly discordant, likely due to post-xllization Pb loss. Age is weighted avg 207/206 ages of the 3 fracs. A min. age of ca. 172 is given by the min. 206/238 age of the 3 fractions.	(intrudes Cache Creek terrane) Mt. Bryde pluton	Plutonic	Medium-grained equigranular biotite-hornblende quartz monzodiorite (10% biotite, 15% hornblende), mafics are fresh	Hunt, P.A. and Roddick, J.C.	1994	A compilation of K-Ar and 40Ar-39Ar ages: Report 24	Radiogenic age and isotopic studies: Report 8: Geological Survey of Canada Current Research 1994-F 0 125 155	60.12611	-133.1945
11	WHA 9	64.3	4.4	K/Ar	Biotite	Cooling	Analytical data not provided in paper. Similar rocks in the Bennett and Atlin map areas give similar ages.	Carcross Plutonic Suite	Plutonic	Coarse-grained porphyritic biotite quartz monzonite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.15	-134.7117
12	ZR-4	113	3	K/Ar	Hornblende	Cooling	Excellent radiogenic analysis - age reflects partial (?) resetting due to thermal overprinting (possibly mid-Cretaceous magmatism or deformation).	Tally Ho pluton, Stikine Plutonic Suite	Plutonic	coarse-grained, megacrystic leucogabbro orthogneiss; remnant cpx in cores of hornblende	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.19834	-135.0017
13	ZR-4	213.8	0.6	U/Pb	Zircon	Igneous Crystallization	206/238 age for a single coarse-grained (>200 microns) highly abraded concordant fraction. One other finer grained fraction plotted right of concordia indicating an inherited component of ~910 Ma.	Tally Ho pluton, Stikine Plutonic Suite	Plutonic	coarse-grained, megacrystic leucogabbro orthogneiss; remnant cpx in cores of hornblende	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.19834	-135.0017
14	Y88-87-4-3	113	8	K/Ar	Hornblende	Cooling	Unpublished data - not available for assessment.		Plutonic	Megacrystic foliated hornblende gabbro intruding ultramafic rocks in Tally Ho shear zone	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.1995	-135.0017
15	89CH60-5	68.6	2.5	K/Ar	Biotite	Cooling	Excellent radiogenic analysis - age is similar to K/Ar ages for the Wheaton River Plutonic Suite. See also Morrison et al. (1979) for additional relevant ages.	Carcross pluton, Carcross Plutonic Suite	Plutonic	biotite granite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.24667	-134.91
16	Y88-14	77.7	1	U/Pb	Zircon	Igneous Crystallization	3 fractions overlap concordia in a linear Pb-loss array. Age is 206/238 age of the oldest and least U-rich fraction. May be a minimum if this fraction also lost some Pb. Age is consistent with other ages for this suite.	Wheaton River pluton, Wheaton River Plutonic Suite	Plutonic	Slightly altered, mesocratic hornblende granodiorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.25666	-135.0367
17	Y88-13	61.7	2.2	K/Ar	K-Feldspar	Cooling	Only 2.31 wt.% K in sample. Good analysis - possible Ar loss as age is considerably younger than other K/Ar ages obtained for this suite (this study).	Wheaton River volcanic suite	Plutonic	Porphyritic dacite dyke cutting Wheaton River andesite flows	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.265	-135.0183
18	Y88-1	61.1	2.1	K/Ar	Biotite	Cooling	Biotite slightly K-depleted (5.73 wt.%), but excellent radiogenic analysis. Age is somewhat younger than expected considering the U/Pb age for this sample. Ar loss?	Folle Mountain pluton, Wheaton River Plutonic Suite	Plutonic	leucocratic biotite granite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.28917	-135.0117
19	Y88-1	77.5	0.3	U/Pb	Zircon	Igneous Crystallization	206/238 age of oldest of two fractions overlapping concordia. Other fraction, or possibly both, lost Pb. Both are high U fractions (>1200 ppm). Age is consistent with other ages for this suite.	Folle Mountain pluton, Wheaton River Plutonic Suite	Plutonic	leucocratic biotite granite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.28917	-135.0117
20	Y88-15	78.3	3.6	K/Ar	K-Feldspar	Cooling	Only 0.57 wt.% K in grains. Otherwise, good analysis. Age is older than most K/Ar ages for this suite, but consistent with age of sample Y88-23.	Wheaton River volcanic suite	Plutonic	andesite porphyry flow	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.29667	-135.0683
21	Y88-9A	54.7	3.8	K/Ar	Whole Rock	Cooling	Unpublished data, unavailable for interpretation. However, age is consistent with ages for other felsic volcanics in the area (see Hart, 1995).		Plutonic	Quartz-feldspar porphyry dyke cutting Tally-Ho shear zone	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.30333	-135.1717
22	89CH49-6	63.6	2.2	K/Ar	Whole Rock	Igneous Crystallization	Good analysis - age is consistent with other minimum ages for this suite. Age is considered a min. because sample may have been vulnerable to Ar loss.	Wheaton River volcanic suite	Plutonic	rhyolite dyke	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.30833	-134.9083
23	Y88-27A	70.1	3.3	K/Ar	K-Feldspar	Igneous Crystallization	Only 1.48 wt% K in grains. Excellent radiogenic analysis. Considered a minimum age because of feldspar's vulnerability to Ar loss. Age is consistent with other minimum cooling ages for this volcanic suite (this study).	Wheaton River volcanic suite	Volcanic	rhyolite dyke cutting Wheaton River andesite flows	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.315	-135.0283
24	89CH34-1	65.3	2.3	K/Ar	Whole Rock	Igneous Crystallization	Good radiogenic analysis - age is consistent with other ages for this suite. Age is considered a min. because sample may have been vulnerable to Ar loss.	Wheaton River volcanic suite	Plutonic	Sheared andesite porphyry dyke intruding Tally Ho shear zone	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.31667	-135.1917
25	89CH35-7	106	4	K/Ar	Hornblende	Cooling	Very low K in analysis (0.341 wt.%). Good radiogenic analysis - age is within range of other cooling ages for this suite of plutons.	Mt. Hodnett pluton, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Pyroxene diorite; intrudes Tally Ho shear zone	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.34166	-135.225
26	Y88-33-2	80.6	2.8	K/Ar	Hornblende	Cooling	Low K content (0.421 wt.%) in grains. Good analysis - age is consistent with U/Pb and other K/Ar cooling ages for this suite.	Red Ridge II pluton, Wheaton River Plutonic Suite	Plutonic	Coarse-grained hornblende diorite/gabbro	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.36	-135.07
27	Y88-33-3	200.1	0.9	U/Pb	Zircon	Igneous Crystallization	206/238 age and error limits based on 2 overlapping concordant fractions. This age is unique for plutons in the Yukon.	Red Ridge pluton, Red Ridge Plutonic Suite	Plutonic	Coarse grained hornblende diorite/gabbro	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.36	-135.07
28	Y88-10	128	4	K/Ar	Hornblende	Cooling	Excellent radiogenic analysis - age is consistent with other metamorphic cooling ages obtained for this area.	Alligator Lake pluton (phase of Bennett Batholith, Bennett Plutonic Suite)	Plutonic	Foliated hornblende monzodiorite/granodiorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.36166	-135.4583

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 3: Geochronological Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
29	Y88-10	175.3	1.9	U/Pb	Zircon	Igneous Crystallization	206/238 age of a single concordant fraction. Upper error limit includes 207/206 ages of this and one of 2 discordant fractions. Age is consistent with other U/Pb ages for this suite. Pb loss and minor inheritance in the 2 discordant analyses.	Alligator Lake pluton (phase of Bennett Batholith, Bennett Plutonic Suite)	Plutonic	Foliated hornblende monzodiorite/granodiorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.36166	-135.4583
30	89CH-28-2	6.8	0.4	K/Ar	Whole Rock	Igneous Crystallization	Poor analysis (49.4% radiogenic Ar) - age is not consistent with other K/Ar whole rock and Ar/Ar ages for this complex.	Alligator Canyon Basalt (Alligator Lake volcanic complex, unit 3 cone)	Volcanic	Slightly-oxidized vesicular basalt	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.38	-135.4414
31	Y88-23	80.8	2.8	K/Ar	Whole Rock	Igneous Crystallization	Excellent radiogenic analysis - age is older than other K/Ar ages obtained for this suite, but consistent with age of sample Y88-15.	Wheaton River volcanic suite	Volcanic	Dark grey andesite flow	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.395	-134.815
32	96CH-AL1	3.3	0.4	Ar/Ar	Whole Rock	Igneous Crystallization	Monitor used: FCT-San (age 28.03 Ma). 2 step-heating analyses (5 steps each). Age is consistent with other Ar/Ar ages for this complex. Correl'n plot shows excess Ar not a factor in the age being older than K/Ar ages of samples from the same locale.	Alligator Lake Complex Alligator Canyon Basalt (Alligator Lake volcanic complex, unit 3 flow)	Volcanic	Unoxidized, olivine-phyric, non-vesicular alkali basalt and basanite flow with megacrysts of olivine, spinel and pyroxene.	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.43666	-135.4367
33	Y88-33-4	210.4	16	U/Pb	Zircon	Igneous Crystallization	2 fractions, 1 concordant at 210.4 +/- 0.8 Ma (206/238). Its 207/206 age has errors allowing an age of up to 226 Ma. Discordant fraction was U-rich and its position may reflect Pb loss from its 206/207 age of ~225 Ma.	Friday Creek pluton, Stikine Plutonic Suite	Plutonic	Hornblende-biotite leucodiorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.45499	-135.2767
34	93CH-24-2	1.9	0.1	K/Ar	Whole Rock	Igneous Crystallization	Poor analysis (38% radiogenic Ar). Age is not consistent with a much more radiogenic Ar/Ar age determination for this sample.	Alligator Canyon Basalt (Alligator Lake volcanic complex, unit 5)	Volcanic	Unoxidized, medium-grained, non-vesicular diabasic basaltwith 20% fine blades of plagioclase	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.45833	-135.4333
35	93CH-24-2	3.12	0.04	Ar/Ar	Whole Rock	Igneous Crystallization	Monitor used: FCT-San (age 28.03 Ma). One total fusion and 2 5-step analyses. Correlation plot shows excess Ar is not a factor in this age being older than the K/Ar age.	Alligator Canyon Basalt (Alligator Lake volcanic complex, unit 5)	Volcanic	Unoxidized, medium-grained, non-vesicular diabasic basaltwith 20% fine blades of plagioclase	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.45833	-135.4333
36	WHA 7	75.3	5.6	K/Ar	Hornblende	Cooling	Analytical data not provided in paper. Similar rocks in the Bennett and Atlin map areas give similar ages.	Mount Lorne pluton, Wheaton River Plutonic Suite	Plutonic	Equigranular medium-grained biotite quartz monzonite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.50499	-134.745
37	89CH64-1	93.3	3.2	K/Ar	Biotite	Reset	Biotite was slightly K-poor (5.72 wt.%K), but excellent radiogenic analysis. Age probably reflects resetting. See also sample 89CH33-3 and Morrison et al. (1979) for similar ages.	Mount Granger pluton, Mount McIntyre Plutonic Suite	Plutonic	biotite granodiorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.51833	-135.2583
38	89CH75-1	104	4	K/Ar	Hornblende	Igneous Crystallization	Very low K in analysis (0.198 wt.%). Satisfactory analysis (74% radiogenic Ar) - age is within range of other cooling ages for this suite of plutons.	Marsh Lake pluton, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Quartz diorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.535	-134.3867
39	SEIM-1	2.4	0.2	K/Ar	Whole Rock	Igneous Crystallization	Poor analysis (34.3% radiogenic Ar). Age is not consistent with other K/Ar and Ar/Ar ages for basalts from in the area.	Miles Canyon Basalt; Ibex Mountain cone	Volcanic	Olivine and plagioclase-phyric basalt - Collected by J. Souther	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.54693	-135.5336
40	GGA-92-05-02C	109	2	U/Pb	Zircon	Igneous Crystallization	Fraction A is concordant but is interpreted as having lost Pb. Fractions B,C,D,E yield older 206Pb/238U ages, plot off concordia, and reflect inheritance and/or Pb loss. See "General" Notes for further explanation.	cuts Yukon Tanana, and Stikine, and Quesnel terranes; Teslin Plutonic Suite; Deadman Creek Batholith	Plutonic	Massive medium-grained biotite granite, Unit 13, Mulligan (1963 GSC Memoir 326)	Gordey, S.P., McNicoll, V.J. and Mortensen, J.K.	1998	New U-Pb ages from the Teslin area, southern Yukon, and their bearing on terrane evolution in the northern Cordillera	Radiogenic Age and Isotopic Studies: Report 11; Geological Survey of Canada, Current Research 1998-F 0 129 148	60.5481	-133.2469
41	94CH-1-1	7.1	0.4	K/Ar	Whole Rock	Igneous Crystallization	Low radiogenic Ar (56.2%) - age is slightly younger than but still consistent with other ages for Miles Canyon basalts.	Miles Canyon Basalt; Wolf Creek	Volcanic	Diabase, paleomagnetism reversed	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.58333	-134.9567
42	GGA-90-46-02B	118.1	3.3	Ar/Ar	Biotite	Cooling	Decay constants used were from Steiger and Jager (1977). No sample description given. The biotite was relatively K-poor (5.97 wt % K), but age is consistent with other cooling ages for this unit.	(Stikine terrane) Teslin Plutonic Suite	Plutonic	Medium-grained quartz monzodiorite with about 8% hornblende and 8% biotite; massive, unfoliated. Intrudes Laberge Group strata	Hunt, P.A. and Roddick, J.C.	1994	A compilation of K-Ar and 40Ar-39Ar ages; Report 24	Radiogenic age and isotopic studies: Report 8: Geological Survey of Canada Current Research 1994-F 0 125 155	60.58972	-133.675
43	Y88-26	108	1.2	U/Pb	Zircon	Igneous Crystallization	Three concordant fractions, 2 overlap each other, 1 slightly older, but within error of the other 2. Date includes 206/238 ages and error limits for all 3 fractions. Age may be as old as the 207/206 age for the most precise fraction (114.8 +/- 0.9 Ma	Ibex River pluton, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Hornblende granodiorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.59166	-135.4267
44	Y88-26	110	4	K/Ar	Hornblende	Cooling	Fairly low K in analysis (0.51 wt.%). Age is older than the U/Pb age and older than typical igneous cooling ages for this suite of plutons.	Ibex River pluton, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Hornblende granodiorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.59166	-135.4267
45	Y88-25	56.8	4	K/Ar	Whole Rock	Cooling	Unpublished data, unavailable for interpretation. However, age is consistent with ages for other rhyolites in the area (see Hart, 1995).		Plutonic	Felsite volcanic neck that cuts Triassic Lewes River Group	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.61166	-135.4167
46	WHA 6A	97.3	6.6	K/Ar	Hornblende	Cooling	Analytical data not provided in paper - age is consistent with cooling ages for other intrusions in this suite.	Mount McIntyre Pluton; Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Granophyre	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.62	-135.1383
47	GGA-90-46-03C	245.4	0.8	U/Pb	Zircon	Igneous Crystallization	Age given is the weighted average of 206Pb/238U ages from 3 concordant overlapping fractions.	Cache Creek Terrane	Plutonic	Massive, fresh, coarse-grained, unfoliated cpx peridotite; forms a One of several small plugs that intrude volcanic and sedimentary rocks of the Stikine and Cache Creek terranes	Gordey, S.P., McNicoll, V.J. and Mortensen, J.K.	1998	New U-Pb ages from the Teslin area, southern Yukon, and their bearing on terrane evolution in the northern Cordillera	Radiogenic Age and Isotopic Studies: Report 11; Geological Survey of Canada, Current Research 1998-F 0 129 148	60.63132	-133.6514
48	RS90-24	351.2	1.4	U/Pb	Zircon	Igneous Crystallization	Age is from Stevens et al. (1993). A weighted 207/206Pb age based on 3 very slightly discordant and overlapping fractions.	Yukon Tanana Terrane and Teslin Suture Zone PMTqd (Stevens, 1992)	Plutonic	Mesocratic hornblende-bearing metatonalite, medium grained, well foliated and locally lineated	Stevens, R.A., Mortensen, J.K. and Hunt, P.A.	1993	U-Pb and 40Ar-39Ar geochronology of plutonic rocks from the Teslin suture zone, Yukon Territory	Radiogenic Age and Isotopic Studies: Report 7, Geological Survey of Canada, Paper 93-2 0 83 90	60.63333	-133.2863
49	RS90-24	427	4	Ar/Ar	Biotite	Cooling	Age is from Hunt and Roddick (1993). Preferred age is based on two heating steps (98% cumulative released gas): 429 +/- 4 Ma (33% gas) and 426 +/- 1 Ma (65% gas). The two ages are consistent, but anomalously old.	Yukon Tanana Terrane and Teslin Suture Zone PMTqd (Stevens, 1992)	Plutonic	Mesocratic hornblende-bearing metatonalite, medium grained, well foliated and locally lineated	Stevens, R.A., Mortensen, J.K. and Hunt, P.A.	1993	U-Pb and 40Ar-39Ar geochronology of plutonic rocks from the Teslin suture zone, Yukon Territory	Radiogenic Age and Isotopic Studies: Report 7, Geological Survey of Canada, Paper 93-2 0 83 90	60.63333	-133.2863
50	Y88-20	8.8	0.6	K/Ar	Whole Rock	Igneous Crystallization	Low K (0.497 wt.%) and low radiogenic Ar (52%) in the analysis, however age is consistent with other K/Ar and Ar/Ar ages for Miles Canyon basalts.	Miles Canyon Basalt; McRae	Volcanic	Columnar-jointed basalt flows, paleomagnetism normal.	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.64333	-135.0325
51	Y88-18	108.6	1.2	U/Pb	Zircon	Igneous Crystallization	206/238 age of oldest of two U-rich, concordant, slightly overlapping fractions. Upper error limit includes possibility of minor Pb loss suggested by older 207/206 age for this fraction (contained 2473 ppm U).	Mount McIntyre stock, Mount McIntyre Plutonic Suite	Plutonic	Pinkish granite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.645	-135.1867
52	WHA 5	105	8	K/Ar	Hornblende	Cooling	Analytical data not provided in paper. Age is consistent with other K/Ar cooling ages for intrusions of this suite.	Whitehorse pluton, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Granodiorite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.64666	-135.1767
53	WHB 8	108	8	K/Ar	Phlogopite	Alteration	Analytical data not provided in the paper - age is consistent with ages obtained for the associated Whitehorse batholith (samples WHB 1 to WHB 5).		Hydrothermal	Skarn associated with mineralization at Arctic Chief mine, Whitehorse Copper Belt	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.66166	-135.115
54	GGA-90-20-03B	342.5	0.9	U/Pb	Zircon	Igneous Crystallization	5 discordant fractions indicate Early Proterozoic inherited component although no cores observed. Two 2-pt. discordia lines yield lower intercepts of 341.6 +/-0.9 Ma and 342.5 +/- 0.9 Ma, interpreted as the mininum age range for the aplite.	Yukon Tanana Terrane	Metamorphic	Blastomylonitic(?) foliated aplite dyke	Gordey, S.P., McNicoll, V.J. and Mortensen, J.K.	1998	New U-Pb ages from the Teslin area, southern Yukon, and their bearing on terrane evolution in the northern Cordillera	Radiogenic Age and Isotopic Studies: Report 11; Geological Survey of Canada, Current Research 1998-F 0 129 148	60.67343	-133.2765

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 3: Geochronological Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
55	GGA-90-46-04B	119.8	1.4	Ar/Ar	Hornblende	Cooling	Age is from Hunt and Roddick (1994) and is based on the following 2 heating steps (98% cumulative gas released): 119.9 +/- 1.0 Ma (64% released gas) and 19.7 +/- 0.9 Ma (34% released gas).	(intrudes Stikine terrane) Teslin Plutonic Suite	Plutonic	Medium-grained hornblende-biotite quartz monzodiorite with about 5% fresh hornblende and about 10% fresh biotite. Intrudes strata of the Laberge Group	Hunt, P.A. and Roddick, J.C.	1994	A compilation of K-Ar and 40Ar-39Ar ages: Report 24	Radiogenic age and isotopic studies: Report 8: Geological Survey of Canada Current Research 1994-F 0 125 155	60.68193	-133.8461
56	GGA-90-46-04B	120.3	1.2	Ar/Ar	Biotite	Cooling	Age is from Hunt and Roddick (1994) and is based on the following 2 heating steps (98% cumulative gas released): 120.7 +/- 0.7 Ma (49% gas) and 120.0 +/- 0.4 Ma (49% gas).	(intrudes Stikine terrane) Teslin Plutonic Suite	Plutonic	Medium-grained hornblende-biotite quartz monzodiorite with about 5% fresh hornblende and about 10% fresh biotite. Intrudes strata of the Laberge Group	Hunt, P.A. and Roddick, J.C.	1994	A compilation of K-Ar and 40Ar-39Ar ages: Report 24	Radiogenic age and isotopic studies: Report 8: Geological Survey of Canada Current Research 1994-F 0 125 155	60.68193	-133.8461
57	GGA-90-46-04B	123.7	4.6	U/Pb	Zircon	Igneous Crystallization	Age from Gordey et al. (1998), based on 1 concordant fraction. A 2nd fraction overlaps it, but gives a slightly older 207/206Pb age and plots just right of concordia, indicative of minor inheritance. Corresponds well with Ar/Ar ages.	(intrudes Stikine terrane) Teslin Plutonic Suite	Plutonic	Medium-grained hornblende-biotite quartz monzodiorite with about 5% fresh hornblende and about 10% fresh biotite. Intrudes strata of the Laberge Group	Hunt, P.A. and Roddick, J.C.	1994	A compilation of K-Ar and 40Ar-39Ar ages: Report 24	Radiogenic age and isotopic studies: Report 8: Geological Survey of Canada Current Research 1994-F 0 125 155	60.68193	-133.8461
58	RS91-306	346.8	8	U/Pb	Zircon	Igneous Crystallization	207/206Pb age based on one concordant fraction. Two other colinear discordant fractions show significant inherited component (2.11 +/- 0.5 Ga)	Yukon Tanana Terrane and Teslin Suture Zone PMtdq (Stevens, 1992)	Metamorphic	Strongly foliated and locally lineated, fine to medium-grained metatonalite to meta-quartz diorite. Unit A of Mulligan (1963).	Stevens, R.A., Mortensen, J.K. and Hunt, P.A.	1993	U-Pb and 40Ar-39Ar geochronology of plutonic rocks from the Teslin suture zone, Yukon Territory	Radiogenic Age and Isotopic Studies: Report 7, Geological Survey of Canada, Paper 93-2 0 83 90	60.68717	-133.2858
59	WHA 4	55	3.8	K/Ar	Biotite	Cooling	Analytical data not provided in paper. Age is consistent with other Nisling Range Plutonic Suite rocks, and with K/Ar biotite and WR Rb/Sr ages for similar sample WHA 1.	Jackson Creek pluton, Nisling Range Plutonic Suite	Plutonic	Biotite quartz monzonite from margin of pluton	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.68999	-135.37
60	94CH-1-3	8.7	0.8	K/Ar	Whole Rock	Igneous Crystallization	Low K (0.48 wt.%) and low radiogenic Ar (53.7%) in the analysis however age is still consistent with other K/Ar and Ar/Ar ages for the Miles Canyon basalts.	Miles Canyon Basalt	Volcanic	Fine-grained diabase from uppermost flow, paleomagnetism normal	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.69667	-135.0338
61	TMH-2	8.4	0.1	Ar/Ar	Whole Rock	Igneous Crystallization	Monitor used: FCT-San (age 28.03 Ma). 1 fusion and 2 3-step analyses. All steps used in Ar/Ar data regression (MSWD=3.6; minor scatter). Age is younger than but within error of K/Ar ages for this and other Miles Canyon basalt samples. No excess Ar.	Miles Canyon Basalt /Whitehorse Dam Basalt	Volcanic	Medium-grained diabase; sample contained minor carbonate alteration	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.6983	-135.0417
62	TMH-2	8.9	0.8	K/Ar	Whole Rock	Igneous Crystallization	Low K (0.62 wt.%) and somewhat low radiogenic Ar (62%) in the analysis, however age is still consistent with Ar/Ar age for this same sample and with K/Ar ages for other Miles Canyon basalts.	Miles Canyon Basalt /Whitehorse Dam Basalt	Volcanic	Medium-grained diabase; sample contained minor carbonate alteration	Hart, C.J.R. and Villeneuve, M.	1999	Geochronology of Neogene alkaline volcanic rocks (Miles Canyon Basalt), southern Yukon Territory, Canada; the relative effectiveness of laser 40Ar/39Ar and K-Ar geochronology	Canadian Journal of Earth Sciences 36 1495 1507	60.6983	-135.0417
63	GGA-90-3-06C	203.6	0.6	U/Pb	Zircon	Igneous Crystallization	Of 3 fractions, the age is based on 1 concordant fraction. The 3 fractions are colinear, yielding an upper intercept of 1.10 Ga. The age is very similar to that given by titanite.	Whitehorse Trough Laberge Group (Inklin assemblage?)	Plutonic	Coarse-grained K-feldspar megacrystic hornblende (~4%) granite clast in Laberge Group conglomerate. Quartz has graphic texture.	Gordey, S.P., McNicoll, V.J. and Mortensen, J.K.	1998	New U-Pb ages from the Teslin area, southern Yukon, and their bearing on terrane evolution in the northern Cordillera	Radiogenic Age and Isotopic Studies: Report 11: Geological Survey of Canada, Current Research 1998-F 0 129 148	60.72685	-133.8355
64	GGA-90-3-06C	204.6	1.5	U/Pb	Titanite	Igneous Crystallization	Age is based on a single concordant fraction that overlaps with a single concordant zircon fraction. The data is relatively less precise than those for the concordant zircon fraction but the ages are nonetheless essentially equivalent.	Whitehorse Trough Laberge Group (Inklin assemblage?)	Plutonic	Coarse-grained K-feldspar megacrystic hornblende (~4%) granite clast in Laberge Group conglomerate. Quartz has graphic texture.	Gordey, S.P., McNicoll, V.J. and Mortensen, J.K.	1998	New U-Pb ages from the Teslin area, southern Yukon, and their bearing on terrane evolution in the northern Cordillera	Radiogenic Age and Isotopic Studies: Report 11: Geological Survey of Canada, Current Research 1998-F 0 129 148	60.72685	-133.8355
65	WHB 1	109	8	K/Ar	Biotite	Cooling	Analytical data not provided in paper - age is within the range of cooling ages for intrusions of this suite.	Whitehorse Batholith, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Biotite-hornblende quartz monzonite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.72833	-135.1617
66	WHB 1	116	8	K/Ar	Hornblende	Cooling	Analytical data not provided in paper - age is within error of but anomalously (?) older than the biotite age for this sample and other K/Ar cooling ages for this plutonic suite.	Whitehorse Batholith, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Biotite-hornblende quartz monzonite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.72833	-135.1617
67	93CH-51-1	107.6	1	U/Pb	Zircon	Igneous Crystallization	Three nearly overlapping concordant fractions with identical 207Pb/206Pb ages (within error). Age is weighted average of the three Pb/Pb ages. Age is consistent with other U/Pb ages for the Mount McIntyre suite of intrusions (Hart, 1994).	Cap Mountain pluton, McIntyre Plutonic Suite/Whitehorse-Coffee Creek Suite	Plutonic	Coarse-grained biotite>hornblende quartz monzonite	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.8	-134.8167
68	WHA 3A	98.6	6.8	K/Ar	Biotite	Cooling	Analytical data not provided in the paper - age is consistent with a 92 +/- 10 Ma WR Rb/Sr age for samples WHA 3A to WHA 3C, and with other igneous cooling ages for the Whitehorse-Coffee Creek Suite.		Plutonic	Quartz monzonite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.8	-134.7917
69	RS91-276a	341	5	U/Pb	Zircon	Igneous Crystallization	207/206Pb age based on a poorly constrained lower intercept of a roughly linear array of 4 discordant fractions (MSWD=10.8). All fractions show significant inherited components (to ~ 1.0 Ga).	Yukon Tanana Terrane and Teslin Suture Zone PMtdq (Stevens, 1992)	Metamorphic	Mesocratic metatonalite, medium grained, well foliated and locally lineated	Stevens, R.A., Mortensen, J.K. and Hunt, P.A.	1993	U-Pb and 40Ar-39Ar geochronology of plutonic rocks from the Teslin suture zone, Yukon Territory	Radiogenic Age and Isotopic Studies: Report 7, Geological Survey of Canada, Paper 93-2 0 83 90	60.80017	-133.4667
70	Y88-32A	57.1	0.2	U/Pb	Zircon	Igneous Crystallization	Age defined by identical 206/238 ages of two overlapping concordant fractions. A third fraction was also concordant at 56.6 +/- 0.2, but was the most U-rich (1657 ppm) and probably lost Pb. Age is consistent with other ages obtained for this pluton.	Annie Ned (Takhini) pluton, Nisling Plutonic Suite (Skukum)	Plutonic	Biotite quartz monzonite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.80666	-135.975
71	WHA 2	92.1	7.6	K/Ar	Hornblende	Cooling	Analytical data not provided in paper. Age is consistent with other K/Ar cooling ages for intrusions of this suite.	Whitehorse-Coffee Creek Plutonic Suite?	Plutonic	Granodiorite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.81166	-134.7917
72	YT-1	63.3	13.2	Fission Track	Apatite	Cooling	Age reflects cooling through 100 C crustal isotherm - good long etchable track lengths, statistically good age determination. Age is consistent with other late Cretaceous fission track ages obtained for plutonic and volcanic rocks in the vicinity.	Nordenskiold Dacite/Andesite?	Volcanic	Unwelded andesite tuff	Dickie, J.R., Grist, A.M. and Donelick, R.A.	1992	Differential uplift across the Coast Plutonic Complex-Northern Stikine Terrane contact, Yukon: preliminary evidence from apatite fission-track thermochronometry	Yukon Geology, Vol. 3: Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 160 166	60.81667	-135.4667
73	94CH-60-6	100	2	K/Ar	Whole Rock	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Satisfactory analysis (58% radiogenic Ar) - age is consistent with U/Pb and K/Ar ages for this unit (see samples 94CH-60-5, 94CH-31-1, Y89-18-3).	Byng Creek volcanic complex, Whitehorse-Coffee Creek Suite	Volcanic	Rhyolite lapilli tuff	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.82	-134.1967
74	92CH-80-2	56	1.4	K/Ar	Whole Rock	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Excellent radiogenic analysis - age is consistent with that of the Annie Ned pluton and other Nisling Range intrusions.	dyke; feeder to Annie Ned pluton (Nisling Range Plutonic Suite)	Volcanic	rhyolite dyke	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.82	-135.7283
75	92CH-80-1	322.9	1.2	U/Pb	Zircon	Igneous Crystallization	Two concordant overlapping fractions. Age is the weighted average of the two 207Pb/206Pb ages. This is the oldest age obtained from the study area.	Takhini assemblage	Metamorphic	felsic metavolcanic	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.82	-135.7267
76	92CH-80-3	52.1	1.3	K/Ar	Whole Rock	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Good radiogenic analysis.	dyke, cuts Annie Ned pluton	Volcanic	N-trending andesite dyke	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.83167	-135.7117
77	YT-2	62.7	17	Fission Track	Apatite	Cooling	Age reflects cooling through 100 C crustal isotherm - good long etchable track lengths, statistically good age determination. Age is consistent with other late Cretaceous fission track ages obtained for plutonic and volcanic rocks in the vicinity.	Lewes River Group	Volcanic	Aphyric andesite clast	Dickie, J.R., Grist, A.M. and Donelick, R.A.	1992	Differential uplift across the Coast Plutonic Complex-Northern Stikine Terrane contact, Yukon: preliminary evidence from apatite fission-track thermochronometry	Yukon Geology, Vol. 3: Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 160 166	60.83333	-135.45
78	WHA 1	51.2	4	K/Ar	Biotite	Cooling	Analytical data not provided in paper. Age is consistent with other Nisling Range Plutonic Suite rocks, and with a WR Rb/Sr date of 53 +/- 4 Ma for this sample (reported in text only).	Annie Ned (Takhini) pluton, Nisling Range Plutonic Suite (Skukum)	Plutonic	Granite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.84333	-135.8883
79	YT-3	61.8	24.2	Fission Track	Apatite	Cooling	Age reflects cooling through 100 C crustal isotherm - good long etchable track lengths, statistically good age determination. Age is consistent with other late Cretaceous fission track ages obtained for plutonic and volcanic rocks in the vicinity.	Lewes River Group	Plutonic	Granitic clast	Dickie, J.R., Grist, A.M. and Donelick, R.A.	1992	Differential uplift across the Coast Plutonic Complex-Northern Stikine Terrane contact, Yukon: preliminary evidence from apatite fission-track thermochronometry	Yukon Geology, Vol. 3: Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 160 166	60.85	-135.4

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 3: Geochronological Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
80	YT-4	67.7	13.8	Fission Track	Apatite	Cooling	Age reflects cooling through 100 C crustal isotherm - good long etchable track lengths, statistically good age determination.		Volcanic	volcanogenic sandstone	Dickie, J.R., Grist, A.M. and Donelick, R.A.	1992	Differential uplift across the Coast Plutonic Complex-Northern Stikine Terrane contact, Yukon: preliminary evidence from apatite fission-track thermochronometry	Yukon Geology, Vol. 3: Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 160 166	60.85	-135.3667
81	WHA 11	144	10	K/Ar	Hornblende	Cooling	Analytical data not provided in the paper. Age was younger than expected, possibly as a result of alteration of the rock (biotite in the same sample only contained 0.6 wt.% K).	Laberge clast, Lewes River Group	Plutonic	Altered biotite-hornblende granodiorite boulder	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.85333	-135.4367
82	Y88-31A	208	10	U/Pb	Zircon	Igneous Crystallization	Age is upper intercept of regression through 2 fractions (one concordant at 206 +/- 2.5 Ma). Lower error limit is reduced from 10 Ma to 3 Ma because age cannot be younger than the minimum 206/238 age for the concordant fraction (204.4 Ma).	Laberge Group	Plutonic	Granitic cobble: Medium-grained, slightly foliated sphene-rich hornblende-biotite granodiorite with small and sparse pink alkali feldspar	Hart, C.J.R., Dickie, J.R., Ghosh, D.K. and Armstrong, R.L.	1995	Provenance constraints for Whitehorse Trough conglomerate: U-Pb zircon dates and initial Sr ratios of granitic clasts in Jurassic Laberge Group, Yukon Territory	Jurassic magmatism and tectonics of the North American Cordillera, Geological Society of America Special Paper 299 0 47 63	60.855	-135.4333
83	Y88-31E	215.3	3.3	U/Pb	Zircon	Igneous Crystallization	3 slightly discordant fractions along linear array, reflecting recent Pb loss. Age is upper intercept (MSWD=1.7), largely controlled by the 207/206Pb age of the most precise fraction. Age is consistent with other ages for plutonic Laberge clasts.	cobble from Laberge Group	Plutonic	granitic cobble in conglomerate: medium-grained hornblende>biotite quartz monzonite with alkali feldspar megacrysts	Hart, C.J.R., Dickie, J.R., Ghosh, D.K. and Armstrong, R.L.	1995	Provenance constraints for Whitehorse Trough conglomerate: U-Pb zircon dates and initial Sr ratios of granitic clasts in Jurassic Laberge Group, Yukon Territory	Jurassic magmatism and tectonics of the North American Cordillera, Geological Society of America Special Paper 299 0 47 63	60.855	-135.4333
84	GGA-90-25-03E	204.5	2.1	U/Pb	Titanite	Cooling	Two concordant almost perfectly overlapping fractions: cooling age. See also zircon data for crystallization age estimate.	Whitehorse Trough Laberge Group (Inklin assemblage?)	Volcanic	Quartz-feldspar porphyry clast in Laberge Group conglomerate	Gordey, S.P., McNicoll, V.J. and Mortensen, J.K.	1998	New U-Pb ages from the Teslin area, southern Yukon, and their bearing on terrane evolution in the northern Cordillera	Radiogenic Age and Isotopic Studies: Report 11: Geological Survey of Canada, Current Research 1998-F 0 129 148	60.85745	-133.8449
85	GGA-90-25-03E	229.6	1.4	U/Pb	Zircon	Igneous Crystallization	2 concordant fractions yielded a total range of 206Pb/238U ages of 229.6 +/- 1.4 Ma, which is the estimated crystallization age for the clast. Two other fractions indicate minor inheritance and Pb loss. See also titanite age for same clast.	Whitehorse Trough Laberge Group (Inklin assemblage?)	Volcanic	Quartz-feldspar porphyry clast in Laberge Group conglomerate	Gordey, S.P., McNicoll, V.J. and Mortensen, J.K.	1998	New U-Pb ages from the Teslin area, southern Yukon, and their bearing on terrane evolution in the northern Cordillera	Radiogenic Age and Isotopic Studies: Report 11: Geological Survey of Canada, Current Research 1998-F 0 129 148	60.85745	-133.8449
86	93CH-52-2	51.8	1.6	K/Ar	Whole Rock	Reset	Age calculated using constants from Steiger and Jager (1977). Good radiogenic analysis - age may reflect resetting by early Tertiary magmatism associated with Tintina fault movement.	Joe Mountain volcanic complex	Volcanic	Feldspar porphyritic andesite flow	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.86333	-134.67
87	YT-5	95.8	27.8	Fission Track	Apatite	Cooling	Age reflects cooling through 100 C crustal isotherm - good long etchable track lengths, statistically good age determination.	Laberge Group	Sedimentary	Hornblende granodiorite clast in the conglomerate	Dickie, J.R., Grist, A.M. and Donelick, R.A.	1992	Differential uplift across the Coast Plutonic Complex-Northern Stikine Terrane contact, Yukon: preliminary evidence from apatite fission-track thermochronometry	Yukon Geology, Vol. 3: Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 160 166	60.86667	-135.25
88	94CH-60-5	113.5	2.3	U/Pb	Zircon	Igneous Crystallization	Two concordant fractions. 206/238 age based on the older fraction. Post-xllization Pb loss pulled the other fraction (and perhaps both) down along concordia. Age may therefore be a minimum. Age is consistent with other K/Ar and U/Pb ages.	Byng Creek volcanic complex, Whitehorse-Coffee Creek Suite	Volcanic	Dacite lapilli tuff	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.87	-134.275
89	WB-55-A-1	227	17	K/Ar	Biotite	Cooling	Age has been updated using new constants from Steiger and Jager (1977). Note that the biotite was K-poor (4.13 wt. % K). Correction for atmospheric argon problematic (radiogenic Ar = 100%).	Belt Flat Creek Pluton	Plutonic	Hbl-bt granodiorite that intrudes Laberge Group	Lowdon, J.A.	1960	Part I - Geological age determinations	Age determinations by the Geological Survey of Canada. Report 1 Isotopic ages. GSC Paper 60-17 0 5 40	60.88333	-135.55
90	YT-6	113	20	Fission Track	Apatite	Cooling	Age reflects cooling through 100 C crustal isotherm - good long etchable track lengths, statistically good age determination.	Laberge Group	Sedimentary	augite-phyric andesite clast in the conglomerate	Dickie, J.R., Grist, A.M. and Donelick, R.A.	1992	Differential uplift across the Coast Plutonic Complex-Northern Stikine Terrane contact, Yukon: preliminary evidence from apatite fission-track thermochronometry	Yukon Geology, Vol. 3: Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 160 166	60.88333	-135.2167
91	93CH-53-3	105	3	K/Ar	Biotite	Cooling	Age calculated using constants from Steiger and Jager (1977). Biotite was slightly K-depleted (5.23 wt.%). Good radiogenic analysis - age is consistent with other igneous cooling ages for intrusions of this suite.	Cap Creek pluton, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Coarse-grained hornblende-biotite granodiorite	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.88333	-134.8167
92	93CH-53-3	111	1	U/Pb	Zircon	Igneous Crystallization	Three fractions, one with minor inheritance. Age is weighted 207Pb/206Pb average age of the two fractions overlapping concordia. Age is consistent with other U/Pb ages for intrusions of this suite.	Cap Creek pluton, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Coarse-grained hornblende-biotite granodiorite	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.88333	-134.8167
93	94CH-16-8	115.5	1	U/Pb	Zircon	Igneous Crystallization	3 fractions, two concordant. Age is from the most concordant fraction. Inheritance and post-crystallization Pb loss are reflected in the other two fractions.	M'Clintock Lakes pluton, Teslin Plutonic Suite	Plutonic	Coarse-grained biotite granite	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.88833	-135.2967
94	GGA-90-28-01B	185.32	1.9	Ar/Ar	Hornblende	Metamorphic	Age is based on the following two heating steps (97% cumulative gas released): 169.1 +/- 3.1 Ma (20%) and 188.5 +/- 0.5 Ma (77%). Age reported as 184.5 to flux monitor FCT-3=27.89 Ma. Recalibrated to FCT-3=28.02 (Renne et al., 1998)	Teslin Suture Zone	Metamorphic	Unfoliated hornblendite monomineralic zone within a lensoid metagreenstone body	Hunt, P.A. and Roddick, J.C.	1992	A compilation of K-Ar and 40Ar-39Ar ages: Report 22	Radiogenic Age and Isotopic Studies: Report 6, Geological Survey of Canada, Paper 92-2 0 179 226	60.90433	-133.6674
95	GGA-90-28-04B	188.04	1.8	Ar/Ar	Biotite	Metamorphic	Age is based on the following two heating steps (99% cumulative released gas): 187.9 +/- 0.7 Ma (39% gas) and 186.8 +/- 0.4 Ma (61% gas). Age reported as 187.2 to flux monitor FCT-3=27.89 Ma. Recalibrated to FCT-3=28.02 (Renne et al., 1998)	Teslin Suture Zone	Metamorphic	Near-monomineralic, unfoliated mosaic of large biotite flakes (up to 2 cm); occurs within a lensoid body of metagreenstone	Hunt, P.A. and Roddick, J.C.	1992	A compilation of K-Ar and 40Ar-39Ar ages: Report 22	Radiogenic Age and Isotopic Studies: Report 6, Geological Survey of Canada, Paper 92-2 0 179 226	60.91182	-133.6843
96	92CH-85-1	180	5	K/Ar	Hornblende	Cooling	Age calculated using constants from Steiger and Jager (1977). Good radiogenic analysis.	Nordenskiold Dacite (Long Lake Plutonic Suite)	Volcanic	Dacitic crystal tuff interlayered with Laberge Group sandstones.	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.91667	-135.22
97	92CH-85-1	184.1	4.2	U/Pb	Zircon	Igneous Crystallization	Weighted average 207Pb/206Pb age of 3 concordant nearly overlapping fractions. 2 other fractions are discordant and give anomalously older Pb/Pb ages. Age is consistent with that of the Little River Batholith.	Nordenskiold Dacite (Long Lake Plutonic Suite)	Volcanic	Dacitic crystal tuff interlayered with Laberge Group sandstones.	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.91667	-135.22
98	94CH-60-7	119.5	1	U/Pb	Zircon	Igneous Crystallization	Age is based on three overlapping concordant fractions.	Mount M'Clintock pluton, Teslin Plutonic Suite	Plutonic	hbl-bi granodiorite	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.91667	-135.22
99	RS91-421	179	2	Ar/Ar	Hornblende	Cooling	Preferred age (from Hunt and Roddick, 1993) is based on two heating steps (99% cumulative released gas): 177 +/- 3 Ma (30% gas) and 179 +/- 1 Ma (69% gas). The two ages are consistent.	Yukon Tanana Terrane and Teslin Suture Zone Mtqd (Stevens, 1992)	Plutonic	Massive hornblende-bearing tonalite to quartz diorite, locally grading into hornblendite	Stevens, R.A., Mortensen, J.K. and Hunt, P.A.	1993	U-Pb and 40Ar-39Ar geochronology of plutonic rocks from the Teslin suture zone, Yukon Territory	Radiogenic Age and Isotopic Studies: Report 7, Geological Survey of Canada, Paper 93-2 0 83 90	60.91808	-133.7552
100	RS91-421	182	2	Ar/Ar	Biotite	Cooling	Preferred age (from Hunt and Roddick, 1993) is based on two heating steps (96% cumulative released gas): 181 +/- 1 Ma (34% gas) and 182 +/- 1 Ma (62% gas). The two ages are consistent.	Yukon Tanana Terrane and Teslin Suture Zone Mtqd (Stevens, 1992)	Plutonic	Massive hornblende-bearing tonalite to quartz diorite, locally grading into hornblendite	Stevens, R.A., Mortensen, J.K. and Hunt, P.A.	1993	U-Pb and 40Ar-39Ar geochronology of plutonic rocks from the Teslin suture zone, Yukon Territory	Radiogenic Age and Isotopic Studies: Report 7, Geological Survey of Canada, Paper 93-2 0 83 90	60.91808	-133.7552
101	RS91-421	193.2	4.2	U/Pb	Titanite	Cooling	Age is from Stevens et al. (1993). 206Pb/238U age based on the most precise age of two concordant overlapping fractions.	Yukon Tanana Terrane and Teslin Suture Zone Mtqd (Stevens, 1992)	Plutonic	Massive hornblende-bearing tonalite to quartz diorite, locally grading into hornblendite	Stevens, R.A., Mortensen, J.K. and Hunt, P.A.	1993	U-Pb and 40Ar-39Ar geochronology of plutonic rocks from the Teslin suture zone, Yukon Territory	Radiogenic Age and Isotopic Studies: Report 7, Geological Survey of Canada, Paper 93-2 0 83 90	60.91808	-133.7552
102	TJB89-18-04	143	10	K/Ar	Whole Rock	No Age	No analytical data provided for K/Ar analysis. Age is erroneous this unit is intruded by TJB89-18-2 (168 Ma); moderate argon loss reported. The 252 Ma Rb/Sr age reported in this paper is discarded - is not an isochron age.	Cache Creek assemblage (?)	Volcanic	Aphanitic andesite with a greenish cast due to chlorite alteration of hornblende	Bremner, T.	1991	Mount Byng mineral occurrence.	Yukon Geology 1990, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 52 56	60.92697	-134.3456
103	Y89-18-3	104	4	K/Ar	Whole Rock	Igneous Crystallization	No analytical data provided for this sample. Age is consistent with other K/Ar and U/Pb ages for this body (see samples 94CH-60-6, 94CH-60-5, 94CH-31-1).	Byng Creek volcanic complex, Whitehorse-Coffee Creek Suite	Volcanic	Quartz porphyry rhyolite dyke	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.93333	-134.375
104	TJB89-18-01	121	10	K/Ar	Hornblende	Cooling	Excellent radiogenic analysis - age is consistent with ages of Teslin Suite plutons.	Teslin Plutonic Suite?	Plutonic	Granodiorite - comparable to igneous rocks in Mt. Nansen area	Bremner, T.	1991	Mount Byng mineral occurrence.	Yukon Geology 1990, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 52 56	60.93361	-134.3758

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 3: Geochronological Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
105	TJB89-18-03	104	8	K/Ar	Whole Rock	Igneous Crystallization	Excellent radiogenic analysis; age is consistent with other Mid-Cretaceous ages for volcanics in the area.		Volcanic	Quartz-eye rhyolite dyke, cuts andesite TJB89-18-4. Comparable to igneous rocks in Mt. Nansen area	Bremner, T.	1991	Mount Byng mineral occurrence.	Yukon Geology 1990, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 52 56	60.93361	-134.3758
106	92CH-75-8	183	2	U/Pb	Zircon	Igneous Crystallization	Three discordant fractions; this is a lower intercept age incorporating two regressions through the most concordant fraction (C). Age is consistent with that of the Nordenskiöld Dacite.	Little River Batholith, Long Lake Plutonic Suite	Plutonic	K-feldspar megacrystic quartz monzonite	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.93667	-135.8083
107	TJB89-18-02	168	12	K/Ar	Whole Rock	Igneous Crystallization	Excessively low K content (0.132 wt.%) in the analysis - minor argon loss is suspected by authors and therefore this age is at best a minimum estimate.	Lewes River Group (?)	Plutonic	Coarse-grained pyroxene gabbro	Bremner, T.	1991	Mount Byng mineral occurrence.	Yukon Geology 1990, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada 0 52 56	60.94083	-134.3817
108	94CH-60-4	270	6	U/Pb	Zircon	Igneous Crystallization	Poorly-constrained upper intercept age for a regression through 3 discordant fractions. Age indicates a possible newly documented Permian source for some Whitehorse Trough detritus.	Sheldon Member, Lewes River Group	Sedimentary	dacite porphyry cobble	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.95667	-134.2917
109	94CH-31-1	111	15	U/Pb	Zircon	Igneous Crystallization	Upper intercept age for a single slightly discordant fraction. Age is relatively imprecise and older than other related bodies, ex. Cap Mountain pluton 93CH51-1; 107.6 Ma (this study) and other Mount McIntyre suite rocks (Hart, 1994).	Byng Creek pluton, McIntyre Plutonic Suite/Whitehorse-Coffee Creek Suite	Plutonic	Pink quartz monzonite	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.95667	-134.3583
110	94CH-58-4	53.6	0.2	U/Pb	Zircon	Igneous Crystallization	Three concordant fractions, age based on oldest fraction. Other two fractions probably underwent post-crystallization Pb loss and were pulled down along concordia. Age is consistent with ages of other Nisling Range Plutonic Suite intrusions.	Flat Creek pluton, Nisling Range Plutonic Suite	Plutonic	biotite granite	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.96167	-135.47
111	93CH-T11	50.6	1.4	K/Ar	Biotite	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Biotite was K-depleted (4.23 wt.%). Satisfactory analysis (78% radiogenic Ar), but age is younger than expected (was thought to be part of ca. 70 Ma Carmacks suite of volcanics).	Ta'an Plug	Plutonic	fine-grained bi-hbl quartz monzonite	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.97	-135.305
112	Y88-44A	209.5	8	U/Pb	Zircon	Igneous Crystallization	1 concordant, 2 slightly slightly discordant fractions form short linear array. One concordant fraction at 194 Ma has a large 207/235 error and an 207/206 age. Assigned age is weighted mean of the 207/206 ages for all 3 fractions.	Laberge Group	Plutonic	Granite cobble: Coarsely crystalline grey alkali feldspar syenite with medium-grained hornblende	Hart, C.J.R., Dickie, J.R., Ghosh, D.K. and Armstrong, R.L.	1995	Provenance constraints for Whitehorse Trough conglomerate: U-Pb zircon dates and initial Sr ratios of granitic clasts in Jurassic Laberge Group, Yukon Territory	Jurassic magmatism and tectonics of the North American Cordillera, Geological Society of America Special Paper 299 0 47 63	60.975	-135.1833
113	Y88-44B	210	6	U/Pb	Zircon	Igneous Crystallization	3 co-linear fractions, 1 concordant at 208.5 +/- 1 Ma (207/235 age), 2 just slightly discordant (minor Pb loss). Age is upper intercept of discordia fit through all 3 (MSWD=0.76). Age is consistent with other Laberge clast ages.	clast from Laberge Group	Plutonic	Granite clast: dark gray, medium-grained plagioclase hornblende granophyric granodiorite	Hart, C.J.R., Dickie, J.R., Ghosh, D.K. and Armstrong, R.L.	1995	Provenance constraints for Whitehorse Trough conglomerate: U-Pb zircon dates and initial Sr ratios of granitic clasts in Jurassic Laberge Group, Yukon Territory	Jurassic magmatism and tectonics of the North American Cordillera, Geological Society of America Special Paper 299 0 47 63	60.975	-135.1833
114	SYA79-56	87.3	2	K/Ar	Biotite	Mineralization	Age is from Hunt and Roddick (1987), calculated using constants from Steiger and Jager (1977). ~3% chlorite contamination. Wt.% K= 6.33. Good radiogenic analysis	the Red Mnt. deposit is a porphyry moly deposit associated with a small granodioritic stock intruding phyllitic rocks of the Yukon-Tanana (Kootenay) terrane east of the Teslin River. Red Mountain (Yukon) molybdenum d	Hydrothermal	Altered granodiorite porphyry cut by qtz veinlets with sparse moly. Secondary (hydro) bt occurs as grns 1-2 mm in the altered granodiorite and the qtz veinlets. The hydro bt in the altered granodiorite appears to replace primary bt for the most part.	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	60.98778	-134.7417
115	SYA79-56	95.6	2.8	K/Ar	Biotite	Mineralization	Age is from Stevens et al. (1982), calculated using constants from Steiger and Jager (1977). ~3% chlorite contamination. Wt.% K= 6.33. Good radiogenic analysis.	the Red Mnt. deposit is a porphyry moly deposit associated with a small granodioritic stock intruding phyllitic rocks of the Yukon-Tanana (Kootenay) terrane east of the Teslin River. Red Mountain (Yukon) molybdenum d	Hydrothermal	Altered granodiorite porphyry cut by qtz veinlets with sparse moly. Secondary (hydro) bt occurs as grns 1-2 mm in the altered granodiorite and the qtz veinlets. The hydro bt in the altered granodiorite appears to replace primary bt for the most part.	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	60.98778	-134.7417
116	SYA80-33	79	1.8	K/Ar	Phlogopite	Cooling	Age is from Hunt & Roddick (1987). Clean ragged anhedral grains, ~2% chlorite alteration.		Plutonic	Post-mineralization quartz monzonite porphyry dyke at Red Mountain molybdenum deposit	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	60.98806	-134.7417
117	SYA80-33	87.4	1.9	K/Ar	Phlogopite	Cooling	Age is from Stevens et al. (1982). Clean ragged anhedral grains, ~2% chlorite alteration.		Plutonic	Post-mineralization quartz monzonite porphyry dyke at Red Mountain molybdenum deposit	Stevens, R.D., Delabio, R.N. and Lachance, G.R.	1982	Age determinations and geological studies, K-Ar isotopic ages, Report 16	Geological Survey of Canada, Paper 82-2. 0 1 56	60.98806	-134.7417
118	93CH-55J	76.6	2.6	K/Ar	Hornblende	Reset	Age calculated using constants from Steiger and Jager (1977). Very low K in sample (0.108 wt.%) and low radiogenic Ar (41%) in the analysis. No thermal event of this age has been recognized in this area, therefore the age may be suspect.	Joe Mountain volcanic complex	Volcanic	basaltic andesite flow	Hart, C.J.R.	1997	A transect across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)	Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Bulletin 8 8 105 0	60.995	-134.5489
119	08MCO89	216.35	0.23	U/Pb	Zircon	Igneous Crystallization	Weighted average 206Pb/238U age of 4 concordant overlapping fractions.	Dike at King Lake prospect	Plutonic	Granitic dike intruding diorite/gabbro of L Triassic age?	Friedman, R.M. and Colpron, M.	2008		unpublished	60.80833	-135.483
120	04AT253-1	173	0.5	U/Pb	Zircon	Igneous Crystallization	2 point regression anchored at nearly concordant fraction at 172.9 Ma	Tally Ho Mountain	Plutonic	megacrystic granite	Tizzard, A.M.	2009	The Tally Ho Shear Zone: Implications for the Tectonic Evolution of the Western Margin of Stikinia, Southern Yukon Territory, Canada	Unpublished M.Sc. thesis, University of Victoria, Victoria, British Columbia, 97 p.	60.22811	-135.0874
121	04AT251-1	208.4	4.3	U/Pb	Zircon	Igneous Crystallization	3 point regression through discordant fractions; lower intercept at 208.4 +/- 4.3 Ma (MSWD=0.034)	Tally Ho Mountain	Plutonic	leucogabbro	Tizzard, A.M.	2009	The Tally Ho Shear Zone: Implications for the Tectonic Evolution of the Western Margin of Stikinia, Southern Yukon Territory, Canada	Unpublished M.Sc. thesis, University of Victoria, Victoria, British Columbia, 97 p.	60.21952	-135.074
122	Y88-6.5	51.3	3.6	K/Ar	Whole Rock	Cooling	Unpublished data, unavailable for assessment.		Plutonic	Feldspar-phyric andesite: age may be reset by nearby Paleocene/Eocene plutons	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.00833	-135.5
123	94028	59	6	K/Ar	Biotite	Cooling	Age recalculated using constants from Steiger and Jager (1977). Fresh coarse grains - satisfactory analysis (60% radiogenic Ar). Age is consistent with other ages for this suite.	Bennett Lake cauldron complex (Nisling Range Plutonic Suite)	Plutonic	Hornblende-biotite quartz monzonite	Lambert, M.B.	1970	The Bennett Lake cauldron subsidence complex, British Columbia and Yukon Territory	Geological Survey of Canada, Bulletin 227 227 213 0	60.01194	-135.4211
124	12017	52	6	K/Ar	Whole Rock	Igneous Crystallization	Age recalculated using constants from Steiger and Jager (1977). Quartzofeldspathic matrix material analyzed. Only 49% radiogenic Ar but age is still consistent with other ages obtained for this suite.	Bennett Lake cauldron complex (Nisling Range Plutonic Suite)	Plutonic	Sparsely porphyritic rhyolite ring dyke of Bennett Lake complex	Lambert, M.B.	1970	The Bennett Lake cauldron subsidence complex, British Columbia and Yukon Territory	Geological Survey of Canada, Bulletin 227 227 213 0	60.01833	-135.1269
125	Y88-7	54.2	0.2	U/Pb	Zircon	Igneous Crystallization	3 U-rich fractions analyzed (1720-2638 ppm U). Age is defined by the combined 206/238 ages of 2 concordant overlapping fractions. The 3rd and most U-rich fraction was pulled down along concordia, reflecting Pb loss.	Mount Macauley pluton, Nisling Plutonic Suite (Skukum)	Plutonic	granite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.02499	-135.515
126	89CH52-1	54.9	1.9	K/Ar	Hornblende	Cooling	Good analysis - age is consistent with other cooling ages for this suite.	Pennington stock, Nisling Plutonic Suite	Plutonic	Altered hornblende-biotite quartz monzonite/syenite plugging Llewellyn fault	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.025	-134.95
127	89CH52-1	41.2	2.8	K/Ar	Biotite	Cooling	Very low K content (1.30 wt.%) due to chlorite alteration. Satisfactory analysis (73% radiogenic Ar), however the age is anomalously young compared to other cooling ages for this suite. Age is not consistent with hbl age for this sample.	Pennington stock, Nisling Plutonic Suite	Plutonic	Altered hornblende-biotite quartz monzonite/syenite plugging Llewellyn fault	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.025	-134.95
128	Y88-6	51.2	1.8	K/Ar	Whole Rock	Igneous Crystallization	No analytical data provided for this sample, however, this age is consistent with the 50.3 +/- 1.8 Ma age for Crozier Ck. sample Y88-29, and with other K/Ar ages for this suite (see Morrison et al., 1979; Pride and Clark, 1985).	Crozier Creek pluton, Nisling Plutonic Suite	Plutonic	Coarse-grained, pinkish leucocratic granite; part of ring dyke of Bennett Lake cauldron	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.04833	-135.185

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 3: Geochronological Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
129	Y88-6	56	0.3	U/Pb	Zircon		2 concordant fractions, relatively high common Pb. Age defined by 206/238 age of the youngest fraction. Older fraction believed to be contaminated; an abraded portion of this frac plotted even older (80 Ma).	Crozier Creek pluton, Nisling Plutonic Suite	Plutonic	Coarse-grained, pinkish leucocratic granite; part of ring dyke of Bennett Lake cauldron	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.04833	-135.185
130	CH88-75-2	70.9	2.5	K/Ar	Whole Rock	Cooling	Fairly good analysis (2.4 wt.% K, 71% radiogenic Ar). Age is consistent with other cooling ages for this suite.	Wheaton River volcanic suite	Plutonic	Andesitic porphyry plug intruding Laberge Group	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.05666	-134.88
131	Y88-29	50.3	1.8	K/Ar	Whole Rock	Cooling	Excellent radiogenic analysis - age is consistent with other ages obtained for this suite.	Crozier Creek pluton, Nisling Plutonic Suite	Plutonic	quartz monzonite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.08333	-135.225
132	Y88-8	108	5.1	U/Pb	Zircon	Igneous Crystallization	Age is 207/206 age of the most concordant, least U-rich fraction ("a"). Lower error limit reflects the youngest possible 206/238 age for this fraction. Upper limit includes 207/206 age for nearly concordant fraction "c" which overlaps slightly with "	Boudette Creek pluton, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	diorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.09	-135.415
133	WHA 8A	113	8	K/Ar	Hornblende	Cooling	Analytical data not provided in paper - age is within error of but anomalously (?) older than other K/Ar cooling ages for this plutonic suite.	Boudette Creek pluton, Whitehorse-Coffee Creek Plutonic Suite?	Plutonic	Foliated biotite-hornblende granodiorite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.09166	-135.4083
134	Y88-35B	55.4	4.8	K/Ar	Whole Rock	Cooling	Unpublished data - not available for assessment. Age is consistent, however, with other ages for bimodal volcanics in the area.		Plutonic	Andesite porphyry dyke cutting Lower Cretaceous and Eocene units	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.1325	-135.3517
135	Y88-30	176.4	1.8	U/Pb	Zircon	Igneous Crystallization	3 fractions overlap concordia, defining a Pb loss array. Age is 206/238 age of oldest fraction, upper error limit adjusted to include the 207/206 ages for the two oldest fractions. Age is consistent with other plutons in this suite.	Fenwick Creek pluton (phase of Bennett Batholith, Bennett Pluton	Plutonic	Hornblende diorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.14	-135.2067
136	Y88-30	136	5	K/Ar	Hornblende	Cooling	Excellent radiogenic analysis - age is consistent with other metamorphic cooling ages in the area (e.g. Tally Ho and Alligator plutons).	Fenwick Creek pluton (phase of Bennett Batholith, Bennett Pluton	Plutonic	Hornblende diorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.14	-135.2067
137	Y88-36	109.2	0.4	U/Pb	Zircon	Igneous Crystallization	3 fractions all overlapping concordia in linear array. Age is 206/238 age of most concordant oldest fraction, which is similar to an upper intercept regression age through all 3. Pb loss likely affected all fractions and this age may thus be a minimu	Mount Ward pluton, Mount McIntyre Plutonic Suite	Plutonic	Coarse-grained K-feldspar-phyric biotite granite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.14833	-135.3383
138	ZR3-2_3	111	3	U/Pb	Zircon	Igneous Crystallization	Age is reinterpreted by J.K. Mortensen, based on two near-concordant fractions. From original data of Baadsgaard (previously interpreted as 119 +/- 5 Ma). Data and concordia not available.	Mount Anderson pluton	Plutonic	Biotite-hornblende granodiorite on Mount Anderson	Baadsgaard, H.	1988		unpublished	60.15833	-135.2
139	92CH-70-1	176.1	2.4/0.2	U/Pb	Zircon	Igneous Crystallization	Unpublished data - no analytical data available.	Bennet Pluton	Plutonic		Mortensen, J.K. and Hart, C.J.R.	1992		unpublished	60.16668	-135.1667
140	Y88-40	110.5	0.4	U/Pb	Zircon	Igneous Crystallization	Three overlapping concordant fractions. Age encompasses 206/238 error limits of all 3. The 207/206 ages for the fractions suggest this pluton may be slightly older, but this age is consistent with other ages for this plutonic suite.	Berney Creek pluton, Whitehorse-Coffee Creek Plutonic Suite	Plutonic	Hornblende granodiorite	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.16833	-135.4
141	89CH33-3	96	15	K/Ar	Biotite	Cooling	Biotite is partially chloritized; only 1.48 wt.% K and 58% radiogenic Ar in analysis. Age is highly imprecise and younger than most cooling ages for this suite, probably a result of K and Ar loss.	Carbon Hill pluton, Mount McIntyre Plutonic Suite	Plutonic	Biotite granite, intrudes Triassic granitic plutonic rocks	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.17166	-135.2333
142	Y88-42B	61	4.2	K/Ar	Whole Rock	Alteration	Unpublished data - not available for assessment. See also Rb-Sr wr isochron for sample Y88-42A/42B and K/Ar age of sample Y88-2A.		Volcanic	Mineralized rhyolite at Omni mine	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.17833	-135.3933
143	Y88-37A	105	4	K/Ar	Whole Rock	Cooling	Good radiogenic analysis - age is consistent with biotite age for sample Y88-38 from same body and with other Mt. Nansen Volcanics.	Carbon Hill volcanic suite (Mt. Nansen Group?)	Volcanic	Porphyritic andesite flow	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.18333	-135.2767
144	Y88-43A	53	3.8	K/Ar	Whole Rock	Alteration	Unpublished data - not available for assessment. See also samples Y88-43B to Y88-43D.		Plutonic	Quartz-feldspar porphyry dyke	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.19166	-135.28
145	Y88-43C	59.1	4.2	K/Ar	Whole Rock	Alteration	Unpublished data - not available for assessment. See also samples Y88-43A to Y88-43D.		Volcanic	Rhyolite in drill core	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.19166	-135.28
146	Y88-43D	56.9	4	K/Ar	Whole Rock	Alteration	Unpublished data (unavailable for assessment)		Volcanic	Rhyolite in drill core; probably reset during mineralization	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.19166	-135.28
147	Y88-38	106	4	K/Ar	Biotite	Cooling	Biotite was slightly K-depleted (4.55 wt.%). Excellent radiogenic analysis - age is consistent with whole rock age for sample Y88-37A and with ages for other Mt. Nansen Volcanics.	Carbon Hill volcanic suite (Mt. Nansen Group?)	Plutonic	dacite dyke	Hart, C.J.R.	1995	Magmatic and tectonic evolution of the Intermontane Superterrane and Coast Plutonic Complex in southern Yukon Territory	Unpublished M.Sc. thesis, University of British Columbia, Vancouver, British Columbia 0 198 0	60.19167	-135.2717
148	R-W-371	106	8	K/Ar	Hornblende	Cooling	Excellent radiogenic analysis - provides a minimum estimate for the age of granodiorite emplacement.	Coast Plutonic Complex	Plutonic	Foliated granodiorite	Watson, P.H., Godwin, C.I. and Armstrong, R.L.	1981	Geology, mineralization, and K-Ar and Rb-Sr isotopic study of the Ram zinc-lead-silver property, Yukon Plateau, southwest Yukon Territory	Yukon Exploration and Geology 1979-80, Indian and Northern Affairs Canada (Whitehorse) 0 123 127	60.19333	-135.75
149	R-W-371	53.7	3.8	K/Ar	Biotite	Reset	Excellent radiogenic analysis - age reflects resetting by an Eocene thermal event (possibly Nisling/Skukum magmatism).	Coast Plutonic Complex	Plutonic	Foliated granodiorite	Watson, P.H., Godwin, C.I. and Armstrong, R.L.	1981	Geology, mineralization, and K-Ar and Rb-Sr isotopic study of the Ram zinc-lead-silver property, Yukon Plateau, southwest Yukon Territory	Yukon Exploration and Geology 1979-80, Indian and Northern Affairs Canada (Whitehorse) 0 123 127	60.19333	-135.75
150	3/2/1990	53.33	0.19	Ar/Ar	Whole Rock	Igneous Crystallization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). Age is based on a plateau comprising the last 6 of 10 heating steps (50.5% of 39Ar).	Mt. Skukum Volcanic Complex	Volcanic	quartz-feldspar porphyritic rhyolite dyke	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario 0 406 0	60.19482	-135.4833
151	3/2/1990	53.74	0.43	Ar/Ar	K-Feldspar	Igneous Crystallization	Monitor used: LP-6 biotite (128.4 Baksi et al, 1996). High purity Kspar mineral separate. Age is based on a plateau comprising the 13 of 14 heating steps (95.3% of 39Ar). Age recalculated: LP-6 biotite (128.4 Ma; Baksi et al, 1996).	Mt. Skukum Volcanic Complex	Volcanic	quartz-feldspar porphyritic rhyolite dyke	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario 0 406 0	60.19482	-135.4833
152	ASTN-13	50.7	3.6	K/Ar	Whole Rock	Alteration	Age calculated using constants from Steiger and Jager (1977). Only 67% radiogenic Ar; age is within error of ages obtained for the Mount Skukum volcanics.	Mt. Skukum volcanic complex	Volcanic	Fine grained andesite with pervasive propylitic alteration	McDonald, B.W.D.	1990	Geology and genesis of the Mount Skukum epithermal gold-silver deposits, southwestern Yukon Territory (NTS 105D 3, 6)	Exploration and Geological Services Division, Bulletin 2 1 65 10	60.2	-135.4667
153	ASTN-14	53.2	3.6	K/Ar	Whole Rock	Igneous Crystallization	Age calculated using constants from Steiger and Jager (1977). Excellent radiogenic analysis - age is consistent with ages for other Mount Skukum volcanics.	Mt. Skukum volcanic complex	Volcanic	Fresh, fine grained andesite	McDonald, B.W.D.	1990	Geology and genesis of the Mount Skukum epithermal gold-silver deposits, southwestern Yukon Territory (NTS 105D 3, 6)	Exploration and Geological Services Division, Bulletin 2 1 65 10	60.2	-135.4667
154	4/2/1990	56.94	1.35	Ar/Ar	K-Feldspar	Igneous Crystallization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). Qtz also present in concentrate. 4.0 wt.% K, 30-70% rad. Ar in heating steps. Slightly disturbed, saddle-shaped age spectrum - plateau in saddle = 5 of 10 steps (55% of 39Ar) and gives a min. age.	Member 5, Butte Creek Formation, Mt. Skukum Volcanic Complex	Volcanic	welded rhyolitic ignimbrite, predates mineralization	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario 0 406 0	60.2074	-135.4799
155	7-16-1A	54.96	0.55	Ar/Ar	Alunite	Alteration	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). 80-120 mesh separate - good radiogenic analysis. Plateau age comprises last 5 of 6 steps (93.6% 39Ar). Age is consistent with other alunite ages for the Alunite Cap.	Alunite Cap, Watson River Fm, Lower Member, Skukum Group	Hydrothermal	Barren hypogene alunite-kaolinite-type alteration	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.20992	-135.4666

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 3: Geochronological Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
156	7-16-1A	56.08	0.45	Ar/Ar	Alunite	Alteration	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). 120-140 mesh separate - fairly good radiogenic analysis. Slightly disturbed spectrum - step dates increase with temperature, attaining a plateau age comprising 3 of 6 steps (82.6% 39Ar).	Alunite Cap, Watson River Fm, Lower Member, Skukum Group	Hydrothermal	Barren hypogene alunite-kaolinite-type alteration	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.20992	-135.4666
157	7-16-1	55.37	0.51	Ar/Ar	Alunite	Alteration	Monitor used: LP-6 biotite (128.5 Ma; Roddick, 1983). 120-140 mesh separate - fairly good radiogenic analysis. Plateau age comprises 4 of 6 steps (98.5% 39Ar). Age is consistent with other alunite ages for the Alunite Cap.	Alunite Cap, Watson River Fm, Lower Member, Skukum Group	Hydrothermal	Barren hypogene alunite-kaolinite-type alteration	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21014	-135.4666
158	7-16-1	55.89	0.45	Ar/Ar	Alunite	Alteration	Monitor used: LP-6 biotite (128.5 Ma; Roddick, 1983). 80-120 mesh separate - fairly good radiogenic analysis. Plateau age comprises 4 of 5 steps (97.8% 39Ar). Age is consistent with other alunite ages for the Alunite Cap.	Alunite Cap, Watson River Fm, Lower Member, Skukum Group	Hydrothermal	Barren hypogene alunite-kaolinite-type alteration	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21014	-135.4666
159	1/1/1990	56.3	0.4	U/Pb	Zircon	Igneous Crystallization	4 concordant partially overlapping fractions. This is the range of 206/238 ages for all 4 fractions. The oldest concordant fraction probably gives a minimum age for crystallization (56.4 +/- 0.3 Ma).	Vesuvius Formation, Skukum Group	Volcanic	Fine-grained, slightly porphyritic, slightly flow-banded sericitized rhyolite dyke. Freshest available outcrop of the Main Cirque dyke, which hosts gold mineralization	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21315	-135.4633
160	1/1/1990	53.26	0.17	Ar/Ar	Sericite	Alteration	Monitor used: LP-6 biotite (128.5 Ma; Roddick, 1983). Sericitized light fraction - excellent radiogenic analysis. Plateau age comprises 2 of 12 steps (60.6% 39Ar) and is consistent with inv. isochron age of 53.33 +/- 0.26 Ma, MSWD=1.51.	Vesuvlus Formation, Skukum Group	Volcanic	Fine-grained, slightly porphyritic, slightly flow-banded sericitized rhyolite dyke. Freshest available outcrop of the Main Cirque dyke, which hosts gold mineralization	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21315	-135.4633
161	1/1/1990	53.33	0.35	Ar/Ar	Sericite	Alteration	Monitor used: LP-6 biotite (128.5 Ma; Roddick, 1983). Sericitized whole rock, 45-60 mesh separate - excellent radiogenic analysis. Plateau age comprises 4 of 12 steps (56.6% 39Ar) and is consistent with inv. isochron age of 53.18 +/- 0.27 Ma, MSWD=1.	Vesuvius Formation, Skukum Group	Volcanic	Fine-grained, slightly porphyritic, slightly flow-banded sericitized rhyolite dyke. Freshest available outcrop of the Main Cirque dyke, which hosts gold mineralization	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21315	-135.4633
162	1/4/1990	54.64	0.31	Ar/Ar	NA	Igneous Crystallization	Age from Love (1997). Monitor used: LP-6 biotite (128.5 Ma; Roddick, 1983). Light mineral concentrate. Excess Ar indicated from inverse isochron diagram; age given is a correlation age from inverse isochron, MSWD=1.04 (62.3% of 39Ar).	Mt. Skukum Volcanic Complex	Volcanic	Fine-grained quartz-feldspar-phyric andesite dyke; cuts rhyolite dyke which hosts the Cirque Zone (not seen cutting ore)	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.2133	-135.4633
163	1/4/1990	55.7	0.3	U/Pb	Zircon	Igneous Crystallization	Love et al. (1998): Range of 206/238 ages for 3 concordant U-rich fractions (1417-4047 ppm). Because of high U, Pb loss is likely, and the oldest concordant fraction probably gives a minimum age for crystallization (55.9 +/- 0.1 Ma).	Mt. Skukum Volcanic Complex	Volcanic	Fine-grained quartz-feldspar-phyric andesite dyke; cuts rhyolite dyke which hosts the Cirque Zone (not seen cutting ore)	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.2133	-135.4633
164	4/1/1988	54.01	0.48	Ar/Ar	Adularia	Mineralization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). 60-80 mesh separate - excellent radiogenic analysis. Plateau age comprises last 6 of 9 steps (66.9% 39Ar). Age is indistinguishable from other adularia ages for the Lake and Cirque Zones.	Lake Zone, hosted in Watson River Fm, Lower Member, Skukum Group	Hydrothermal	Gold-bearing adularia-sericite-type quartz-calcite vein	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21663	-135.4746
165	8/2/2007	53.86	0.56	Ar/Ar	Adularia	Mineralization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). 60-80 mesh separate - excellent radiogenic analysis. Plateau age comprises last 10 of 11 steps (89.4% 39Ar). Age is indistinguishable from other adularia ages for the Lake and Cirque Zones.	Cirque Zone, hosted in Watson River Fm, Lower Member, Skukum Group	Hydrothermal	Gold-bearing adularia-sericite-type quartz-calcite vein	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21664	-135.4737
166	1/2/2009	52.79	0.22	Ar/Ar	Sericite	Alteration	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). Sericitized whole rock (45-60 mesh fraction) - excellent radiogenic analysis. Plateau age comprises 11 of 16 steps (79.7% 39Ar).	Cirque Zone, Vesivius Fm, Skukum Group	Volcanic	Sericitized rhyolite dyke	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21667	-135.4733
167	1/2/2009	53.27	0.13	Ar/Ar	Sericite	Alteration	Monitor used: LP-6 biotite (128.4 Ma; Baksi et al, 1996). Sericitized light fraction - excellent radiogenic analysis. Plateau age comprises 8 of 11 steps (80% 39Ar).	Cirque Zone, Vesivius Fm, Skukum Group	Volcanic	Sericitized rhyolite dyke	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21667	-135.4733
168	Y88-3B(F)	58.4	4	K/Ar	Whole Rock	Cooling	Unpublished data, unavailable for assessment. Age is similar to that of Nisling Range Plutonic Suite intrusions.	Nisling Range Plutonic Suite?	Plutonic	Felsite dyke cutting Nisling Assemblage	Ghosh, D.K. and Armstrong, R.L.	1988		unpublished	60.21833	-135.1833
169	6-23-3	54.63	0.46	Ar/Ar	Adularia	Mineralization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). 60-80 mesh separate - excellent radiogenic analysis. Plateau age comprises last 8 of 9 steps (95.7% 39Ar). Age is indistinguishable from other adularia ages for the Lake and Cirque Zones.	Cirque Zone, Vesuvius Fm, Skukum Group	Hydrothermal	Gold-bearing adularia-sericite-type quartz-calcite vein in rhyolite dyke	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21935	-135.4667
170	6-23-3	54.66	0.44	Ar/Ar	Adularia	Mineralization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). 80-120 mesh separate - excellent radiogenic analysis. Plateau age comprises last 11 of 12 steps (97.1% 39Ar). Age is indistinguishable from other adularia ages for the Lake and Cirque Zones.	Cirque Zone, Vesuvius Fm, Skukum Group	Hydrothermal	Gold-bearing adularia-sericite-type quartz-calcite vein in rhyolite dyke	Love, D.A., Clark, A.H., Hodgson, C.J., Mortensen, J.K., Archibald, D.A. and Farrar, E.	1998	The timing of adularia-sericite-type mineralization and alunite-kaolinite-type alteration, Mount Skukum epithermal gold deposit, Yukon Territory, Canada; 40Ar-39Ar and U-Pb geochronology	Economic Geology 93 437 462	60.21935	-135.4667
171	5/1/1990	54.06	0.64	Ar/Ar	K-Feldspar	Igneous Crystallization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). High purity Kspar mineral separate. Age is based on a plateau comprising 10 of 12 heating steps (97% of 39Ar). Age coincides with adularia age from the mineralized Cirque Zone	Central Intrusion, Mt. Skukum Volcanic Complex	Plutonic	crowded porphyritic quartz-feldspar rhyolite	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario 0406 0	60.22176	-135.4828
172	5/1/1990	54.78	0.18	Ar/Ar	K-Feldspar	Igneous Crystallization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). High purity Kspar separate. Age is based on a plateau comprising 10 of 12 heating steps (97.8% of 39Ar). Age coincides with adularia age from the mineralized Cirque Zone	Central Intrusion, Mt. Skukum Volcanic Complex	Plutonic	crowded porphyritic quartz-feldspar rhyolite	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario 0406 0	60.22176	-135.4828
173	90-5-1A	54.5	0.3	Ar/Ar	K-Feldspar	Igneous Crystallization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). High purity Kspar mineral separate. Age is based on a plateau comprising 6 of 9 heating steps (79.8% of 39Ar). Age coincides with adularia age from the mineralized Cirque Zone	Central Intrusion, Mt. Skukum Volcanic Complex	Plutonic	sparsely porphyritic quartz-feldspar rhyolite	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario 0406 0	60.22176	-135.4828
174	1/3/1990	55.68	1.36	Ar/Ar	Plagioclase	Igneous Crystallization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). High purity plag concentrate. Age is based on a plateau comprising the last 4 of 6 heating steps (93.4% of 39Ar). Age is consistent with the other plag age for this sample.	Lower Member, Watson River Formation, Mt. Skukum Volcanic Comp	Volcanic	andesite lava flow, predates mineralization	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario 0406 0	60.22445	-135.4837
175	1/3/1990	55.12	0.53	Ar/Ar	Plagioclase	Igneous Crystallization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). High purity plag concentrate. Age is based on a "plateau" comprising the last 3 of 7 heating steps (53.6% of 39Ar). Age is consistent with the other plag age for this sample.	Lower Member, Watson River Formation, Mt. Skukum Volcanic Comp	Volcanic	andesite lava flow, predates mineralization	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario 0406 0	60.22445	-135.4837
176	2/3/1990	55.94	1.76	Ar/Ar	Plagioclase	Igneous Crystallization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). High purity plag concentrate. Age is based on a plateau comprising the last 5 of 8 heating steps (80.2% of 39Ar). Age is consistent with the other plag age for this sample.	Watson River Formation, Mt. Skukum Volcanic Complex	Volcanic	andesite lava flow, predates mineralization	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario 0406 0	60.22625	-135.4811

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 3: Geochronological Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)																
MAP#	SAMPLE	AGE	ERR_+/-	METHOD	MATERIAL	AGE_INTERP	AGE_NOTE	GEOLOGIC_DESC	ROCKTYPE	ROCKDESC	AUTHORS	YEAR	TITLE	REFERENCE	LATITUDE	ONGITUDE
177	2/3/1990	56.6	0.79	Ar/Ar	Plagioclase	Igneous Crystallization	Monitor used: LP-6 biotite (128.5 Ma; Renne, 1983). High purity plag concentrate. Age is based on a plateau comprising all 5 heating steps (100% of 39Ar). Age is consistent with the other plag age for this sample.	Watson River Formation, Mt. Skukum Volcanic Complex	Volcanic	andesite lava flow, predates mineralization	Love, D.A.	1997	The Mount Skukum epithermal gold deposit and its geological setting, Yukon Territory, Canada	Unpublished Ph.D. thesis, Queen's University, Kingston, Ontario O406 0	60.22625	-135.4811
178	WHA 10	52.6	3.6	K/Ar	Hornblende	Cooling	Analytical data not provided in paper. This age may reflect thermal resetting by Eocene magmatism (mapping suggests this unit is associated with Cretaceous intrusions).		Plutonic	Equigranular hornblende-biotite granodiorite	Morrison, G.W., Godwin, C.I. and Armstrong, R.I.	1979	Interpretation of isotopic ages and 87Sr/86Sr initial ratios for plutonic rocks in the Whitehorse map area, Yukon	Canadian Journal of Earth Sciences 16 1988 1997	60.28167	-135.9067
<div><div>Note: This compilation of geochronological data for Whitehorse trough and surrounding areas is based in part on YukonAge 2004 (Breitsprecher and Mortensen, 2004). It includes additional recently published ages, as well as a number of unpublished ages acquired by the Yukon Geological Survey. Sampling localities have been verified for most samples and corrections have been made where required, correcting in some cases errors in original database.</div><div>Breitsprecher, K., and Mortensen, J. K., 2004, Yukonage 2004: A database of isotopic age determinations for rock units from Yukon Territory, Canada: Yukon Geological Survey.</div></div>																

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 4: Fossil Data for Sheet 1 - Parts of Carmacks (115I) and Glenlyon (105L)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATEGORY
1	xx6419	C-086427	probably Late Triassic, Carnian		Hancock	M.J. ORCHARD	1979	TOR-79-20-13	Glenlyon	105L/4	conodont; foraminiferid; radiolarian; bivalve; gastropod; fish	ichthyolith	microfossil
2	xx6420	C-086428	Late Triassic, Carnian		Hancock	M.J. ORCHARD	1979	TOR-79-20-12	Glenlyon	105L/4	conodont; foraminiferid; radiolarian; bivalve; gastropod; fish	ichthyolith	microfossil
3	xx6421	C-086429	Late Triassic, Norian		Hancock	M.J. ORCHARD	1979	TOR-79-20-2A	Glenlyon	105L/4	conodont; foraminiferid; radiolarian; bivalve; gastropod; fish	ichthyolith	microfossil
4	xx6422	C-086430	Late Triassic, Norian		Hancock	M.J. ORCHARD	1979	TOR-79-20-1A	Glenlyon	105L/4	conodont; foraminiferid; radiolarian; bivalve; gastropod; fish	ichthyolith	microfossil
5	9843	C-081318	Lower Jurassic, probably Sinemurian		Tanglefoot	T.P. Poulton	0		Glenlyon	105L/4	bivalve		macrofossil
6	7936	O-028504	Norian, probably late Norian		Hancock?	E.T. TOZER	0	5611	Glenlyon	105L/4			macrofossil
7		C-091780	Middle Jurassic, possibly middle Bajocian		Tanglefoot	T.P. Poulton	2006		Carmacks	115I/1	bivalve		macrofossil
8			Carnian- early Norian		Semenof	M.J. Johns	2003	02GGA721	Glenlyon	105L/4	ichthyolith		microfossil
9	xx6112	C-202965	Early Paleocene - late Neogene		Tantalus?	A.R. SWEET	1993	93-CH-P9	Carmacks	115I/1	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, ginkgo; plant, angiosperm	pollen, polyporate; pollen, tricolpate; pollen, tricolporate; pollen, triporate; pollen, bisaccate; spore, trilete; palynomorph	microfossil
10		C-440187	Middle Jurassic, Lower Bajocian		Tantalus	A.R. Sweet	2006		Carmacks	115I/1	palynomorph		microfossil
11			Carnian- early Norian		Semenof	M.J. Johns	2003	02CR115	Glenlyon	105L/4	ichthyolith		microfossil
12		C-440138	Middle Jurassic, Lower Bajocian		Tantalus	A.R. Sweet	2004	GL03-24	Carmacks	115I/1	palynomorph		microfossil
13			Carnian ?		Semenof	M.J. Johns	2003	02CR114	Glenlyon	105L/4	ichthyolith		microfossil
14	xx6111	C-202960	Aptian or early-middle Albian		Tantalus	A.R. SWEET	1993	93-CH-P4	Carmacks	115I/1	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, ginkgo; plant, angiosperm	pollen, polyporate; pollen, tricolpate; pollen, tricolporate; pollen, triporate; pollen, bisaccate; spore, trilete; palynomorph	microfossil
15	xx7639	C-413001	Carboniferous or Permian, possibly Visean - Moscovian		Klinkit; Little Salmon	BAMBER E.W.	2000	99-MC-041	Glenlyon	105L/2	coral; echinoderm	ossicle	macrofossil
16	xx7640	C-413002	middle Carboniferous, late Visean - Moscovian		Klinkit; Little Salmon	BAMBER E.W.	2000	99-MC-042	Glenlyon	105L/2	coral; echinoderm	ossicle	macrofossil
17	xx7583	C-304669	Carboniferous - Permian		Klinkit; Little Salmon	M.J. ORCHARD	2000	99-RAS-MC-031-1	Glenlyon	105L/2	conodont		microfossil
18	xx7584	C-304668	Carboniferous - Early Permian		Klinkit; Little Salmon	M.J. ORCHARD	2000	99-RAS-41-3	Glenlyon	105L/2	conodont		microfossil
19		C-413002	mid- Carboiferous, late Visean to Moscovian		Klinkit; Little Salmon	E.W. Bamber	2000	99MC042	Glenlyon	105L/2	coral		macrofossil
20	xx4995	C-091774	late Pliensbachian, older than C-091782		Tanglefoot	H.W. TIPPER	1974	TO-74-16a	Carmacks	115I/1	cephalopod (ammonoid); cephalopod (coleoid); bivalve; bryozoan; plant, ferns and allies, fern	wood	macrofossil
21	xx8845	O-091774	late Pliensbachian		Tanglefoot	H. FREBOLD	1974	TO-74-16a	Carmacks	115I/1	cephalopod (ammonoid); bivalve		macrofossil
22	xx4996	C-091781	lower Bajocian		Tanglefoot	H.W. TIPPER	1974	TO-74-17	Carmacks	115I/8	cephalopod (ammonoid); cephalopod (coleoid); bivalve; bryozoan; plant, ferns and allies, fern	wood	macrofossil
23	xx8846	O-091781	possibly Early Toarcian		Tanglefoot	H. FREBOLD	1974	TO-74-17	Carmacks	115I/8	cephalopod (ammonoid); bivalve		macrofossil
24	xx4994	C-091778	lower Bajocian?		Tanglefoot	H.W. TIPPER	1974	TO-74-166	Carmacks	115I/8	cephalopod (ammonoid); cephalopod (coleoid); bivalve; bryozoan; plant, ferns and allies, fern	wood	macrofossil
25	xx8844	O-091778	Late Pliensbachian or Early Toarcian		Tanglefoot	H. FREBOLD	1974	TO-74-166	Carmacks	115I/8	cephalopod (ammonoid); bivalve		macrofossil
26	xx8849	O-091784	probably Late Pliensbachian		Tanglefoot	H. FREBOLD	1974	TO-74-44	Carmacks	115I/8	cephalopod (ammonoid); bivalve		macrofossil
27		C-091784	probably Early Toarcian		Tanglefoot	H. Frebold	1974		Carmacks	115I/8	ammonite		macrofossil
28	xx4997	C-091782	possibly very late Pliensbachian		Tanglefoot	H.W. TIPPER	1974	TO-74-18a	Carmacks	115I/8	cephalopod (ammonoid); cephalopod (coleoid); bivalve; bryozoan; plant, ferns and allies, fern	wood	macrofossil
29	xx8847	O-091782	Early Toarcian		Tanglefoot	H. FREBOLD	1974	TO-74-18a	Carmacks	115I/8	cephalopod (ammonoid); bivalve		macrofossil
30		C-091777	Early Jurassic, Sinemurian or Pliensbachian		Tanglefoot	T.P. Poulton	2006		Carmacks	115I/8	ammonite		macrofossil
31	xx4998	C-091783	late Pliensbachian		Tanglefoot	H.W. TIPPER	1974	TOA-74-2	Carmacks	115I/8	cephalopod (ammonoid); cephalopod (coleoid); bivalve; bryozoan; plant, ferns and allies, fern	wood	macrofossil
32	xx8848	O-091783	Early Toarcian		Tanglefoot	H. FREBOLD	1974	TOA-74-2	Carmacks	115I/8	cephalopod (ammonoid); bivalve		macrofossil
33	xx6795	C-102736	Early Carboniferous (Mississippian), late Tournaisian		Kalzas	M.J. ORCHARD	1983	82GGA-73E1	Glenlyon	105L/15	conodont; radiolarian; foraminiferid; sponge; gastropod; echinoderm; bryozoan; brachiopod, inarticulate; annelid, scolecodont; ostracod; chitinozoan; graptolite; conularid; fish	ichthyolith; spicule; shell; spine	microfossil
34	xx4508	C-107906	Ashgillian	D complanatus ornatus	Road River	B.S. NORFORD	1983	82-GGA-56	Glenlyon	105L/15	graptolite; brachiopod, inarticulate		macrofossil
35	xx4785	C-089927	late Middle or Late Ordovician		Road River	B.S. NORFORD	1983	TOA-6-2	Glenlyon	105L/15	graptolite; brachiopod, inarticulate		macrofossil
36	xx7548	C-304129	Carboniferous-Permian		Finlayson; Little Kalzas	M.J. ORCHARD	1999	98-IG-MC-158	Glenlyon	105L/13	conodont		microfossil
37	xx6819	C-103768	probably Permian		Mount Christie	M.J. ORCHARD	1983	82GGA-55B2	Glenlyon	105L/15	conodont; radiolarian; foraminiferid; sponge; gastropod; echinoderm; bryozoan; brachiopod, inarticulate; annelid, scolecodont; ostracod; chitinozoan; graptolite; conularid; fish	ichthyolith; spicule; shell; spine	microfossil
38	xx6356	C-081699	Early Carboniferous		Kalzas	M.J. ORCHARD	1983	82-DY-2418	Glenlyon	105L/15	conodont; radiolarian; foraminiferid; gastropod; sponge; bryozoan; ostracod; tentaculitid; fish	ichthyolith; spicule	microfossil
39	xx7066	C-176041	probably Middle-Late Triassic, probably Ladinian-Carnian		Jones Lake	M.J. ORCHARD	1992	91-GGA-23-1A	Glenlyon	105L/15	conodont; foraminiferid; sponge; echinoderm; gastropod; fish	ichthyolith; spicule	microfossil

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 4: Fossil Data for Sheet 1 - Parts of Carmacks (115I) and Glenlyon (105L)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATEGORY
40	xx6789	C-102600	Early Carboniferous (Mississippian), late Tournaisian		Kalzas	M.J. ORCHARD	1983	82GGA-59A1	Glenlyon	105L/15	conodont; radiolarian; foraminiferid; sponge; gastropod; echinoderm; bryozoan; brachiopod, inarticulate; annelid, scolecodont; ostracod; chitinozoan; graptolite; conularid; fish	ichthyolith; spicule; shell; spine	microfossil
41	xx6820	C-103769	Carboniferous-Permian		Mount Christie	M.J. ORCHARD	1983	82GGA-59A3	Glenlyon	105L/15	conodont; radiolarian; foraminiferid; sponge; gastropod; echinoderm; bryozoan; brachiopod, inarticulate; annelid, scolecodont; ostracod; chitinozoan; graptolite; conularid; fish	ichthyolith; spicule; shell; spine	microfossil
42	xx6791	C-102651	Middle-Late Triassic, Ladinian-Carnian		Jones Lake	M.J. ORCHARD	1983	82 GGA-59C1	Glenlyon	105L/15	conodont; radiolarian; foraminiferid; sponge; gastropod; echinoderm; bryozoan; brachiopod, inarticulate; annelid, scolecodont; ostracod; chitinozoan; graptolite; conularid; fish	ichthyolith; spicule; shell; spine	microfossil
43	xx4813	C-107906	Silurian - Permian		Road River	E.W. BAMBER	1983	82GGA-58A	Glenlyon	105L/14	bryozoan; gastropod; graptolite		macrofossil
44	xx4985	C-089947	Tournaisian		Kalzas	E.W. BAMBER	1983	82TOA-3	Glenlyon	105L/15	coral; brachiopod		macrofossil
45	xx4755	C-102622	Late Ordovician - early Silurian		Road River	B.S. NORFORD	1983	82DY-23	Glenlyon	105L/14	graptolite		macrofossil
46	xx4810	C-102623	Carboniferous		Kalzas	E.W. BAMBER	1983	82DY-23	Glenlyon	105L/14	brachiopod; echinoderm		macrofossil
47	xx4811	C-102624	Carboniferous or Permian		Kalzas	E.W. BAMBER	1983	82DY-23	Glenlyon	105L/14	brachiopod; echinoderm		macrofossil
48	xx6645	C-089948	Late Devonian-Early Carboniferous Famennian-Tournaisian		Kalzas	M.J. ORCHARD	1985	84-TOA-82-3-3	Glenlyon	105L/15	conodont; ostracod; gastropod		microfossil
49	xx4812	C-102625	Middle - Late Tournaisian		Kalzas	E.W. BAMBER	1983	82DY-24	Glenlyon	105L/15	brachiopod; echinoderm		macrofossil
50	xx6355	C-081691	Early Carboniferous		Kalzas	M.J. ORCHARD	1983	82-DY-2381	Glenlyon	105L/14	conodont; radiolarian; foraminiferid; gastropod; sponge; bryozoan; ostracod; tentaculitid; fish	ichthyolith; spicule	microfossil
51	xx6354	C-081689	Early Carboniferous, Tournaisian		Kalzas	M.J. ORCHARD	1983	82-DY-2382	Glenlyon	105L/14	conodont; radiolarian; foraminiferid; gastropod; sponge; bryozoan; ostracod; tentaculitid; fish	ichthyolith; spicule	microfossil
52	xx5289	C-157787	middle - late Tournaisian		Kalzas	E.W. BAMBER	1988	87GGA-26B2	Glenlyon	105L/15	invertebrate; echinoderm; trilobite; ostracod; brachiopod; gastropod; bryozoan; coral; foraminiferid		microfossil; macrofossil
53	xx7040	C-157761	Middle Devonian-Early Carboniferous		Kalzas	M.J. ORCHARD	1988	87GGA-26B4	Glenlyon	105L/15	conodont; radiolarian; foraminiferid; sponge; gastropod; echinoderm; bryozoan; brachiopod, inarticulate; annelid, scolecodont; ostracod; chitinozoan; graptolite; conularid; fish	ichthyolith; spicule; shell; spine	microfossil

Note: This compilation of fossil collections from Whitehorse trough and surrounding areas used the compilation of Poulton et al. (2003) as a base. It includes additional recently published fossil collections, as well as a number of unpublished collections by the Yukon Geological Survey

Poulton, T., Orchard, M.J., Gordey, S.P. and Davenport, P., 2003. Selected Yukon fossil determinations. In: Yukon digital geology, version 2, S.P. Gordey and A.J. Makepeace (eds.), Geological Survey of Canada, Open File 1749, and Yukon Geological Survey, Open File 2003-9(D).

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 5: Fossil Data for Sheet 2 - Laberge (105E) and Parts of Aishihik (115H) and Quiet Lake (105F)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATEGORY
1	xx6143	C-203083	Triassic		Hancock	M.J. ORCHARD	1994	94-CH-JH-MT.LAURIER	Lake Laberge	105E/2	conodont; foraminiferid; echinoderm, holothuroid; fish	ichthyolith; shell	microfossil
2	xx6894	C-116318	Late Triassic Middle-Late Norian		Hancock	M.J. ORCHARD	0	LP80/3	Lake Laberge	105E/2			
3	xx6444	C-087007	Late Triassic Late Norian		Hancock	M.J. ORCHARD	1979	79-TOT-12-2	Lake Laberge	105E/2	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
4	xx7489	C-203082	Late Triassic		Hancock	M.J. ORCHARD	1994	94-CH-60-1	Lake Laberge	105E/2	conodont; foraminiferid; echinoderm, holothuroid; fish	ichthyolith; shell	microfossil
5	xx6427	C-086442	Ordovician-Triassic		Hancock	M.J. ORCHARD	1994	79-TOT-12-6d	Lake Laberge	105E/2	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
6	xx6668	C-095320	Late Triassic late Norian		Hancock	M.J. ORCHARD	1994		Lake Laberge	105E/2			
7	xx7420	O-095320	Late Triassic Late Norian		Hancock	M.J. ORCHARD	1994	77-TO-LGREY	Lake Laberge	105E/2	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
8	xx6893	C-116317	Late Triassic Late Norian		Casca	M.J. ORCHARD	1994	LP80/1	Lake Laberge	105E/2			
9	xx4283	C-079700	Carboniferous or Permian		Boswell	E.W. BAMBER	1979	TOT79-14-8	Lake Laberge	105E/1	foraminiferid; echinoderm; brachiopod; coral		microfossil; macrofossil
10	xx6446	C-087009	Late Carboniferous-Early Permian Bashkirian-Asselian		Boswell	M.J. ORCHARD	1979	79-TOT-15-4	Lake Laberge	105E/1	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
11	xx4637	C-107856	Lower or ?Middle Aalenian		Richthofen	T.P. POULTON	1979	R-79-27-1	Lake Laberge	105E/2	bivalve; cephalopod (ammonoid); plant	wood	macrofossil
12	xx4280	C-082676	Late Carboniferous or Permian		Boswell	E.W. BAMBER	1979	79TO-40-11	Lake Laberge	105E/1	foraminiferid; echinoderm; brachiopod; coral		microfossil; macrofossil
13	xx6434	C-086449	Late Triassic Late Norian		Casca	M.J. ORCHARD	0	79-TOT-10-4	Lake Laberge	105E/3	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
14	xx6433	C-086448	Triassic		Hancock	M.J. ORCHARD	0	79-TOT-10-5	Lake Laberge	105E/3	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
15	xx6435	C-086450	Late Triassic Late Norian		Hancock	M.J. ORCHARD	0	79-TOT-10-8	Lake Laberge	105E/3	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
16	xx6438	C-087001	Late Triassic Late Norian		Hancock	M.J. ORCHARD	0	79-TOT-10-9	Lake Laberge	105E/3	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
17	xx6439	C-087002	Late Triassic Late Norian		Hancock	M.J. ORCHARD	0	79-TOT-10-10	Lake Laberge	105E/3	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
18	xx6440	C-087003	Late Triassic Late Norian		Hancock	M.J. ORCHARD	0	79-TOT-11-14	Lake Laberge	105E/3	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
19	xx6441	C-087004	Late Triassic, Late Norian		Hancock	M.J. ORCHARD	0	79-TOT-11-15	Lake Laberge	105E/3	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
20	xx6442	C-087005	Late Triassic, Late Norian		Hancock	M.J. ORCHARD	0	79-TOT-11-19	Lake Laberge	105E/3	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
21	xx6443	C-087006	Late Triassic, Late Norian		Hancock	M.J. ORCHARD	0	79-TOT-11-20	Lake Laberge	105E/3	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
22	xx6432	C-086447	Permian-Triassic		Hancock	M.J. ORCHARD	0	79-TO-13-6	Lake Laberge	105E/2	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
23	xx7611	C-412544	? Volgian		Tantalus	WHITE J.M.	1999	99-TLA-130	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
24	xx4307	C-086802	Toarcian or lower Bajocian		Tanglefoot	T.P. POULTON	1979	TO-79-11-5	Lake Laberge	105E/2	bivalve; cephalopod (ammonoid); scaphopod		macrofossil
25	xx8753	C-086805	probably Early Jurassic		Tanglefoot	H. FREBOLD	1979	TO79-11	Lake Laberge	105E/02	cephalopod (ammonoid)		macrofossil
26	xx8752	C-086804	Jurassic, Pliensbachian?		Tanglefoot	H. FREBOLD	1979	TO79-11	Lake Laberge	105E/02	cephalopod (ammonoid)		macrofossil
27	xx4991	C-086696	Toarcian, maybe late Toarcian		Tanglefoot	H.W. TIPPER	1979	79-TO-10-36	Lake Laberge	105E/7	cephalopod (ammonoid)		macrofossil
28	xx6426	C-086439	Late Triassic Late Norian		Hancock	M.J. ORCHARD	0	79-TOR-9-7	Lake Laberge	105E/6	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
29	xx7612	C-412545	? Volgian		Tantalus	WHITE J.M.	1999	DDH97-63A	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
30	xx7613	C-412546	? Volgian		Tantalus	WHITE J.M.	1999	DDH97-63B	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
31	xx7614	C-412547	Jurassic		Tantalus	WHITE J.M.	1999	DDH97-63C	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
32	xx7615	C-412548	Jurassic		Tantalus	WHITE J.M.	1999	DDH97-63D	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
33	xx7616	C-412549	? Volgian		Tantalus	WHITE J.M.	1999	DDH97-63E	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 5: Fossil Data for Sheet 2 - Laberge (105E) and Parts of Aishihik (115H) and Quiet Lake (105F)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATEGORY
34	xx7617	C-412552	? Volgian		Tantalus	WHITE J.M.	1999	DDH95-52A	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
35	xx7618	C-412553	Jurassic		Tantalus	WHITE J.M.	1999	DDH95-52B	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
36	xx4355	C-086809	late Pliensbachian		Richthofen	J.A. JELETZKY	1979	TO79-8	Lake Laberge	105E/6	cephalopod (ammonoid)		macrofossil
37	xx7021	C-156661	Middle? Triassic		Hancock	M.J. ORCHARD	1990	89OF-JLJ-54b	Lake Laberge	105E/6	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil
38	xx7600	C-412527	Jurassic		Tantalus	WHITE J.M.	1999	99-TLA-023	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
39	xx7601	C-412528	Jurassic		Tantalus	WHITE J.M.	1999	99-TLA-024	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
40	xx4281	C-082675	late Carboniferous or Permian		Boswell	E.W. BAMBER	1979	79TO-40-8	Lake Laberge	105E/8	foraminiferid; echinoderm; brachiopod; coral		microfossil; macrofossil
41	xx4842	C-082675	lower - mid Moscovian		Boswell	MISCELLANEOUS	1979	79TO-40-8	Lake Laberge	105E/8	foraminiferid	shell	microfossil
42	xx6113	C-203096	Upper Jurassic		Tantalus	A.R. SWEET	1995	94-CH-50-0-30	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, ginkgo	pollen, bisaccate; spore, trilete; palynomorph	microfossil
43	xx6114	C-203095	Upper Jurassic		Tantalus	A.R. SWEET	1995	94-CH-50-1 + 70	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, ginkgo	pollen, bisaccate; spore, trilete; palynomorph	microfossil
44	xx6116	C-203098	Upper Jurassic		Tantalus	A.R. SWEET	1995	94-CH-RR-2	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, ginkgo	pollen, bisaccate; spore, trilete; palynomorph	microfossil
45	xx7602	C-412529	?Volgian		Tantalus	WHITE J.M.	1999	99-TLA-031	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
46	xx7603	C-412530	?Volgian		Tantalus	WHITE J.M.	1999	99-TLA-033	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
47	xx7606	C-412534	?Volgian		Tantalus	WHITE J.M.	1999	99-TLA-044	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
48	xx7604	C-412532	Jurassic		Tantalus	WHITE J.M.	1999	99-TLA-042	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
49	xx7605	C-412533	Jurassic		Tantalus	WHITE J.M.	1999	99-TLA-043	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
50	xx7608	C-412536	Jurassic		Tantalus	WHITE J.M.	1999	99-TLA-053	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
51	xx7607	C-412535	Jurassic		Tantalus	WHITE J.M.	1999	99-TLA-051	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil
52	xx4308	C-086803	Middle Toarcian - Bajocian		Tanglefoot	T.P. POULTON	1979	TOE-79-15-14	Lake Laberge	105E/7	bivalve; cephalopod (ammonoid); scaphopod		macrofossil
53	xx4931	C-081320	Aalenian		Tanglefoot	T.P. POULTON	1979	79-PU-ML	Lake Laberge	105E/7	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
54	xx4932	C-081321	Aalenian		Tanglefoot	T.P. POULTON	1979	79-PU-ML	Lake Laberge	105E/7	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
55	xx4933	C-086803	Lower Sinemurian		Tanglefoot	T.P. POULTON	1979	79-TOE	Lake Laberge	105E/7	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
56	xx8751	C-086801	early Pliensbachian		Tanglefoot	H. FREBOLD	1979	TOC79-3	Lake Laberge	105E/05	cephalopod (ammonoid)		macrofossil
57	xx4282	C-082677	Late Carboniferous or Permian		Boswell	E.W. BAMBER	1979	79TO-40-9	Lake Laberge	105E/7	foraminiferid; echinoderm; brachiopod; coral		microfossil; macrofossil
58	xx4843	C-082677	lower part of upper Moscovian		Boswell	MISCELLANEOUS	1979	79TO-40-9	Lake Laberge	105E/7	foraminiferid	shell	microfossil
59	xx6115	C-203097	Upper Jurassic		Tantalus	A.R. SWEET	1995	94-CH-RR-1	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, ginkgo	pollen, bisaccate; spore, trilete; palynomorph	microfossil
60	xx4993	C-086811	early Pliensbachian, lower half		Tanglefoot	H.W. TIPPER	1979	TOR79-7	Lake Laberge	105E/5	cephalopod (ammonoid)		macrofossil
61	xx8755	C-086811	early Pliensbachian		Tanglefoot	H. FREBOLD	1979	TOR79-7	Lake Laberge	105E/5	cephalopod (ammonoid)		macrofossil
62	xx4268	O-097035	upper Norian		Hancock	E.T. TOZER	1979	TO-79-15	Lake Laberge	105E/7	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
63	xx4275	O-097036	upper Norian		Hancock	E.T. TOZER	1979	TOR-79-12	Lake Laberge	105E/6	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
64	xx7609	C-412542	? Volgian		Tantalus	WHITE J.M.	1999	99-TLA-122	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood; pollen, bisaccate; spore; palynomorph	microfossil

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 5: Fossil Data for Sheet 2 - Laberge (105E) and Parts of Aishihik (115H) and Quiet Lake (105F)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATEGORY
65	xx7610	C-412543	? Volgian		Tantalus	WHITE J.M.	1999	99-TLA-126	Aishihik Lake	115H/8	plant, ferns and allies, fern; plant, ferns and allies, clubmoss; plant, gymnosperm, conifer	wood;pollen, bisaccate; spore; palynomorph	microfossil
66	xx4278	O-097044	upper Triassic		Hancock	E.T. TOZER	1979	TOT-79-6	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
67	xx4272	O-097041	upper Norian		Hancock	E.T. TOZER	1979	TO-79-6	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
68	xx4844	C-108107	Triassic - early Cretaceous		Tantalus?	T.P. POULTON	1983	83-TOA-23-3	Lake Laberge	105E/10	bivalve; plant	wood	macrofossil
69	xx4274	O-097046	upper Triassic		Hancock	E.T. TOZER	1979	TOE-79-9	Lake Laberge	105E/11	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
70	xx4273	O-097045	upper Triassic		Hancock	E.T. TOZER	1979	TOE-79-9	Lake Laberge	105E/11	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
71	xx4271	O-097038	upper Norian		Hancock	E.T. TOZER	1979	TO-79-6	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
72	xx4163	C-060057	Lower Cretaceous-recent		Tantalus	W.S. HOPKINS	1979	79-HFA-14	Lake Laberge	105E/12	plant	wood; palynomorph	microfossil
73	xx4276	O-097043	upper Triassic		Hancock	E.T. TOZER	1979	TOR-79-6	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
74	xx6430	C-086445	Late Triassic, late Carnian		Hancock	M.J. ORCHARD	0	79-TO-17-8e	Lake Laberge	105E/12	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
75	xx6431	C-086446	Late Triassic, late Carnian		Hancock	M.J. ORCHARD	0	79-TO-17-8d	Lake Laberge	105E/12	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
76		C-307675	Sinemurian or Pliensbachian		Tanglefoot	T.P. POULTON	2007	06MC079	Lake Laberge	105E/12	bivalve		macrofossil
77	xx4925	C-081308	mid-Lower - lower-Middle Sinemurian		Tanglefoot	T.P. POULTON	1979	79-PU-MCk	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
78	xx4926	C-081309	mid-Lower - lower-Middle Sinemurian		Tanglefoot	T.P. POULTON	1979	79-PU-MCk	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
79	xx4927	C-081310	mid-Lower - lower-Middle Sinemurian		Tanglefoot	T.P. POULTON	1979	79-PU-MCk	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
80	xx4928	C-081311	mid-Lower - lower-Middle Sinemurian		Tanglefoot	T.P. POULTON	1979	79-PU-MCk	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
81	xx4929	C-081322	mid-Lower - lower-Middle Sinemurian		Tanglefoot	T.P. POULTON	1979	79-PU-MCk	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
82	xx4930	C-081323	mid-Lower - lower-Middle Sinemurian		Tanglefoot	T.P. POULTON	1979	79-PU-MCk	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
83	xx4924	C-081315	Toarcian?, lower Jurassic		Tanglefoot	T.P. POULTON	1979	79-PU-11	Lake Laberge	105E/12	bivalve; cephalopod (ammonoid); cephalopod (coleoid); gastropod; brachiopod; crustacean (decapod); echinoderm, crinoid; echinoderm, echinoid; annelid; trace fossil	spine	macrofossil
84	xx6429	C-086444	Late Carboniferous, late Namurian-Bashkirian		Boswell	M.J. ORCHARD	0	79-TO-20-4	Lake Laberge	105E/15	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
85		O-97040	Upper Triassic, probably upper Norian		Mandanna	E.T. TOZER	1979	TO79-17-10	Lake Laberge	105E/13	corals, bivalve		macrofossil
86		C-307620	Late Norian-Rheatian		Hancock	M.J. ORCHARD	2007	06GL024	Lake Laberge	105E/13	conodont		macrofossil
87	xx8754	C-086806	Early Jurassic, possibly Sinemurian		Tanglefoot	H. FREBOLD	1979	TOG79-10	Lake Laberge	105E/14	cephalopod (ammonoid)		macrofossil
88	xx4356	C-086807	late Pliensbachian		Tanglefoot	J.A. JELETZKY	1979	TOG-79-10-8-B	Lake Laberge	105E/14	cephalopod (ammonoid)		macrofossil
89	xx4992	C-086807	late Pliensbachian		Tanglefoot	H.W. TIPPER	1979	TOG-79-10-8-B	Lake Laberge	105E/14	cephalopod (ammonoid)		macrofossil
90		C-307668	Bajocian or Bathonian ?		Tanglefoot	T.P. POULTON	2007	06GL012	Lake Laberge	105E/14	bivalve		macrofossil
91	xx4306	C-086808	Middle Jurassic		Tanglefoot	T.P. POULTON	1979	79-TOW-10-8-W	Lake Laberge	105E/14	bivalve; cephalopod (ammonoid); scaphopod		macrofossil
92	xx6423	C-086432	Late Triassic Late Norian		Hancock	M.J. ORCHARD	0	79-TOR-17-12	Lake Laberge	105E/13	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
93	xx5889	C-086433	Triassic		Hancock	M.J. ORCHARD	0	79-TO-17	Lake Laberge	105E/13	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
94	xx4277	O-097042	upper Norian		Casca	E.T. TOZER	1979	TOT-79-17	Lake Laberge	105E/13	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
95	xx6424	C-086434	Late Triassic ?Norian		Casca	M.J. ORCHARD	0	79-TOR-17-8	Lake Laberge	105E/13	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 5: Fossil Data for Sheet 2 - Laberge (105E) and Parts of Aishihik (115H) and Quiet Lake (105F)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATEGORY
96	xx3485	O-093375	Franconian		Ingenika	W.H. FRITZ	1975	TO75-24	Quiet Lake	105F/13	trilobite		macrofossil
97	xx6428	C-086443	Ordovician-Triassic		Semenof	M.J. ORCHARD	0	TOG-79-12-7-5	Lake Laberge	105E/15	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
98	xx4270	O-097034	upper Norian		Hancock	E.T. TOZER	1979	TO-79-16	Lake Laberge	105E/13	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
99	xx4269	O-097037	Jurassic		Tanglefoot	E.T. TOZER	1979	TO-79-16	Lake Laberge	105E/13	bivalve; cephalopod (ammonoid); brachiopod; coral		macrofossil
100		C-307665	Early Pliensbachian ?		Tanglefoot	T.P. POULTON	2007	06GGA054	Lake Laberge	105E/13	ammonite; bivalve		macrofossil
101		C-307616	Carnian		Hancock	M.J. ORCHARD	2007	06GGA018	Lake Laberge	105E/13	conodont		microfossil
102	xx4279	C-082673	late Carboniferous or Permian		Semenof?	E.W. BAMBER	1979	79TO-2	Lake Laberge	105E/14	foraminiferid; echinoderm; brachiopod; coral		microfossil; macrofossil
103	xx4841	C-082673	upper Moscovian		Semenof?	MISCELLANEOUS	1979	79TO-20-6	Lake Laberge	105E/14	foraminiferid	shell	microfossil
104		C-86700	Upper Triassic, possibly upper Carnian		Mandanna	H.W. TIPPER	0		Lake Laberge	105E/13	bivalve, ammonite		macrofossil
105	xx6425	C-086437	Late Triassic Carnian		Hancock	M.J. ORCHARD	0	79-TOR-16-1A	Lake Laberge	105E/13	conodont; brachiopod, inarticulate; gastropod; bivalve; ostracod; cephalopod (ammonoid); fish	ichthyolith; ramiform element	microfossil
106		C-440147	Early Cretaceous		Tantalus	A.R. Sweet	2003	GL03-45	Aishihik Lake	115H/16	palynomorph		microfossil
107	xx2493	O-086352	Neocomian		Tantalus	MISCELLANEOUS	1972	TO72-398	Aishihik Lake	115H/16	palynomorph		microfossil
108	xx4156	C-060050	Miocene? or Pliocene		Walsh Creek	W.S. HOPKINS	1979	79-HFA-07	Lake Laberge	105E/15	plant, ferns and allies, clubmoss; plant, gymnosperm, conifer; plant, angiosperm	wood; palynomorph	microfossil
109	xx4157	C-060051	Miocene? or Pliocene		Walsh Creek	W.S. HOPKINS	1979	79-HFA-08	Lake Laberge	105E/15	plant, ferns and allies, clubmoss; plant, gymnosperm, conifer; plant, angiosperm	wood; palynomorph	microfossil
110	xx4158	C-060052	Miocene? or Pliocene		Walsh Creek	W.S. HOPKINS	1979	79-HFA-09	Lake Laberge	105E/15	plant, ferns and allies, clubmoss; plant, gymnosperm, conifer; plant, angiosperm	wood; palynomorph	microfossil
111	xx4159	C-060053	Miocene? or Pliocene		Walsh Creek	W.S. HOPKINS	1979	79-HFA-10	Lake Laberge	105E/15	plant, ferns and allies, clubmoss; plant, gymnosperm, conifer; plant, angiosperm	wood; palynomorph	microfossil
112		C-440148	Early Cretaceous		Tantalus	A.R. Sweet	2003	GL03-46	Aishihik Lake	115H/16	palynomorph		microfossil
113	xx4172	C-060066	Lower Cretaceous		Tantalus	W.S. HOPKINS	1979	79-HFA-24	Aishihik Lake	115H/16	plant, gymnosperm, conifer; plant, bryophyte; plant, ferns and allies, fern	pollen, bisaccate; palynomorph	microfossil
114	xx4173	C-060067	Lower Cretaceous		Tantalus	W.S. HOPKINS	1979	79-HFA-25	Aishihik Lake	115H/16	plant, gymnosperm, conifer; plant, bryophyte; plant, ferns and allies, fern	pollen, bisaccate; palynomorph	microfossil
115	xx4174	C-060068	Lower Cretaceous		Tantalus	W.S. HOPKINS	1979	79-HFA-26	Aishihik Lake	115H/16	plant, gymnosperm, conifer; plant, bryophyte; plant, ferns and allies, fern	pollen, bisaccate; palynomorph	microfossil
116	xx4175	C-060069	Lower Cretaceous		Tantalus	W.S. HOPKINS	1979	79-HFA-27	Aishihik Lake	115H/16	plant, gymnosperm, conifer; plant, bryophyte; plant, ferns and allies, fern	pollen, bisaccate; palynomorph	microfossil
117	xx4176	C-060071	Lower Cretaceous		Tantalus	W.S. HOPKINS	1979	79-HFA-28	Aishihik Lake	115H/16	plant, gymnosperm, conifer; plant, bryophyte; plant, ferns and allies, fern	pollen, bisaccate; palynomorph	microfossil
118	xx4177	C-060070	Lower Cretaceous		Tantalus	W.S. HOPKINS	1979	79-HFA-29	Aishihik Lake	115H/16	plant, gymnosperm, conifer; plant, bryophyte; plant, ferns and allies, fern	pollen, bisaccate; palynomorph	microfossil
119	xx3892	C-076925	Upper Jurassic - lower Cretaceous		Tantalus	W.S. HOPKINS	1977	TO77-100	Lake Laberge	105E/15	plant, ferns and allies, clubmoss; plant, ferns and allies, fern; plant, angiosperm; plant, bryophyte	spore; pollen, tricolpate; pollen, tricolporate; pollen, triporate; palynomorph	microfossil
120		C-307621	Late Triassic, Carnian		Hancock	M.J. Orchard	2007	06GL030	Lake Laberge	105E/13	conodont		microfossil
121		C-307667	Toarcian or Middle Jurassic, possibly mid- to late Aalenian		Tanglefoot	T.P. POULTON	2007	06GGA084	Aishihik Lake	115H/16	ammonite		macrofossil
122	xx7121	C-202735	Late Triassic		Hancock	M.J. ORCHARD	0	79-TOR-20-12	Lake Laberge	105E/13	conodont		microfossil
123	xx7122	C-202736	Late Triassic		Hancock	M.J. ORCHARD	0	79-TOR-20-13	Lake Laberge	105E/13	conodont		microfossil
124	xx7120	C-202734	Late Triassic		Hancock	M.J. ORCHARD	0	79-TOR-20-2a	Lake Laberge	105E/13	conodont		microfossil

Note: This compilation of fossil collections from Whitehorse trough and surrounding areas used the compilation of Poulton et al. (2003) as a base. It includes additional recently published fossil collections, as well as a number of unpublished collections by the Yukon Geological Survey

Poulton, T., Orchard, M.J., Gordey, S.P. and Davenport, P., 2003. Selected Yukon fossil determinations. In: Yukon digital geology, version 2, S.P. Gordey and A.J. Makepeace (eds.), Geological Survey of Canada, Open File 1749, and Yukon Geological Survey, Open File 2003-9(D).

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 6: Fossil Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATE
1	xx7177	C-300031	Late Triassic, Late Norian		Cache Creek	F. CORDEY	1991	91-GGA-28-03/AFF-135	Teslin	105C/3	radiolarian		microfossil
2	xx7178	C-300032	Late Triassic, Late Norian		Cache Creek	F. CORDEY	1991	91-GGA-28-03/AFF-136-1	Teslin	105C/3	radiolarian		microfossil
3	xx7179	C-300033	Triassic		Cache Creek	F. CORDEY	1991	91-GGA-28-04/AFF-137	Teslin	105C/3	radiolarian		microfossil
4	xx7175	C-300029	Middle Triassic, Ladinian		Cache Creek	F. CORDEY	1991	91-GGA-28-02/AFF-133	Teslin	105C/3	radiolarian		microfossil
5	xx7176	C-300030	Late Triassic, Late Norian		Cache Creek	F. CORDEY	1991	91-GGA-28-02/AFF-134-4	Teslin	105C/3	radiolarian		microfossil
6	xx7180	C-300034	Late Triassic, Late Norian		Cache Creek	F. CORDEY	1991	91-GGA-28-05/AFF-138	Teslin	105C/3	radiolarian		microfossil
7	xx7181	C-300035	Late Triassic Norian, possibly Late Norian		Cache Creek	F. CORDEY	1991	91-GGA-29-01/AFF-145	Teslin	105C/3	radiolarian		microfossil
8	xx7182	C-300036	Late Triassic, Carnian		Cache Creek	F. CORDEY	1991	91-GGA-29-01/AFF-143	Teslin	105C/3	radiolarian		microfossil
9	xx7183	C-300037	possibly Early or Middle Triassic		Cache Creek	F. CORDEY	1991	91-GGA-29-01/AFF-146	Teslin	105C/3	radiolarian		microfossil
10	xx7184	C-300038	Late Triassic, Carnian		Cache Creek	F. CORDEY	1991	91-GGA-29-01/AFF-144-1	Teslin	105C/3	radiolarian		microfossil
11	xx7173	C-300027	Late Triassic, Late Norian		Cache Creek	F. CORDEY	1991	91-GGA-28-10/AFF-141	Teslin	105C/3	radiolarian		microfossil
12	xx7174	C-300028	Late Triassic, Early-Middle Norian		Cache Creek	F. CORDEY	1991	91-GGA-28-11/AFF-142	Teslin	105C/3	radiolarian		microfossil
13	xx7279	C-301420	Late Triassic, late Carnian-Middle Norian		Cache Creek	F. CORDEY	1991	91-GGA-29-02/AFF-147	Teslin	105C/3	radiolarian		microfossil
14	xx7186	C-300040	Triassic		Cache Creek	F. CORDEY	1991	91-GGA-29-03/AFF-148	Teslin	105C/3	radiolarian		microfossil
15	xx7190	C-300044	Latest Triassic-Early Jurassic, late Late Norian-Hettangian		Cache Creek	F. CORDEY	1991	91-GGA-29-06/AFF-151-1	Teslin	105C/3	radiolarian		microfossil
16	xx7191	C-300045	Early Jurassic, Hettangian		Cache Creek	F. CORDEY	1991	91-GGA-29-06/AFF-152-1	Teslin	105C/3	radiolarian		microfossil
17	xx7187	C-300041	Late Triassic, Norian		Cache Creek	F. CORDEY	1991	91-GGA-29-04/AFF-150-1	Teslin	105C/3	radiolarian		microfossil
18	xx7188	C-300042	Late Triassic, Norian		Cache Creek	F. CORDEY	1991	91-GGA-29-04/AFF-141	Teslin	105C/3	radiolarian		microfossil
19	xx6861	C-108205	Permian		Cache Creek	M.J. ORCHARD	1988	88-TOA-CH-4-5	Whitehorse	105D/2	conodont; foraminiferid; echinoderm; fish	ichthyolith	microfossil
20	xx7192	C-300046	Late Triassic, late Carnian-Middle Norian		Cache Creek	F. CORDEY	1991	91-GGA-29-07/AFF-140	Teslin	105C/3	radiolarian		microfossil
21	xx7193	C-300047	Late Triassic, Carnian		Cache Creek	F. CORDEY	1991	91-GGA-29-07/AFF-153-1	Teslin	105C/3	radiolarian		microfossil
22	xx7194	C-300048	Early Jurassic Hettangian		Cache Creek	F. CORDEY	1991	91-GGA-29-08/AFF-154-2	Teslin	105C/3	radiolarian		microfossil
23	xx7237	C-300542	Late Triassic, Late Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-03-12-B	Teslin	105C/3	radiolarian		microfossil
24	xx7195	C-300049	Late Triassic, Late Norian		Cache Creek	F. CORDEY	1991	91-GGA-29-09/AFF-155-1	Teslin	105C/3	radiolarian		microfossil
25	xx7243	C-300548	Late Triassic, possibly Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-03-11-A	Teslin	105C/3	radiolarian		microfossil
26	xx7185	C-300039	Middle or Late Triassic		Cache Creek	F. CORDEY	1991	91-GGA-29-12/AFF-157	Teslin	105C/3	radiolarian		microfossil
27	xx7244	C-300549	Middle or Late Triassic		Cache Creek	F. CORDEY	1994	94-GGA-03-10-B	Teslin	105C/3	radiolarian		microfossil
28	xx7224	C-300526	Triassic, possibly Late Carnian-Middle Norian		Cache Creek	F. CORDEY	1993	93-GGA-S-F-15-01	Teslin	105C/4	radiolarian		microfossil
29	xx7225	C-300527	Triassic, possibly Late Carnian-Middle Norian		Cache Creek	F. CORDEY	1993	93-GGA-S-G-15-01	Teslin	105C/4	radiolarian		microfossil
30	xx6862	C-108209	Early-Late Carboniferous, Namurian		Cache Creek	M.J. ORCHARD	1988	88-TOA-CH-5-3	Whitehorse	105D/2	conodont; foraminiferid; echinoderm; fish	ichthyolith	microfossil
31	xx7250	C-300558	Late Triassic, late Carnian-Middle Norian		Cache Creek	F. CORDEY	1994	94-GGA-04-05-A	Teslin	105C/3	radiolarian		microfossil
32	xx7246	C-300551	Late Triassic		Cache Creek	F. CORDEY	1994	94-GGA-03-03-B	Teslin	105C/3	radiolarian		microfossil
33	xx7251	C-300559	Late Triassic, Late Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-04-01-B	Teslin	105C/3	radiolarian		microfossil
34	xx7236	C-300541	probably Late Triassic		Cache Creek	F. CORDEY	1994	94-GGA-J-02-08-B	Teslin	105C/3	radiolarian		microfossil
35	xx7012	C-156612	Middle Triassic		Cache Creek	M.J. ORCHARD	1988	88OF-JLJ-78	Teslin	105C/4	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil
36	xx7242	C-300547	Late Triassic, Late Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-02-03-A	Teslin	105C/3	radiolarian		microfossil
37	xx7235	C-300540	Early Jurassic, Hettangian-Sinemurian		Cache Creek	F. CORDEY	1994	94-GGA-03-04-C	Teslin	105C/3	radiolarian		microfossil

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 6: Fossil Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATE
38	xx7239	C-300544	Late Triassic, late Carnian-Middle Norian		Cache Creek	F. CORDEY	1994	94-GGA-J-02-05-B	Teslin	105C/3	radiolarian		microfossil
39	xx7238	C-300543	Late Triassic Late Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-02-05-B	Teslin	105C/3	radiolarian		microfossil
40	xx7245	C-300550	Late Triassic, Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-J-02-06-A	Teslin	105C/3	radiolarian		microfossil
41	xx7241	C-300546	Late Triassic, possibly Late Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-02-07-A	Teslin	105C/3	radiolarian		microfossil
42	xx7247	C-300552	Late Triaassic, Late Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-02-08-B	Teslin	105C/3	radiolarian		microfossil
43	xx7010	C-156608	Late Triassic, Late Carnian - Middle Norian		Cache Creek	F. CORDEY	1988	88OF-JLJ-53	Teslin	105C/3	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil
44	xx7027	C-156728	Late Carboniferous, Middle - Late Pennsylvanian		Cache Creek	M.J. ORCHARD	1988	88OF-FC-0006	Whitehorse	105D/1	conodont		microfossil
45	xx7026	C-156727	Late Carboniferous, probably Middle Pennsylvanian		Cache Creek	M.J. ORCHARD	1988	88OF-FC-0005	Whitehorse	105D/1	conodont		microfossil
46	xx7028	C-156729	Late Carboniferous, Middle? Pennsylvanian		Cache Creek	M.J. ORCHARD	1988	88OF-FC-0007	Whitehorse	105D/1	conodont		microfossil
47	xx8917	O-020318	upper Lower Jurassic, probably Toarcian		Richthofen	H. FREBOLD	0	JOW-F3-W	Whitehorse	105D/2	cephalopod (ammonoid); bivalve		macrofossil
48	xx6723	C-101892	Late Triassic, Carnian-Early Norian		Cache Creek	M.J. ORCHARD	1980	80-MV-T3	Teslin	105C/3	conodont; foraminiferid; radiolarian; gastropod; sponge; echinoderm; fish	ichthyolith; spicule; shell	microfossil
49	xx7286	C-302173	Late Triassic, late Carnian-Middle Norian		Cache Creek	F. CORDEY	1994	94-GGA-J-03-01-B	Teslin	105C/3	radiolarian		microfossil
50	xx7204	C-300079	Late Triassic		Cache Creek	F. CORDEY	1991	91-GGA-32-22/AFF-194-1	Teslin	105C/3	radiolarian		microfossil
51	xx7272	C-301360	Middle Triassic, Ladinian		Cache Creek	F. CORDEY	1991	91-GGA-32-22/AFF-194-2	Teslin	105C/3	radiolarian		microfossil
52	xx7068	C-176056	Late Triassic, Late Norian		Cache Creek	M.J. ORCHARD	1991	91-GGA-32-22A/AFF-194-3	Teslin	105C/3	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
53	xx7491	C-300557	Late? Permian		Cache Creek	M.J. ORCHARD	1994	94-GGA-J-01-03-C	Teslin	105C/3	conodont; gastropod; bivalve; fish	ichthyolith; shell	microfossil
54	xx7234	C-300539	Late Triassic, Late Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-J-01-02-A	Teslin	105C/3	radiolarian		microfossil
55	xx7227	C-300529	Late Triassic-Early Jurassic, Late Norian-Hettangian		Cache Creek	F. CORDEY	1993	93-GGA-S-B-16-05	Teslin	105C/4	radiolarian		microfossil
56	xx7240	C-300545	Late Triassic, Late Norian/Rhaetian		Cache Creek	F. CORDEY	1994	94-GGA-01-06-A	Teslin	105C/3	radiolarian		microfossil
57	xx7248	C-300554	Late Triassic, late Carnian-Middle Norian		Cache Creek	F. CORDEY	1994	94-GGA-01-06-B	Teslin	105C/3	radiolarian		microfossil
58	9666		Atokan or Desmoinesian		Cache Creek	W.W. Nassichuk	0		Whitehorse	105D/2	cephalopod (ammonoid)		macrofossil
59	xx7019	C-156653	Triassic ?Early Carnian		Cache Creek	M.J. ORCHARD	1989	89OF-JLJ-009	Teslin	105C/3	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil
60	xx7196	C-300050	Late Triassic		Cache Creek	F. CORDEY	1991	91-GGA-30-01/AFF-158	Teslin	105C/3	radiolarian		microfossil
61	xx7198	C-300055	Late Triassic, possibly late Carnian-Middle Norian		Cache Creek	F. CORDEY	1991	91-GGA-30-02/AFF-159	Teslin	105C/3	radiolarian		microfossil
62	xx7199	C-300056	Middle or Late Triassic		Cache Creek	F. CORDEY	1991	91-GGA-30-03/AFF-160	Teslin	105C/3	radiolarian		microfossil
63	xx7200	C-300057	Late Triassic		Cache Creek	F. CORDEY	1991	91-GGA-30-04/AFF-161	Teslin	105C/3	radiolarian		microfossil
64	xx7935	O-025057	probably late Norian	probably Spondylospira fauna	Hancock	E.T. TOZER	0		Whitehorse	105D/2	bivalve		macrofossil
65	xx7201	C-300062	Late Triassic, late Carnian-Middle Norian		Cache Creek	F. CORDEY	1991	91-GGA-31-02/AFF-170-1	Teslin	105C/3	radiolarian		microfossil
66	xx7222	C-300524	Late Triassic, Early-Middle Norian		Cache Creek	F. CORDEY	1993	93-GGA-S-B-14-05	Teslin	105C/4	radiolarian		microfossil
67	xx7197	C-300054	Early Jurassic, Hettangian-Sinemurian		Cache Creek	F. CORDEY	1991	91-GGA-30-14/AFF-169	Teslin	105C/3	radiolarian		microfossil
68	xx7095	C-177580	Early Jurassic, Sinemurian - Toarcian, possibly late Sinemurian		Cache Creek	F. CORDEY	1990	90-GGA-34-15/AFF-63-2	Teslin	105C/3	radiolarian		microfossil
69	xx7096	C-177581	Late Triassic, Late Norian		Cache Creek	M.J. ORCHARD	1990	90-FC-63-3	Teslin	105C/3	conodont		microfossil
70	xx7097	C-177585	Early Jurassic		Cache Creek	F. CORDEY	1990	90-GGA-34-15/AFF-63-7	Teslin	105C/3	radiolarian		microfossil

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 6: Fossil Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATE
71	xx7098	C-177587	Early Jurassic Sinemurian - Toarcian, possibly late Sinemurian		Cache Creek	F. CORDEY	1990	90-GGA-34-15/AFF-63-9	Teslin	105C/3	radiolarian		microfossil
72	xx7232	C-300537	Late Triassic Norian		Cache Creek	F. CORDEY	1993	93-GGA-S-B-27-03	Teslin	105C/3	radiolarian		microfossil
73	xx7223	C-300525	Middle or Late Triassic, Ladinian-Early Carnian		Cache Creek	F. CORDEY	1993	93-GGA-S-B-14-10	Teslin	105C/4	radiolarian		microfossil
74	xx7233	C-300538	Late Triassic, Carnian-Middle Norian		Cache Creek	F. CORDEY	1993	93-GGA-S-B-27-07	Teslin	105C/4	radiolarian		microfossil
75	xx6863	C-108216	Late Triassic, Late Norian		Cache Creek	M.J. ORCHARD	1988	88-TOA-CH-73-1	Whitehorse	105D/2	conodont; foraminiferid; echinoderm; fish	ichthyolith	microfossil
76	xx7168	C-300019	Late Triassic Carnian		Cache Creek	F. CORDEY	1990	90-GGA-34-09/AFF-60-2	Teslin	105C/3	radiolarian		microfossil
77	xx7219	C-300517	Late Triassic, Late Carnian-Middle Norian		Cache Creek	F. CORDEY	1993	93-GGA-A-33-06	Teslin	105C/4	radiolarian		microfossil
78	xx7094	C-177573	Late Triassic, Late Carnian or pre-late Norian		Cache Creek	F. CORDEY	1990	90-GGA-34-07/AFF-59-1	Teslin	105C/3	radiolarian		microfossil
79	xx7093	C-177572	Late Triassic, Late Carnian or pre-late Norian		Cache Creek	F. CORDEY	1990	90-GGA-34-06/AFF-58-1	Teslin	105C/3	radiolarian		microfossil
80	xx7231	C-300536	Late Triassic-Early Jurassic, Late Norian-Hettangian		Cache Creek	F. CORDEY	1993	93-GGA-S-B-26-08	Teslin	105C/3	radiolarian		microfossil
81	xx7091	C-177569	Early Jurassic, Pliensbachian or early Toarcian		Cache Creek	F. CORDEY	1990	90-GGA-34-05/AFF-56-6	Teslin	105C/3	radiolarian		microfossil
82	xx7092	C-177571	Late Triassic, Late Norian		Cache Creek	F. CORDEY	1990	90-FC-57-2	Teslin	105C/3	radiolarian		microfossil
83	xx7167	C-300015	Late Triassic-Early Jurassic, possibly latest Norian - Pliensbachian		Cache Creek	F. CORDEY	1990	90-GGA-34-04/AFF-55-3	Teslin	105C/3	radiolarian		microfossil
84	xx7273	C-301361	Middle-Late Triassic		Cache Creek	F. CORDEY	1990	90-GGA-34-04/AFF-55-4	Teslin	105C/3	radiolarian		microfossil
85	xx7274	C-301362	Early Jurassic, Hettangian		Cache Creek	F. CORDEY	1990	90-GGA-34-04/AFF-55-5	Teslin	105C/3	radiolarian		microfossil
86	xx7090	C-177557	Late Triassic, Late Carnian or pre-late Norian		Cache Creek	F. CORDEY	1990	90-GGA-34-02/AFF-54-2	Teslin	105C/3	radiolarian		microfossil
87	xx7089	C-177555	Late Triassic, Late Carnian or pre-late Norian		Cache Creek	F. CORDEY	1990	90-GGA-34-01/AFF-53-4	Teslin	105C/3	radiolarian		microfossil
88	xx7218	C-300516	Late Triassic, Late Carnian-Middle Norian		Cache Creek	F. CORDEY	1993	93-GGA-A-32-12	Teslin	105C/4	radiolarian		microfossil
89	xx7230	C-300535	Late Triassic-Early Jurassic		Cache Creek	F. CORDEY	1993	93-GGA-S-B-26-04	Teslin	105C/3	radiolarian		microfossil
90	xx7253	C-300562	Middle or Late Triassic, Ladinian-early Carnian		Cache Creek	F. CORDEY	1994	94-GGA-15-04-A	Teslin	105C/3	radiolarian		microfossil
91	xx7217	C-300514	possibly Triassic		Cache Creek	F. CORDEY	1993	93-GGA-A-31-11	Teslin	105C/5	radiolarian		microfossil
92	xx7060	C-176028	Late Carboniferous-Early Permian, Bashkirian-Sakmarian		Cache Creek	M.J. ORCHARD	1991	91-GGA-S-21-2	Teslin	105C/6	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
93	xx7252	C-300560	Middle Triassic, Ladinian		Cache Creek	F. CORDEY	1994	94-GGA-14-07-B	Teslin	105C/5	radiolarian		microfossil
94	xx7229	C-300534	possibly Early Jurassic		Cache Creek	F. CORDEY	1993	93-GGA-S-B-26-03	Teslin	105C/6	radiolarian		microfossil
95	xx7216	C-300513	Late Triassic, Carnian-Middle Norian		Cache Creek	F. CORDEY	1993	93-GGA-A-31-07	Teslin	105C/5	radiolarian		microfossil
96	xx7287	C-302174	Middle or Late Triassic		Cache Creek	F. CORDEY	1994	94-GGA-J-14-03-B	Teslin	105C/6	radiolarian		microfossil
97	xx7254	C-300565	probably Triassic, possibly Middle Triassic		Cache Creek	F. CORDEY	1994	94-GGA-16-07-B	Teslin	105C/6	radiolarian		microfossil
98	xx7014	C-156617	Late Triassic, Late Norian		Cache Creek	M.J. ORCHARD	1988	88OF-JLJ-105	Teslin	105C/6	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil
99	xx7285	C-302169	Middle or Late Triassic		Cache Creek	F. CORDEY	1994	94-GGA-J-13-07-B	Teslin	105C/5	radiolarian		microfossil
100	xx7284	C-302168	Late Triassic, late Carnian-Middle Norian		Cache Creek	F. CORDEY	1994	94-GGA-J-13-06-D	Teslin	105C/5	radiolarian		microfossil
101	xx7087	C-176394	Late? Permian		Cache Creek	M.J. ORCHARD	1990	90-GGA-33-10A	Teslin	105C/6	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 6: Fossil Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATE
102	xx6902	C-117199	Late Carboniferous (Pennsylvanian)-Early Permian, Bashkirian-Asselian		Cache Creek	M.J. ORCHARD	1985	85-TD-TES-11	Teslin	105C/5	conodont; foraminiferid; radiolarian; gastropod; echinoderm, holothuroid; sponge; fish	spicule; ichthyolith; shell	microfossil
103	xx7086	C-176393	Late Carboniferous		Cache Creek	M.J. ORCHARD	1990	90-GGA-31-7A	Teslin	105C/6	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
104	xx7023	C-156672	Permian - Triassic		Cache Creek	M.J. ORCHARD	1989	89OF-JLJ-148	Teslin	105C/6	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil
105	xx7015	C-156620	Triassic		Cache Creek	M.J. ORCHARD	1988	88OF-JLJ-120	Teslin	105C/6	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil
106	xx7018	C-156625	Late Carboniferous (Pennsylvanian)-Early Permian, Bashkirian - Asselian		Cache Creek	M.J. ORCHARD	1988	88OF-JLJ-150	Teslin	105C/6	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil
107	xx7163	C-300003	Middle or Late Triassic, Ladinian-Carnian		Cache Creek	F. CORDEY	1990	90-GGA-29-02/AFF-30-1	Teslin	105C/6	radiolarian		microfossil
108	xx7017	C-156624	Late Carboniferous (Pennsylvanian)-Early Permian, Bashkirian - Sakmarian		Cache Creek	M.J. ORCHARD	1988	88OF-JLJ-149	Teslin	105C/6	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil
109	xx7221	C-300519	Middle or Late Triassic		Cache Creek	F. CORDEY	1993	93-GGA-A-39-10	Teslin	105C/5	radiolarian		microfossil
110	xx7088	C-176402	Triassic		Cache Creek	M.J. ORCHARD	1990	90-GGA-29-3A	Teslin	105C/6	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
111	xx7164	C-300004	Middle or Late Triassic, Ladinian-Carnian		Cache Creek	F. CORDEY	1990	90-GGA-29-03/AFF-31-1	Teslin	105C/6	radiolarian		microfossil
112	xx8915	O-020306	upper Lower Jurassic, probably Toarcian		Richthofen	H. FREBOLD	0	JOW-51-F22	Whitehorse	105D/7	cephalopod (ammonoid); bivalve		macrofossil
113	xx7165	C-300010	Late Permian middle Guadalupian		Cache Creek	F. CORDEY	1990	90-GGA-32-04/AFF-47-5	Teslin	105C/6	radiolarian		microfossil
114	xx7069	C-176057	Late Carboniferous		Cache Creek	M.J. ORCHARD	1991	91-GGA-41-10B	Teslin	105C/5	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
115	xx8654	O-024830	possibly Toarcian		Richthofen	H. Frebold	0		Whitehorse	105D/6	cephalopod (ammonoid); cephalopod (coleoid); bivalve; gastropod		macrofossil
116	xx8655	O-024831	Pliensbachian?		Richthofen	H. Frebold	0		Whitehorse	105D/6	cephalopod (ammonoid); cephalopod (coleoid); bivalve; gastropod		macrofossil
117	xx8656	O-024832	Pliensbachian?		Richthofen	H. Frebold	0		Whitehorse	105D/6	cephalopod (ammonoid); cephalopod (coleoid); bivalve; gastropod		macrofossil
118	xx8657	O-024833	Pliensbachian?		Richthofen	H. Frebold	0		Whitehorse	105D/6	cephalopod (ammonoid); cephalopod (coleoid); bivalve; gastropod		macrofossil
119	xx8658	O-024834	possibly Toarcian		Richthofen	H. Frebold	0		Whitehorse	105D/6	cephalopod (ammonoid); cephalopod (coleoid); bivalve; gastropod		macrofossil

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MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATE
120	xx8659	O-024835	Pliensbachian?		Richthofen	H. Frebold	0		Whitehorse	105D/6	cephalopod (ammonoid); cephalopod (coleoid); bivalve; gastropod		macrofossil
121	xx8660	O-024836	Indeterminate, possibly Middle Lias		Richthofen	H. Frebold	0		Whitehorse	105D/6	cephalopod (ammonoid); cephalopod (coleoid); bivalve; gastropod		macrofossil
122	xx8661	O-024837	Pliensbachian?		Richthofen	H. Frebold	0		Whitehorse	105D/6	cephalopod (ammonoid); cephalopod (coleoid); bivalve; gastropod		macrofossil
123	xx7271	C-301358	possibly Triassic		Cache Creek	F. CORDEY	1990	90-GGA-32-08/AFF-48-3	Teslin	105C/6	radiolarian		microfossil
124	xx7062	C-176033	Late Triassic Norian		Semenof	M.J. ORCHARD	1991	91-GGA-12-19A	Teslin	105C/6	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
125	xx6860	C-108202	Late Triassic, Late Carnian		Hancock?	M.J. ORCHARD	1987	87-OF-CH-TOA-22-5	Whitehorse	105D/6	conodont; foraminiferid; echinoderm; fish	ichthyolith	microfossil
126	xx7260	C-300593	Middle or Late Triassic		Cache Creek	F. CORDEY	1994	94-GGA-T-07-02-A	Teslin	105C/6	radiolarian		microfossil
127	xx7495	C-300591	Late Carboniferous		Cache Creek	M.J. ORCHARD	1994	94-GGA-S-03-04-A	Teslin	105C/5	conodont; gastropod; bivalve; fish	ichthyolith; shell	microfossil
128	xx7063	C-176034	Late Triassic, Late Norian		Hancock	M.J. ORCHARD	1991	91-GGA-13-5A	Teslin	105C/5	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
129	xx7494	C-300590	Late Carboniferous-Early Permian		Cache Creek	M.J. ORCHARD	1994	94-GGA-S-03-02-A	Teslin	105C/5	conodont; gastropod; bivalve; fish	ichthyolith; shell	microfossil
130	xx7064	C-176035	Late Triassic, Late Norian		Hancock	M.J. ORCHARD	1994	91-GGA-13-6A	Teslin	105C/5	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
131	xx7055	C-176012	Middle or Late Triassic, Anisian-Carnian		Cache Creek	F. CORDEY	1994	91-GGA-10-01C	Teslin	105C/5	radiolarian		microfossil
132	xx7056	C-176014	Late Triassic, ?Norian		Hancock	M.J. ORCHARD	1991	91-GGA-13-3A	Teslin	105C/5	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
133	xx7170	C-300023	Late Triassic-Middle Jurassic		Cache Creek	F. CORDEY	1991	91-GGA-13-03B	Teslin	105C/5	radiolarian		microfossil
134	xx7070	C-176059	Late Triassic, Middle-Late Norian		Hancock	M.J. ORCHARD	1991	91-GGA-13-2B	Teslin	105C/5	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
135	xx7057	C-176018	Late Carboniferous, Bashkirian-Moscovian		Cache Creek	M.J. ORCHARD	1991	91-GGA-S-11-3F	Teslin	105C/5	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
136	xx7934	O-025048	probably late Norian	probably Spondylospira fauna	Hancock	E.T. TOZER	0		Whitehorse	105D/8	bivalve		macrofossil
137	xx5620	C-108232	Middle Toarcian - Early Bajocian		Richthofen	T.P. POULTON	1989	89-CH-12-5	Whitehorse	105D/6	bivalve; cephalopod (ammonoid)		macrofossil
138	xx5622	C-108231	Toarcian?		Richthofen	T.P. POULTON	1989	89-CH-12-0	Whitehorse	105D/6	bivalve; cephalopod (ammonoid)		macrofossil

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MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATE
139	xx7061	C-176030	Late Devonian-Early Carboniferous, Famennian-Visean		Cache Creek	M.J. ORCHARD	1991	91-GGA-24-3	Teslin	105C/5	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
140	xx6901	C-117184	Late Carboniferous (Pennsylvanian)-Early Permian?		Cache Creek	M.J. ORCHARD	1985	85-TD-WH-1	Whitehorse	105D/8	conodont; foraminiferid; radiolarian; gastropod; echinoderm, holothuroid; sponge; fish	spicule; ichthyolith; shell	microfossil
141	xx8916	O-020307	upper Lower Jurassic, probably Toarcian		Richthofen	H. FREBOLD	1951	JOW-51-F23	Whitehorse	105D/7	cephalopod (ammonoid); bivalve		macrofossil
142	xx7084	C-176383	Late? Permian		Cache Creek	M.J. ORCHARD	1990	90-GGA-17-10C	Teslin	105C/12	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
143	xx7462	C-210131	Late Carboniferous-Early Permian		Cache Creek	M.J. ORCHARD	1993	93-GGA-G-32	Teslin	105C/12	conodont; gastropod; bivalve; fish	ichthyolith; shell	microfossil
144	xx7083	C-176381	Permian?		Cache Creek	M.J. ORCHARD	1990	90-GGA-16-6A	Teslin	105C/12	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
145	xx7464	C-210135	Late Triassic		Cache Creek	M.J. ORCHARD	1993	93-GGA-G-36	Teslin	105C/12	conodont; gastropod; bivalve; fish	ichthyolith; shell	microfossil
146	xx7463	C-210133	Late Triassic		Cache Creek	M.J. ORCHARD	1993	93-GGA-G-34	Teslin	105C/12	conodont; gastropod; bivalve; fish	ichthyolith; shell	microfossil
147	xx7214	C-300509	Middle or Late Triassic		Cache Creek	F. CORDEY	1993	93-GGA-B-08-01	Teslin	105C/12	radiolarian		microfossil
148	xx7082	C-176377	Late? Triassic ?Early Carnian		Cache Creek	M.J. ORCHARD	1990	90-GGA-11-5B	Teslin	105C/12	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
149	xx7929	O-024380	Lower(?) Carnian		Casca	E.T. TOZER	1954	54/5	Whitehorse	105D/11	bivalve; cephalopod (ammonoid); brachiopod; coral; echinoderm, echinoid		macrofossil
150	xx7169	C-300022	Mesozoic, possibly Late Triassic late Carnian-Middle Norian		Cache Creek	F. CORDEY	1990	90-GGA-09-01A	Teslin	105C/12	radiolarian		microfossil
151	xx7933	O-026655	Late Triassic, Late Norian		Casca	E.T. TOZER	1955	55/1	Whitehorse	105D/10	bivalve		macrofossil
152	xx7920	O-017557	early Norian or late Carnian		Casca	E.T. TOZER	1950	50/F/7	Whitehorse	105D/10	bivalve; cephalopod (ammonoid); brachiopod; coral; echinoderm, echinoid		macrofossil
153	xx7081	C-176373	Middle - Late Triassic Ladinian - Early Carnian		Cache Creek	M.J. ORCHARD	1990	90-GGA-5-6A	Teslin	105C/12	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
154	xx7080	C-176371	Late Triassic, Late Carnian - Early Norian	primitius	Cache Creek	M.J. ORCHARD	1990	90-GGA-1-4C	Teslin	105C/12	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
155	xx7483	C-202992	Upper Triassic, Upper Norian	cordilleranus	Hancock	E.T. TOZER	1994	94-CH-25-1M	Whitehorse	105D/16	bivalve; cephalopod (ammonoid); brachiopod		macrofossil
156	xx7132	C-203062	Middle Triassic Ladinian		Joe Mountain	M.J. ORCHARD	1993	93-CH-47-4	Whitehorse	105D/15	conodont; sponge; fish	ichthyolith; shell; spicule	microfossil
157	xx7009	C-156604	Late Triassic latest Middle-Late Norian		Hancock	M.J. ORCHARD	1988	88OF-JLJ-27A	Whitehorse	105D/14	conodont; foraminiferid; radiolarian; echinoderm, crinoid; fish	ichthyolith; shell	microfossil

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 6: Fossil Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATE
158	xx7461	C-210114	Late Triassic	Upper +nodosus? Zone	Hancock	M.J. ORCHARD	1993	93-GGA-G-15A	Whitehorse	105D/16	conodont; gastropod; bivalve; fish	ichthyolith; shell	microfossil
159	xx7465	C-210107	Late Triassic		Hancock	M.J. ORCHARD	1993	93-GGA-G-7	Whitehorse	105D/16	conodont; gastropod; bivalve; fish	ichthyolith; shell	microfossil
160	xx7162	C-300002	Mesozoic, possibly Late Triassic-Middle Jurassic			F. CORDEY	1990	90-GGA-25-03F	Teslin	105C/13			
161	xx7085	C-176384	Ordovician-Triassic			M.J. ORCHARD	1990	90-GGA-25-3B	Teslin	105C/13	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
162	xx7072	C-176064	Late Triassic, Late Norian	upper bidentata	Hancock	M.J. ORCHARD	1991	91-GGA-43-9A	Whitehorse	105D/16	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
163	xx7131	C-203056	Middle Triassic, Ladinian		Joe Mountain	M.J. ORCHARD	1993	93-CH-15-3	Whitehorse	105D/15	conodont; sponge; fish	ichthyolith; shell; spicule	microfossil
164	xx7526	C-202982	Late Triassic		Hancock	M.J. ORCHARD	1995	95-JTI-60	Whitehorse	105D/15	conodont		microfossil
165	xx7525	C-202981	Late Triassic		Hancock	M.J. ORCHARD	1995	95-JTI-58	Whitehorse	105D/15	conodont		microfossil
166	xx7130	C-203051	Middle Triassic		Joe Mountain	M.J. ORCHARD	1993	93-CH-JH-14-7	Whitehorse	105D/15	conodont; sponge; fish	ichthyolith; shell; spicule	microfossil
167	xx7133	C-203063	Middle Triassic, Ladinian		Joe Mountain	M.J. ORCHARD	1993	93-CH-48-2	Whitehorse	105D/15	conodont; sponge; fish	ichthyolith; shell; spicule	microfossil
168	xx7521	C-202973	Middle-Late Triassic		Joe Mountain	M.J. ORCHARD	1995	95-CH-14-7	Whitehorse	105D/15	conodont		microfossil
169	xx7484	C-203078	Late Triassic		Casca	M.J. ORCHARD	1994	94-CH-35-6	Whitehorse	105D/16	conodont; foraminiferid; echinoderm, holothuroid; fish	ichthyolith; shell	microfossil
170	xx7487	C-203081	Late Triassic		Mandanna	M.J. ORCHARD	1994	94-CH-57-3	Whitehorse	105D/14	conodont; foraminiferid; echinoderm, holothuroid; fish	ichthyolith; shell	microfossil
171	xx7071	C-176063	Late Triassic, Carnian		Casca	M.J. ORCHARD	1991	91-GGA-43-8A	Whitehorse	105D/16	conodont; foraminiferid; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	ichthyolith; spicule; shell; ramiform element	microfossil
172	xx7134	C-203064	Middle Triassic, Ladinian		Joe Mountain	M.J. ORCHARD	1993	93-CH-34-4	Whitehorse	105D/15	conodont; sponge; fish	ichthyolith; shell; spicule	microfossil
173	xx7456	C-202987	Probably Middle Triassic		Joe Mountain	E.T. TOZER	1993	93-CH-34-3M	Whitehorse	105D/15	bivalve; cephalopod (ammonoid); brachiopod		macrofossil
174	xx7123	C-202954	Middle Triassic, Ladinian		Joe Mountain	M.J. ORCHARD	1993	93-CH-28-1	Whitehorse	105D/15	conodont; sponge; fish	ichthyolith; shell; spicule	microfossil
175	xx7520	C-202972	Late Triassic		Hancock	M.J. ORCHARD	1995	95-CH-14-1	Whitehorse	105D/15	conodont		microfossil
176	xx7486	C-203080	Late Triassic		Hancock?	M.J. ORCHARD	1994	94-CH-52-3	Whitehorse	105D/16	conodont; foraminiferid; echinoderm, holothuroid; fish	ichthyolith; shell	microfossil
177	xx5977	C-203068	early Sinemurian		Richthofen	H.W. TIPPER	1993	93CH-201	Whitehorse	105D/14	bivalve; cephalopod (ammonoid); gastropod		macrofossil
178	xx6041	C-203068	Phanerozoic		Richthofen	M.J. ORCHARD	1993	93-CH-20	Whitehorse	105D/14	conodont; sponge; fish	ichthyolith; shell; spicule	microfossil
179	xx5976	C-108242	early Pliensbachian	whiteavesi	Richthofen	H.W. TIPPER	1992	92CH-52-2	Whitehorse	105D/14	bivalve; cephalopod (ammonoid); gastropod		macrofossil
180	xx7522	C-202990	Upper Triassic, Norian	cordilleranus	Casca	E.T. TOZER	1995	95-CH-31-6M	Whitehorse	105D/16	bivalve; cephalopod (ammonoid); brachiopod		macrofossil
181	xx7490	C-203069	Permian-Triassic		Casca	M.J. ORCHARD	1994	94-CH-JH-4-3B	Whitehorse	105D/16	conodont; foraminiferid; echinoderm, holothuroid; fish	ichthyolith; shell	microfossil
182	xx7467	C-202991	Probably Upper Triassic		Casca	E.T. TOZER	1993	93-J-43-8M	Whitehorse	105D/15	bivalve; cephalopod (ammonoid); brachiopod		macrofossil
183	xx7457	C-202988	Middle or Upper Triassic, probably Upper		Casca	E.T. TOZER	1993	93-CH-49-3M	Whitehorse	105D/15	bivalve; cephalopod (ammonoid); brachiopod		macrofossil
184	xx7524	C-202980	Late Triassic		Casca	M.J. ORCHARD	1995	95-JTI-52	Whitehorse	105D/15	conodont		microfossil

YUKON GEOLOGICAL SURVEY - GEOSCIENCE MAP 2011-1 - Appendix 6: Fossil Data for Sheet 3 - Whitehorse (105D) and Part of Teslin (105C)

MAP#	ID_NUM	CURATION#	AGE	FOSSIL_ZONE	FORMATION	AUTHOR	DATE	STATION	NAME_250K	NTS_50K	FOSSIL_TYPE	FOSSIL_PART	FOSSIL_CATE
185	xx5975	C-108238	early Sinemurian		Richthofen	H.W. TIPPER	1992	92CH-51-1	Whitehorse	105D/14	bivalve; cephalopod (ammonoid); gastropod		macrofossil

Note: This compilation of fossil collections from Whitehorse trough and surrounding areas used the compilation of Poulton et al. (2003) as a base. It includes additional recently published fossil collections, as well as a number of unpublished collections by the Yukon Geological Survey

Poulton, T., Orchard, M.J., Gordey, S.P. and Davenport, P., 2003. Selected Yukon fossil determinations. In: Yukon digital geology, version 2, S.P. Gordey and A.J. Makepeace (eds.), Geological Survey of Canada, Open File 1749, and Yukon Geological Survey, Open File 2003-9(D).