

- ### LEGEND
- QUATERNARY**
Q unconsolidated glacial, glaciofluvial and glaciolacustrine deposits; fluvial silt, sand, and gravel, in part with cover of soil and organic deposits
- INTRUSIVE ROCKS**
- PALEOGENE**
LPf light to dark grey, very fine to medium-grained spherulitic dacite, rhyodacite; subvolcanic white-buff rhyolite, rarely with biotite and porphyritic K-feldspar
- EARLY to LATE CRETACEOUS**
mKg medium to coarse-grained hornblende diorite; coarse-grained quartz biotite monzonite
- MIDDLE JURASSIC**
mJg coarse-grained to pegmatitic biotite muscovite syenite
- PENNSYLVANIAN TO TRIASSIC**
Marsh Lake intrusive complex
Pg light grey to grey-green, medium to coarse-grained to porphyritic gabbro/diorite; medium-grained clinopyroxenite; fine to medium-grained diorite; olvine porphyritic diabase
- JURASSIC**
Richthofen formation
Jc green-brown, medium to coarse-grained lithic sandstone, typically coupled with brown to dark grey turbiditic siltstone; polymictic paraconglomerate
- STIKINIA**
- TRIASSIC**
Aksala formation
uTc coarse-grained, black-grey arkosic sandstone to fine-grained, thinly laminated, dark grey argillaceous siltstone; siltstone forms thick sections with grey-buff very fine-grained sandstone interlaminae, locally bioturbated; sandstone locally calcareous
- uTh** coarsely crystalline, light grey limestone to limestone breccia, locally fossiliferous

- CACHE CREEK TERRANE**
- PENNSYLVANIAN TO TRIASSIC**
Michie formation (new unit)
mTk dark grey, fine-grained siltstone; buff, coarse-grained calc-lithic sandstone; green-grey wacke to pebble polymictic orthoconglomerate; fine-grained siltstone locally interbedded with thin, dirty limestone beds; carbonate-rich debris flows and rare olistoliths(?)
- Ctm** grey, massive, crystalline limestone, locally crinoidal and fusuline; recrystallized white to pale yellow limestone, limestone breccia; dolostone
- Ctc** grey-red-brown massive to ribbon banded chert, locally with soft sediment deformation; fine-grained argillite between beds
- Ctv** dark grey, medium-grained to aphanitic, chloritized basalt, locally amygdaloidal; light grey, fine-grained andesite; lenses of limestone and chert, locally, within the volcanic rocks; andesite to chloritized basalt intercalated with green-grey auto-brecciated volcanoclastic rocks; basalt rarely pillowed and hyaloclastic
- Ctum** dark grey-brown, medium to coarse-grained pyroxenite; dun-brown to orange, coarse-grained dunite, harzburgite; sheared, locally brecciated, highly magnetic serpentinite; dun-orange listwaenite

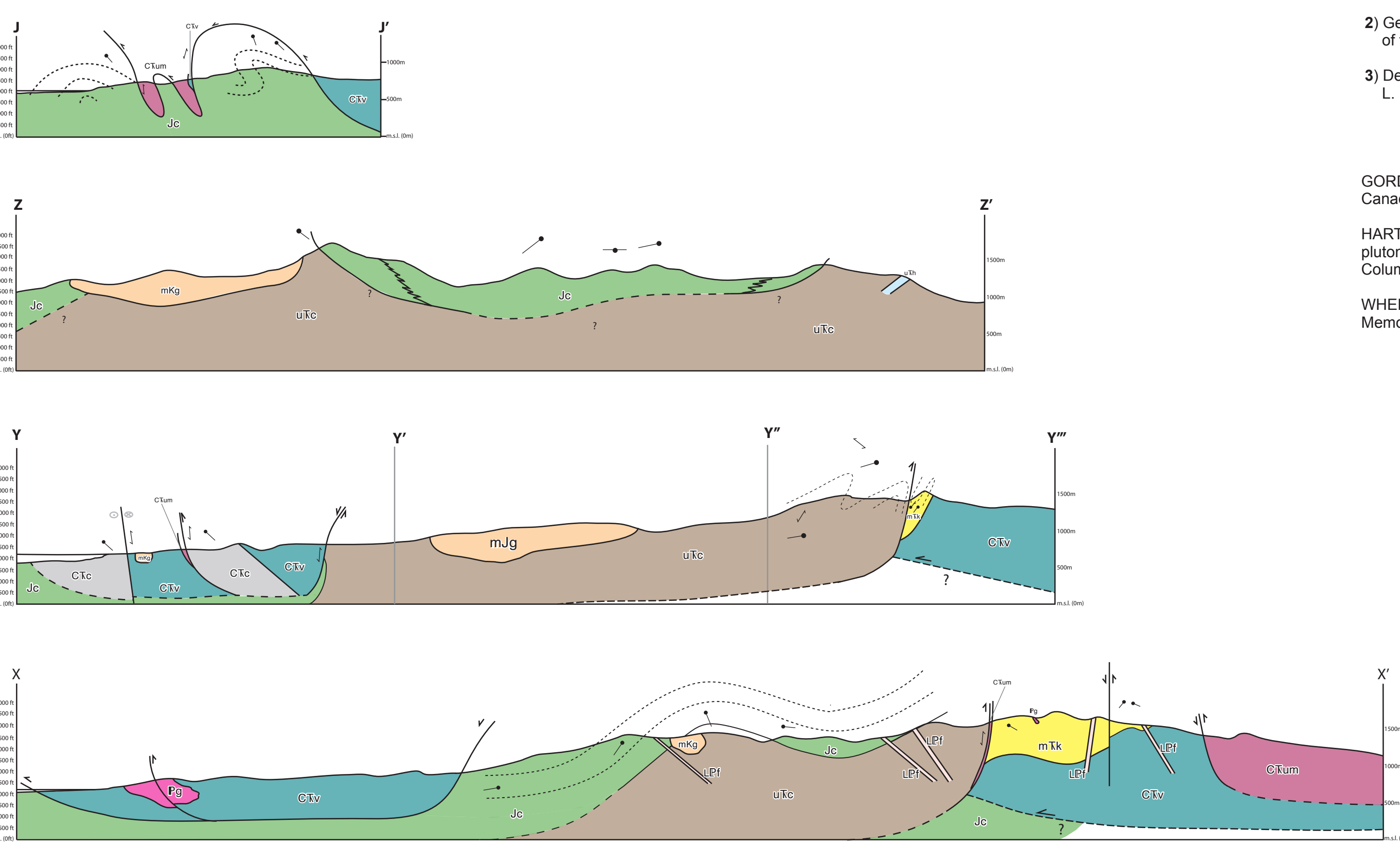
Mineral Occurrences Yukon MINFILE			
105C 049	○	NUF	Anomaly Unknown
105C 055	◇	Eaglenest	Showing Au, Ag Au-Quartz Veins
105D 067	◇	McClintock	Drilled Prospect Cu Cu±Ag Quartz Veins
105D 068	○	Oak	Anomaly Unknown
105D 069	△	Marsh	Drilled Prospect Cu, Au Gabbroid Cu-Ni-PGE
105D 070	□	Lavalee	Showing Asbestos Ultramafic-hosted asbestos
105D 071	△	Michie	Showing Cr Podiform Chromite
105D 115	△	Worbetts	Prospect Au, Ag Polymetallic Veins Ag-Pb-Zn±Au
105D 153	○	Ichie	Anomaly Unknown
105D 154	◇	Into	Anomaly Polymetallic Veins Ag-Pb-Zn±Au
105D 176	○	Mt. Michie	Unknown Unknown
105D 178	○	Military	Anomaly Unknown Unknown
105D 185	○	Bronco	Anomaly Unknown Unknown
105D 196	◇	Mike	Showing Cu±Ag Quartz Veins
105D 198	◇	NLC	Showing Au-Quartz Veins

- YUKON GEOLOGICAL SURVEY**
 CELEBRATING 20 YEARS 1992-2012
- Yukon Energy, Mines and Resources**
- ### SYMBOLS
- Geologic contacts (defined, approximate, inferred, covered).....
- Fault: movement not known (defined, covered).....
- Thrust fault (defined, approximate, inferred, covered).....
- Sinistral strike-slip fault (approximate).....
- Normal fault (defined, approximate, inferred, covered).....
- Fold axial trace (upright - anticline, syncline; overturned - anticline, syncline).....
- Bedding (inclined, overturned).....
- Dominant foliation (inclined).....
- Intersection lineation (m, s, z).....
- Fold axis (dominant phase).....
- Igneous fabric (dominant).....
- Isotopic date (U-Pb, K-Ar) (most significant age indicated; italic numbers refer to geochronology table).....
- Fossil locality (italic numbers refer to fossil table).....
- Field station.....
- Road/trail.....
- Apparent dip of bedding, foliation (in cross-section).....
- Sense of displacement across strike-slip fault (in cross-section: away, toward).....

FOSSIL LOCALITIES								
MAP#	CURATION#	AGE	FORMATION	AUTHOR	DATE	STATION	FOSSIL TYPE	FOSSIL CATEGORY
1	C-176034	Late Triassic, Late Norian	Hancock	M.J. ORCHARD	1991	91-GGA-13-5A	conodont; foraminifer; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	microfossil
2	C-176035	Late Triassic, Late Norian	Hancock	M.J. ORCHARD	1994	91-GGA-13-6A	conodont; foraminifer; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	microfossil
3	C-176012	Middle or Late Triassic, Anisian-Carnian	Cache Creek	F. CORDEY	1994	91-GGA-10-01C	radiolarian	microfossil
4	C-176014	Late Triassic, Norian?	Hancock	M.J. ORCHARD	1991	91-GGA-13-3A	conodont; foraminifer; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	microfossil
5	C-300023	Late Triassic-Middle Jurassic	Cache Creek	F. CORDEY	1991	91-GGA-13-03B	radiolarian	microfossil
6	C-176059	Late Triassic, Middle-Late Norian	Hancock	M.J. ORCHARD	1991	91-GGA-13-2B	conodont; foraminifer; radiolarian; gastropod; echinoderm; cephalopod (ammonoid); bivalve; sponge; fish	microfossil
7	O-025048	probably late Norian	Hancock	E.T. TOZER		85-TD-WH-1	bivalve	macrofossil
8	C-117184	Late Carboniferous (Pennsylvanian)-Early Permian?	Cache Creek	M.J. ORCHARD	1985		conodont; foraminifer; radiolarian; gastropod; echinoderm, holothuroid; sponge; fish	microfossil

Isotopic Age Determinations							
Map ID	Type	Station #	Age (Ma)	Material	Method	Interpretation	Reference
1	K-Ar	89CH64-1	104 ± 4	Hornblende	crystallization	Hart (1995) M.Sc. thesis, University of British Columbia	
2	U-Pb	10MCO49	244.54 ± 0.13	Zircon (detrital)	CA-TIMS	crystallization	This report
3	U-Pb	12LB181	245.85 ± 0.07	Zircon (detrital)	CA-TIMS	crystallization	This report
4	U-Pb	12LB220	ca. 190	Zircon (detrital)	LA-ICPMS	crystallization	This report

CROSS-SECTIONS



- ### NOTES
- Geology of the northeastern and western portion of the Tagish (NTS 105D/8) map area is after Wheeler (1961).
 - Geology of the western portion of the Streak Mountain (NTS 105C/12) and north western portion of the Squanga Lake (NTS 105C/5) is after Gordy and Stevens (1994).
 - Detrital zircon dates from coarse sandstones of 'Michie formation' is unpublished data by L. Bickerton.

- ### REFERENCES
- GORDEY, S.P. and STEVENS, R.A. 1994. Geology, Teslin, Yukon Territory. Geological Survey of Canada, Open File 2886, 1:250 000.
- 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.
- WHEELER, J.O., 1961. Whitehorse map-area, Yukon Territory, 105D. Geological Survey of Canada, Memoir 312, 156 p.

1:50 000-scale topographic base data produced by CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA

ONE THOUSAND METRE GRID Universal Transverse Mercator Projection North American Datum 1983 Zone 8

CONTOUR INTERVAL 20 METRES Elevations in metres above Mean Sea Level

BEDROCK GEOLOGY
MICHIE CREEK/TAGISH
YUKON

SCALE 1:50 000

True North
 1°33' 25'30" 25°30' 25'30" 25°30'

Use diagram only to obtain numerical values APPROXIMATE MEAN DECLINATION 2005 FOR CENTRE OF MAP

105D/15	105D/16	105C/13
Joe Mountain	Mount McClintock	Rosy Lake
105D/10	105D/09	105C/12
Macrae	THIS MAP	Streak Mountain
105D/07		105C/05
Robinson		Squanga Lake

1 Wheeler (1961)
 2 Gordy and Stevens (1994)

APPENDIX A
Geological map of Michie Creek area (NTS 105D/9) and parts of Tagish area (NTS 105D/8) (1:50,000 scale)
 by Luke Bickerton

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