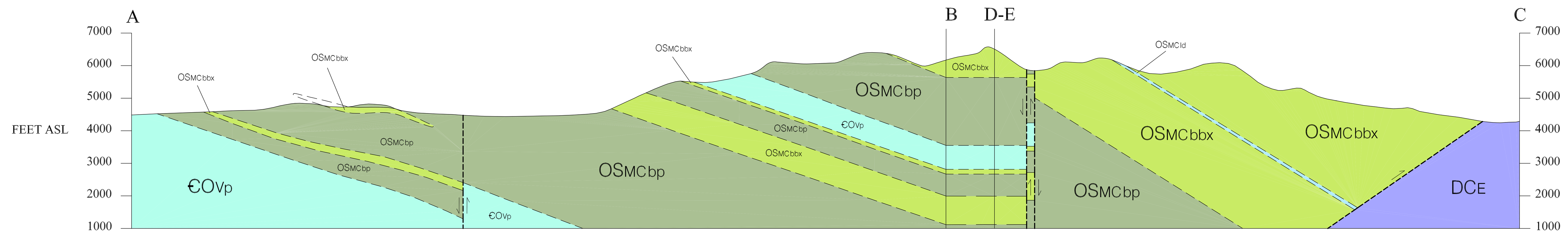

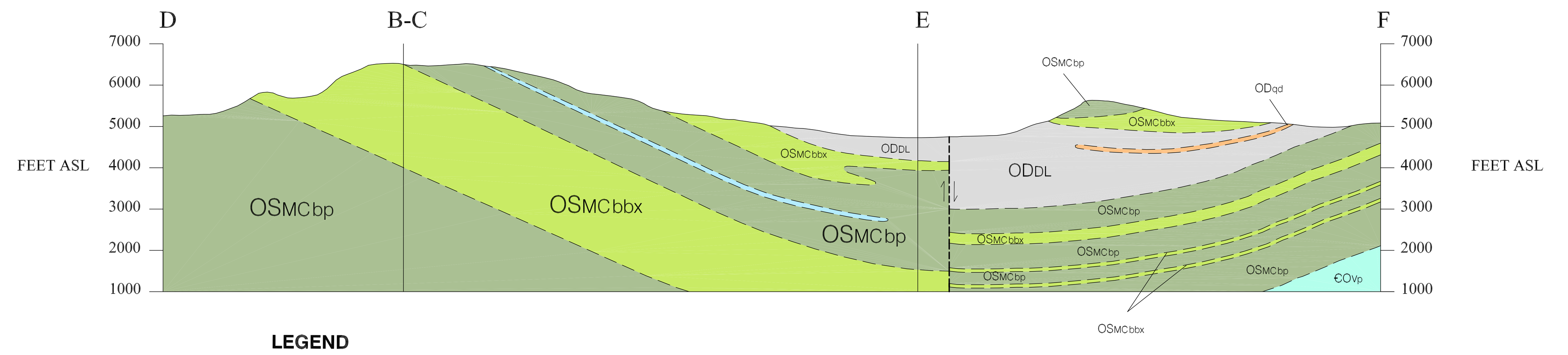

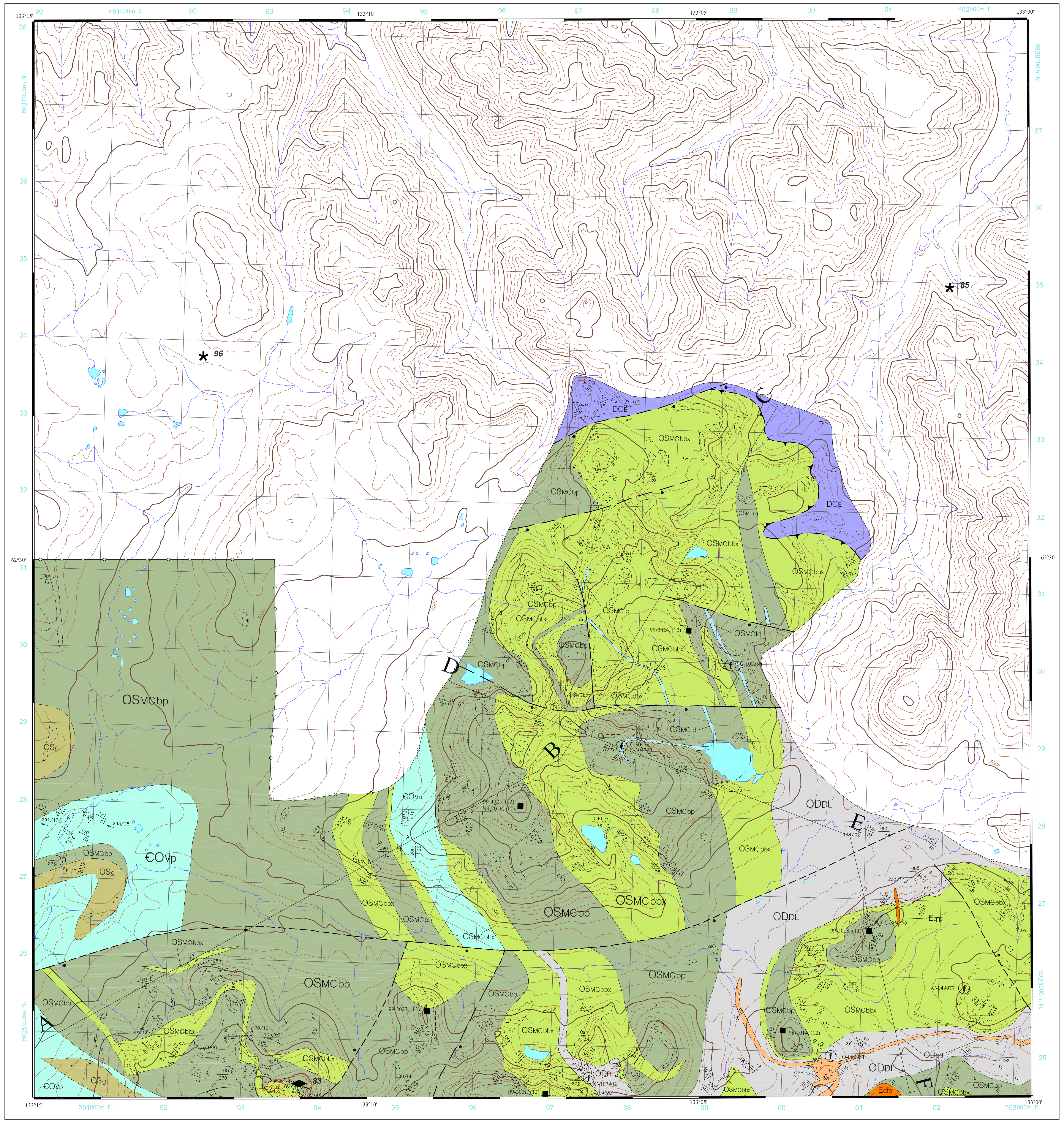

LEGEND

INTRUSIVE ROCKS

EOCENE

quartz-feldspar porphyry

Eqfp	white-weathering, aphanitic to fine-grained, locally flow-banded quartz-feldspar porphyry; commonly contains phenocrysts of smoky grey quartz, biotite and white feldspar

CRETACEOUS

granite to granodiorite undifferentiated

mKUg	grey, resistant, generally medium- to coarse-grained, locally megacrystic, undifferentiated Tay River plutonic suite or Anvil plutonic suite granite to granodiorite

Tay River plutonic suite

mKTRg	Orchay phase - biotite ± hornblende granite to granodiorite

Anvil plutonic suite

mKAg	Mount Mye phase - biotite-muscovite granite; locally foliated

PERMIAN?

gabbro, harzburgite, serpentinite

Ps	mafic and ultramafic intrusive rocks; locally extensively sheared and serpentinized Ps - serpentinite; Phz - harzburgite; Pg - gabbro

ORDOVICIAN-SILURIAN

gabbro

OSg	dark green, locally magnetic, coarse- to fine-grained, massive to foliated gabbro; subvolcanic dykes and sills to Menzie Creek basalts (OSMCb); enclosing phyllites locally display thin contact metamorphic aureoles

pyroxenite

OSpx	dark green, locally magnetic, coarse-grained, massive to foliated, variably serpentinized pyroxenite; subvolcanic dykes and sills to Menzie Creek basalts (OSMCb); enclosing phyllites locally display thin contact metamorphic aureoles

LAYERED ROCKS

YUKON-TANANA TERRANE

TRIASSIC

Faro Peak formation

ŦFPcg	resistant, massive, polymictic conglomerate; clasts include quartzite, chert, limestone and serpentinite; matrix contains detrital muscovite
ŦFPsl	dark grey carbonaceous, locally calcareous shale or siltstone interbedded with medium to dark grey, fine-grained limestone
ŦFPasg	interbedded cherty argillite, chert, sandstone and mafic greywacke or conglomerate
ŦFPb	massive, dark green, fine-grained to aphanitic basalt; may be equivalent to Anvil Range Group basalt

PALEOZOIC

metasedimentary and metavolcanic rocks

PYq	medium to dark grey, locally gritty, muscovitic meta-quartzite to quartzose schist; contains bands of greywacke, gabbro, phyllite; rarely contains eclogite lenses
PYl	grey to tan, massive limestone or dolostone
PYgr	medium to dark olive green, chloritic phyllite to amphibolite; locally displays relict equigranular igneous texture; locally includes ultramafic rocks and/or eclogite (PYgre)
PYog	felsic orthogneiss or paragneiss

SLIDE MOUNTAIN TERRANE

PERMIAN

Campbell Range formation

PCR	Epidotized, locally hematitic, dark green, resistant, massive, poorly foliated basalt or brecciated basalt; contains lesser grey, green, red and black bedded chert, and pale green epivolcaniclastic sandstone or conglomerate

EARLY CARBONIFEROUS-PERMIAN

Rose Mountain formation

CPRM	pale green, tan-weathering, bedded phyllitic chert interbedded with lesser maroon chert and argillite, especially near top of unit; also contains minor black bedded chert, black chert-pebble conglomerate, siltstone, limestone and argillite

DEVONIAN-PERMIAN

undivided Rose Mountain formation and Mount Aho formation

DPRMMA	dark grey to black, pale green, and maroon noncalcareous argillite and bedded chert with lesser siltstone, sandstone, chert-pebble conglomerate and limestone

DEVONIAN-EARLY CARBONIFEROUS

Mount Aho formation

DCMAba	silvery cream, tan-weathering, bedded phyllitic chert with light grey barite beds
DCMAbl	dark grey to black, noncalcareous, siliceous argillite and bedded chert with lesser siltstone, sandstone, chert-pebble conglomerate and limestone
DCMAg	pale green, noncalcareous argillite and bedded chert with lesser shale chip and siltstone breccia, grey sandstone and chert-pebble conglomerate; locally contains maroon argillite and bedded chert

ANCIENT NORTH AMERICA

DEVONIAN-EARLY CARBONIFEROUS

Earn Group

DCE	dark grey to black, noncalcareous, siliceous argillite with lesser siltstone, sandstone, chert-pebble conglomerate and limestone

SILURIAN

siltstone

Ssp	dark grey to black, platy, tan-weathering, thinly laminated, dolomitic siltstone

Road River Group

Steel Formation

Ss	tan- to orange-weathering, dolomitic, bioturbated, silty mudstone

ORDOVICIAN-DEVONIAN

quartz sandstone and dolostone

ODqd	Massive, medium-grained, quartz sandstone interbedded with pale tan-weathering limestone or dolostone

Road River Group

Duo Lake Formation

ODDL	dark grey to black, graptolitic argillite; contains lesser medium to pale grey siltstone and fine sandstone, medium grey limestone and basalt flows

Menzie Creek formation

OSMCb	undivided dark grey green, foliated basalt; includes massive and pillowed, locally amygdaloidal flows and heterolithic or monolithic breccias with lesser limestone, argillite and tuff
OSMCbp	dark grey green, locally amygdaloidal, massive and pillowed basalt with minor monolithic basalt breccia, volcaniclastic sandstone, siltstone and tuff
OSMCbbx	dark grey green, monolithic basalt breccia with lesser volcaniclastic sandstone, siltstone and tuff, and massive and pillowed flows
OSMCld	grey to off-white limestone locally interbedded with orange-weathering dolostone

CAMBRIAN-ORDOVICIAN

Vangorda formation

€OVp	soft, silvery grey, calcareous phyllite with lesser medium crystalline, grey marble, dark grey to black phyllite and dark green gabbro sills and dykes (OSg)
€OVcs	pale green and dark purplish brown, thinly banded calc-silicate rock with lesser black schist, marble and dark green gabbro dykes and sills (OSg)
€OVg	black, locally calcareous, carbonaceous phyllite or schist; commonly contains thin quartzose siltstone interbeds; interbanded with dark green gabbro dykes and sills (OSg)
€OVl	pale to dark grey, foliated marble

UPPER PROTEROZOIC-CAMBRIAN

Mount Mye formation

uP€MMp	brownish grey, noncalcareous, pervasively foliated phyllite; locally indistinctly bedded; contains minor siltstone, marble, calc-silicate rock, carbonaceous phyllite and dark green gabbro dykes and sills (OSg)
uP€MMs	brownish grey, noncalcareous, pervasively foliated muscovite-biotite schist; may contain staurolite, garnet, andalusite, or fibrolite; locally indistinctly bedded; contains minor siltstone, marble, calc-silicate rock, carbonaceous phyllite and dark green gabbro dykes and sills (OSg)
uP€MMcs	pale green and dark purplish brown, thinly banded calc-silicate rock; contains marble and silicated marble beds and dark green gabbro dykes and sills (OSg); lithologically similar to Vangorda calc-silicate rock
uP€MMl	dark to pale grey, medium crystalline marble; typically contains abundant boudins of calc-silicate rock and/or quartz; locally contains coarsely crystalline garnet-pyroxene skarn
uP€MMg	black phyllite to schist; locally contains lenses and beds of black carbonaceous limestone and dark green gabbro dykes and sills (OSg)

FOSSILS

GSC Location No.	Material	Age Range	Ref
O-080030	inarticulate brachiopod	Ordovician, Llanvirn to Caradoc	(14)
O-080031	dipograptid graptolite	Ordovician-Silurian, Llanvirn to Llandovery	(14)
C-102596	conodont	Ordovician, Tremadoc	(1)
C-107902	tetragraptus graptolite	Ordovician, Arenig to basal Llanvirnian	(1)
C-049977	graptolite	early Ordovician	(8)
C-304783	conodont	Indeterminate - barren	(10)
C-304790	conodont	Indeterminate - barren	(10)
C-304791	conodont	Early Ordovician	(10)
C-304792	conodont	Ordovician	(10)

MINERAL OCCURRENCES
Yukon MINFILE

105K 83	◆	REBEL (KD)	Volcanogenic Massive Sulphide
105K 85	*	YETI	Exploration Target
105K 96	*	JON	Exploration Target

Deklerk, R., 2003. Yukon MINFILE - a database of mineral occurrences. Yukon Geological Survey, CD-ROM.

SYMBOLS

- geological contact (defined, approximate, assumed)
- fault or vein-fault, displacement unknown (defined, approximate, assumed) — U D
- thrust fault (defined, approximate, assumed, teeth on hanging wall)
- normal fault (defined, approximate, assumed, dot on downthrown side)
- strike-slip fault (defined, approximate, assumed)
- fold surface axial trace (upright anticline, syncline, overturned anticline, syncline)
- metamorphic boundary (symbol on higher grade side) — schist / phyllite
- bedding (tops not known) — 090/20
- foliation (one tick indicates earliest phase of deformation, two or more ticks indicate subsequent phase(s) of deformation) — 090/20 090/20
- foliation (phase of deformation unknown) — 090/20
- lineation (one arrow indicates earliest phase of deformation, two or more arrows indicate subsequent phase(s) of deformation) — 045/05 045/05
- joint — 090/20
- igneous compositional banding — 090/20
- igneous mineral lineation — 045/05
- fault plane orientation, shear band (C-bands) orientation — 090/20
- shear band plane of flattening (S bands) — 090/20
- mineral lineation/rodding associated with shear bands — 045/05
- apparent dip of measured bedding, foliation (in cross-section)
- foliation form lines in cross-section
- limit of outcrop, subcrop
- projection to surface of mineralized volume
- limit of mapping
- isotopic age determination sample location and age includes radiometric age, 2 sigma error, and sample number — 69.3 ± 0.5 Ma GSC70-45
- fossil sample, includes sample reference number — GC-98-05
- barren fossil sample, includes sample reference number — GC-98-05
- geochemical sample-whole rock with major oxides, minor and trace elements, includes assay number and reference — A098, (1)
- survey control station with station name and elevation (in metres) — HIW10 1500
- diamond drill hole collar (overburden depth/ total depth) in metres — 70X–01 (15/100)
- rotary drill hole collar (overburden depth/ total depth) in metres — 70RH–01 (15/100)
- field station
- trench
- line of cross-section — A B
- primary road
- secondary road, trail, cut line

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12) Pigage, L.C., 2004. Bedrock geology compilation of the Anvil District (parts of 105K/2, 3, 5, 6, 7, and 11), central Yukon. Yukon Geological Survey, Bulletin 15.

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14) Tempelman-Kluit, D.J., 1972. Geology and origin of the Faro, Vangorda, and Swim concordant zinc-lead deposits, central Yukon Territory. Geological Survey of Canada, Bulletin 208, 73 p.

RECOMMENDED CITATION

Pigage, L.C., 2004. Geological map of Mount Mye (NTS 105K/6 NE) and Barwell Lake (NTS 105K/11 SE), central Yukon (1:25 000 scale). Yukon Geological Survey, Geoscience Map 2004-9, also Plate 9 in Bulletin 15.

This map accompanies the bulletin:
Pigage, L.C., 2004. Bedrock geology compilation of the Anvil District (parts of 105K/2, 3, 5, 6, 7, and 11), central Yukon. Yukon Geological Survey, Bulletin 15.

An earlier version of this map was published as Open File 2000-2 by Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada.

The legend shown here is for the entire Anvil District (shown in Plate 2 - Geoscience Map 2004-2). Rock units not present in this map area are not coloured in this legend.

Digital cartography and drafting by L.C. Pigage, Yukon Geological Survey.

Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.

Paper copies of this map, the accompanying report and Yukon MINFILE may be purchased from the Geoscience Information and Sales, c/o Whitehorse Mining Recorder, P.O. Box 2703 (K-102), Whitehorse, Yukon, Y1A 2C6. Phone 867-667-5200, Fax 867-667-5150, Email geosales@gov.yk.ca.

A digital PDF (Portable Document Format) file of this map may be downloaded free of charge from the Yukon Geological Survey website at www.geology.gov.yk.ca.

Keep this map in a dark area to keep colours from fading.

Yukon Geological Survey
Energy, Mines and Resources
Yukon Government

Plate 9
Geoscience Map 2004-9

Geological Map of Mount Mye (NTS 105K/6 NE) and Barwell Lake (NTS 105K/11 SE) Central Yukon (1:25 000 scale)

compiled by
L. C. Pigage

105K/6 NE & 105K/11 SE

YUKON
SCALE 1:25 000

Miles 1 0 1 Milles

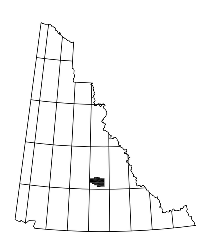
Metres 1000 0 1000 2000 Mètres

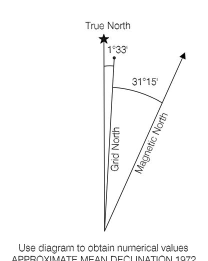
CONTOUR INTERVAL 100 FEET
Elevations in feet above Mean Sea Level
North American Datum 1983
Transverse Mercator Projection

Topographic base produced by SURVEYS AND MAPPING BRANCH DEPARTMENT OF ENERGY, MINES AND RESOURCES

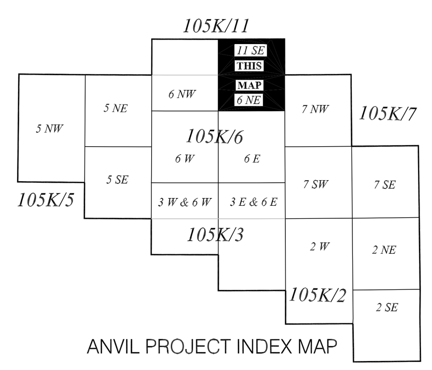
Copyright Her Majesty the Queen in Right of Canada

ONE THOUSAND METRE
Universal Transverse Mercator Grid
ZONE 8


YUKON INDEX MAP

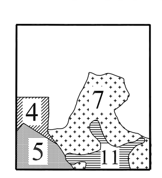


Use diagram to obtain numerical values
APPROXIMATE MEAN DECLINATION 1972
FOR CENTRE OF MAP
Annual change decreasing 4.0'



ANVIL PROJECT INDEX MAP

COMPILATION SOURCES



105K/6 NE & 105K/11 SE