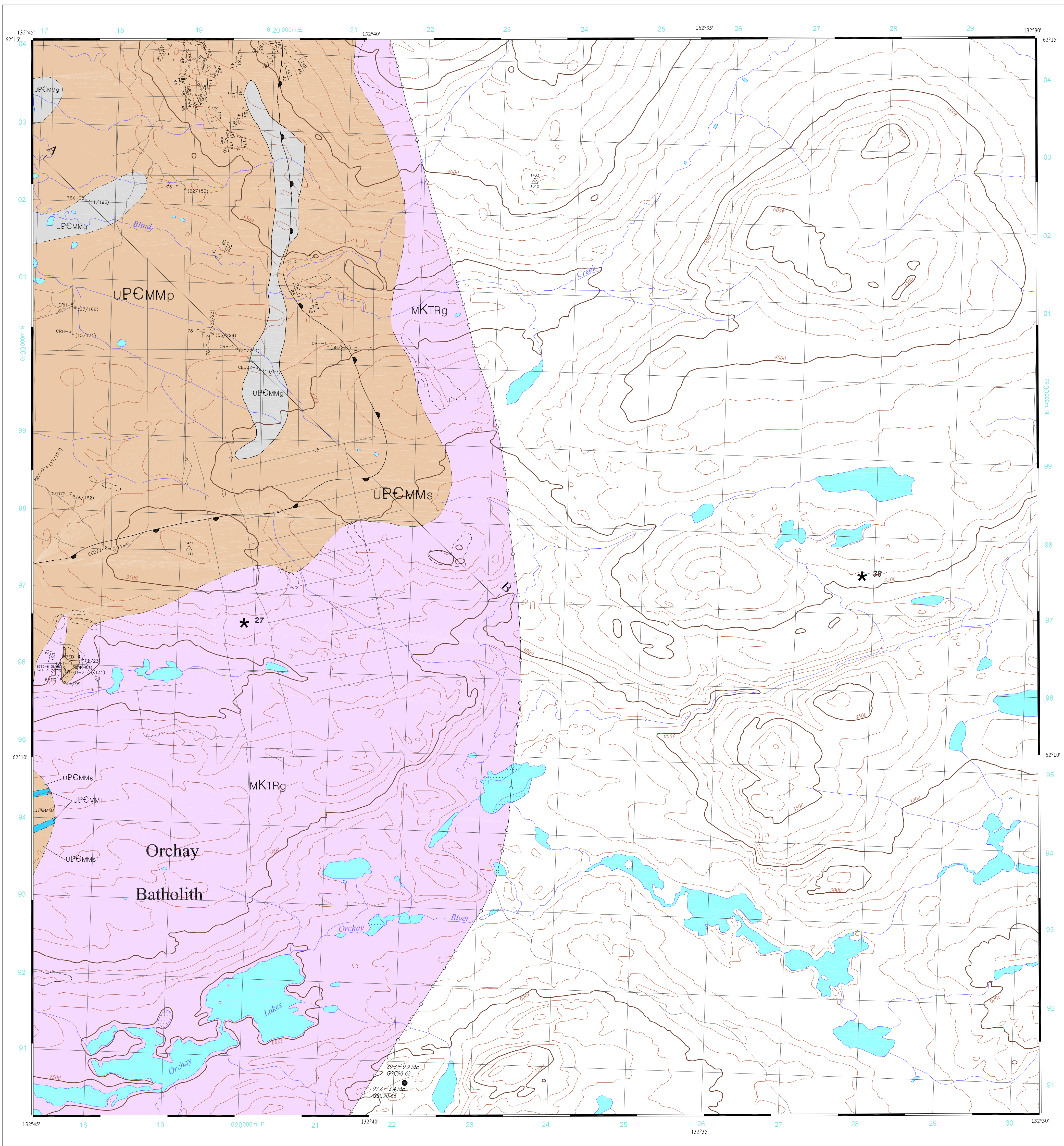
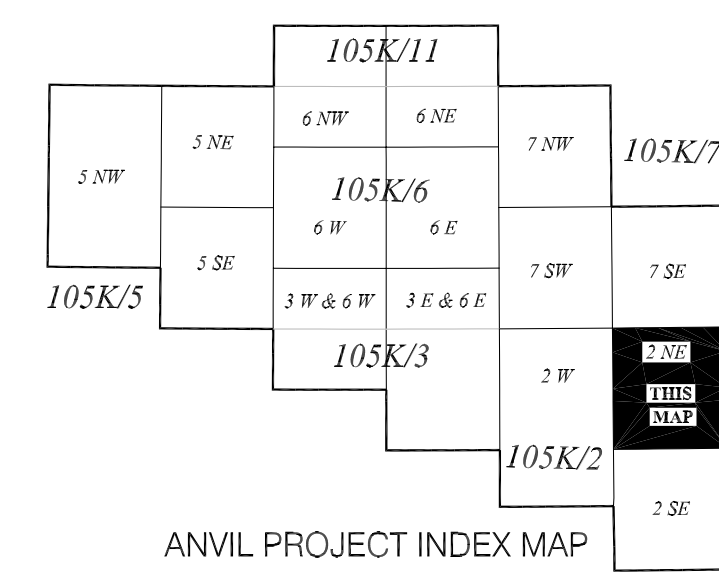
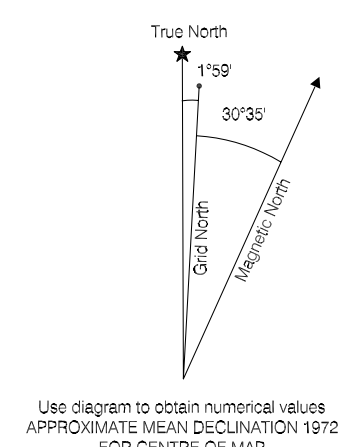




105K/2 NE  
YUKON  
SCALE 1:25 000

ONE THOUSAND METRE  
Universal Transverse Mercator Grid  
ZONE 8

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



## INTRUSIVE ROCKS

### EOCENE

**quartz-feldspar porphyry**  
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**  
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**  
Orchay phase - biotite + hornblende granite to granodiorite

**Anvil plutonic suite**  
Mount Mye phase - biotite-muscovite granite; locally foliated

### PERMIAN?

**gabbro, harzburgite, serpentinite**  
mafic and ultramafic intrusive rocks; locally extensively sheared and serpentinitized  
Ps - serpentinite; Phu - harzburgite; Pg - gabbro

### ORDOVICIAN-SILURIAN

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

**pyroxenite**  
dark green, locally magnetic, coarse-grained, massive to foliated, variably serpentinitized pyroxenite; subvolcanic dykes and sills to Menzies Creek basalt (OSMCb); enclosing phyllites locally display thin contact metamorphic aureoles

### LAYERED ROCKS

#### YUKON-TANANA TERRANE

##### TRIASSIC

**Faro Peak formation**  
resistant, massive, polymictic conglomerate; clasts include quartzite, chert, limestone and serpentinite; matrix contains detrital muscovite

**dark grey carbonaceous, locally calcareous shale or siltstone** interbedded with medium to dark grey, fine-grained limestone

**interbedded cherty argillite, chert, sandstone and mafic greywacke or conglomerate**

**massive, dark green, fine-grained to aphanitic basalt; may be equivalent to Anvil Range Group basalt**

### PALEOZOIC

**metasedimentary and metavolcanic rocks**  
medium to dark grey, locally gritty, muscovitic meta-quartzite to quartzose schist; contains bands of greywacke, gabbro, phyllite; rarely contains eclogite lenses

**grey to tan, massive limestone or dolostone**

**medium to dark olive green, chloritic phyllite to amphibolite; locally displays relict equigranular igneous texture; locally includes ultramafic rocks and/or eclogite (Fig. 5)**

**felsic orthogneiss or paragneiss**

### SLIDE MOUNTAIN TERRANE

#### PERMIAN

**Campbell Range formation**  
Epizonal, locally hercynitic, 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**  
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**  
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**  
silvery cream, tan-weathering, bedded phyllitic chert with light grey barite beds

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

**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

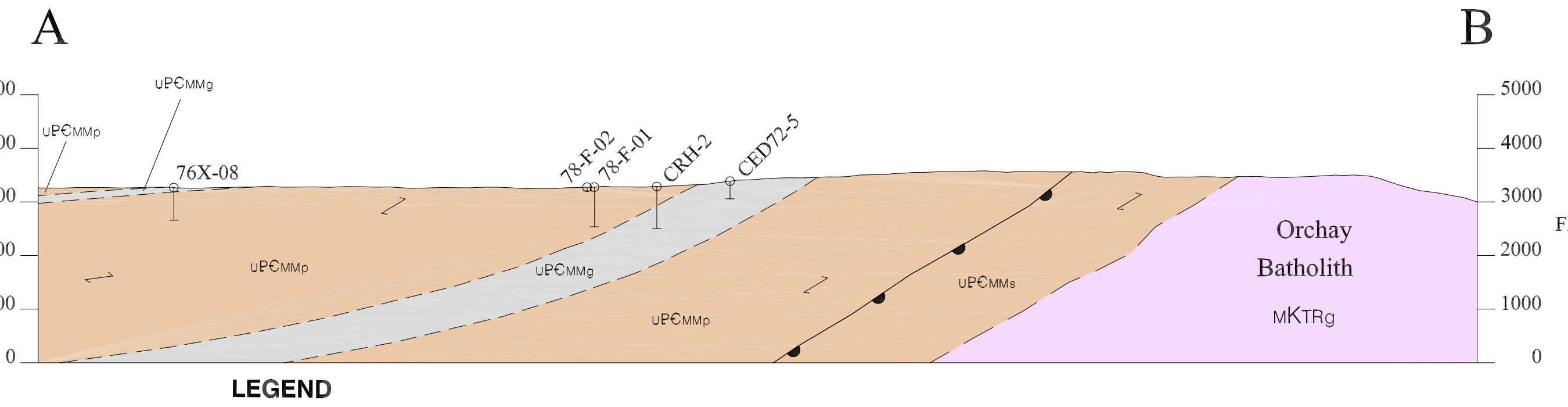
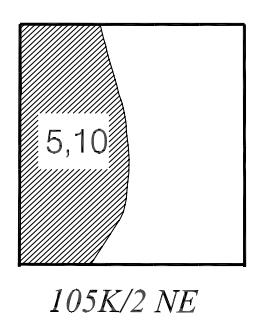
**Earn Group**  
dark grey to black, noncalcareous, siliceous argillite with lesser siltstone, sandstone, chert-pebble conglomerate and limestone

#### SILURIAN

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

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

### COMPILATION SOURCES



### LEGEND

### ORDOVICIAN-DEVONIAN

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

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

**undivided dark grey green, foliated basalt; includes massive and pillowed, locally amygdaloidal flows and heterolithic or monolithic breccias with lesser limestone, argillite and tuff**

**dark grey green, locally amygdaloidal, massive and pillowed basalt with minor monolithic basalt breccia, volcanoclastic sandstone, siltstone and tuff**

**dark grey green, monolithic basalt breccia with lesser volcanoclastic sandstone, siltstone and tuff, and massive and pillowed flows**

**grey to off-white limestone locally interbedded with orange-weathering dolostone**

### CAMBRIAN-ORDOVICIAN

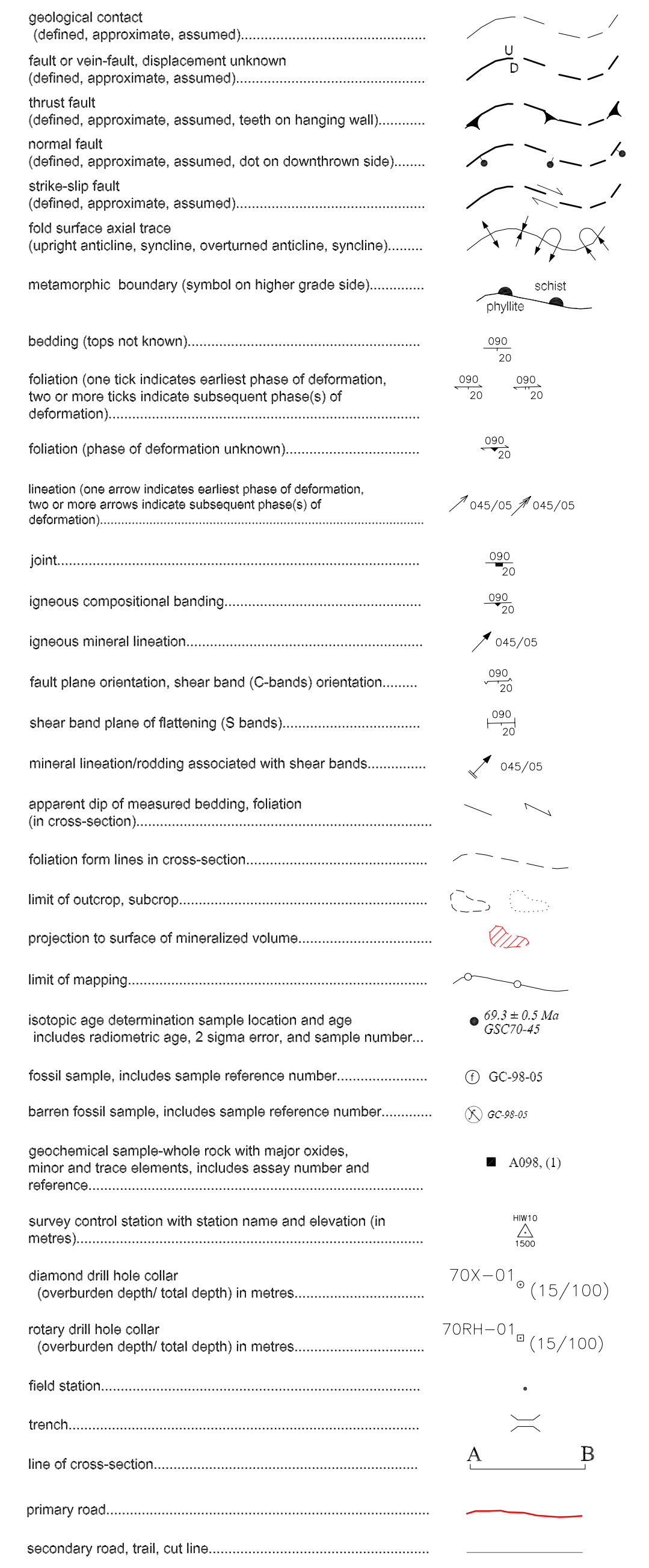
**Vangorda formation**  
soft, silvery grey, carbonaceous phyllite with lesser medium crystalline, grey marble, dark grey to black phyllite and dark green gabbro dykes and sills (OS<sub>g</sub>)

**pale green and dark purplish brown, thinly banded calc-silicate rock with lesser black schist, marble and dark green gabbro dykes and sills (OS<sub>g</sub>)**

**black, locally calcareous, carbonaceous phyllite or schist; commonly contains thin quartzose siltstone interbeds, interbedded with dark green gabbro dykes and sills (OS<sub>g</sub>)**

**pale to dark grey, foliated marble**

### SYMBOLS



### UPPER PROTEROZOIC-CAMBRIAN

**Mount Mye formation**  
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 (OS<sub>g</sub>)

**brownish grey, noncalcareous, pervasively foliated muscovite-biotite schist; may contain sauroite, garnet, andalusite, or kyanite; locally indistinctly bedded; contains minor siltstone, marble, calc-silicate rock, carbonaceous phyllite and dark green gabbro dykes and sills (OS<sub>g</sub>)**

**pale green and dark purplish brown, thinly banded calc-silicate rock; contains marble and siliceous marble beds and dark green gabbro dykes and sills (OS<sub>g</sub>); lithologically similar to Vangorda calc-silicate rock**

**dark to pale grey, medium crystalline marble; typically contains abundant bounds of calc-silicate rock and/or quartz; locally contains coarsely crystalline garnet-pyroxene skarn**

**black phyllite or schist; locally contains lenses and beds of black carbonaceous limestone and dark green gabbro dykes and sills (OS<sub>g</sub>)**

| MINERAL OCCURRENCES<br>Yukon MINFILE |   |        |                    |  |
|--------------------------------------|---|--------|--------------------|--|
| 105K 27                              | ★ | SPUR   | Exploration Target |  |
| 105K 38                              | ★ | VALRAY | Exploration Target |  |

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

| ISOTOPIC AGE DATES |             |        |            |                       |     |
|--------------------|-------------|--------|------------|-----------------------|-----|
| Sample             | Date        | System | Mineral    | Comments              | Ref |
| GSC80-82           | 88.349.9 Ma | K-Ar   | biotite    | intrusion cooling age | (3) |
| GSC80-86           | 97.823.4 Ma | K-Ar   | hornblende | intrusion cooling age | (3) |

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### RECOMMENDED CITATION

Piagge, L.C., 2004. Geological map of Swim Lakes (NTS 105K/2 NE), central Yukon (1:25 000 scale). Yukon Geological Survey, Geoscience Map 2004-16, also Plate 16 in Bulletin 15.

This map accompanies the bulletin:  
Piagge, 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 2000-5 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. Piagge, Yukon Geological Survey.  
Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.

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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](http://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 16  
Geoscience Map 2004-16  
Geological Map of Swim Lakes  
(NTS 105K/2 NE)  
Central Yukon (1:25 000 scale)

compiled by  
L. C. Piagge