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**GEOLOGICAL SURVEY OF CANADA  
OPEN FILE 8572**

**Cartographic symbol standard for  
geological map production**

**Version 1.0**

**Geological Survey of Canada**

**2020**

**Canada** 



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# **Cartographic symbol standard for geological map production**

**Version 1.0**

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**2020**

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Permanent link: <https://doi.org/10.4095/327025>

This publication is available for free download through GEOSCAN (<https://geoscan.nrcan.gc.ca/>).

### **Recommended citation**

Geological Survey of Canada, 2020. Cartographic symbol standard for geological map production;  
Geological Survey of Canada, Open File 8572, ver. 1.0, 1 .zip file. <https://doi.org/10.4095/327025>

Publications in this series have not been edited; they are released as submitted by the author.

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# Introduction

## About the Standard

The purpose of this document is to provide a single standard for digital cartographic symbolization of geological features (either bedrock, surficial or marine) on the Canadian Geoscience Maps (CGM) produced by the Geological Survey of Canada. The symbols were developed for use at standard scales of 1:50 000 to 1:250 000. For special purpose or nonstandard scale maps the symbol standard will serve as a guide and ESRI® proprietary cartographic representation (CartoRep) tools will be used to modify symbology for specific graphic needs.

This standard was compiled by three geological legend committees (Bedrock, Surficial, and Marine) and the Open Geoscience subdivision which reviewed existing formal and informal geological map symbolization standards and adapted them for use with digital mapping systems and the current geospatial data models developed in-house.

## Legend Committee Members

### Bedrock

Brouillette, P., Everett, D., Fallas, K.M., Ford, A., Harrison, C., Houlié, M.G., Inglis, E., Laviolette, A., Ryan, J.J., St-Onge, M.R., and Weatherston, A.

### Surficial

Campbell, J.E., Cocking, R.B., Deblonde, C., Eagles, S., Everett, D., Huntley, D.H., Inglis, E., Kerr, D.E., Laviolette, A., Parent, M., Plouffe, A., Robertson, L., Smith, I.R., St-Onge, D.A., and Weatherston, A.

### Marine

Brake, V.I., Cameron, G.D.M., Cocking, R.B., Deblonde, C., Everett, D., Forbes, D.L., Girard, É., Hynes, S., Inglis, E., Jenner, K.A., Kerr, D.E., King, E.L., Shaw, J., and Todd, B.J.

## Included Files

Included with the download package:

- this reference document (Cartographic Symbol Standard for Geologic Map Production)
- a chart of all the bedrock geologic symbology (Bedrock Style Chart)
- a chart of all surficial geologic symbology (Surficial Style Chart)
- an ESRI® ArcGIS style file (GSC\_SymbolStandard.style)
- four TrueType fonts (GSC\_SymbolStandard1.ttf, GSC\_SymbolStandard2.ttf, GSC\_SymbolStandard3.ttf, GSCGeology2015.ttf)
- a PDF form for submitting a revision (GSC\_Feature\_Modification\_Form.pdf)

## Acknowledgements

The Bedrock Legend Committee would like to thank:

Rob Rainbird, Sebastian Castonguay, David Corrigan, and Glen Stockmal for their informal scientific review of this document and Katarzyna Zawadzka for her detailed formal review.

The Surficial Legend Committee would like to thank:

Isabel McMartin for her guiding thoughts in her review of the Surficial Data Model and its documentation.

## Versions

VERSION	DESCRIPTION
1.0	First version publicly available

## Revisions to the Standard

While this standard is primarily intended for internal use on Canadian Geoscience Maps, other government or private sector organizations may utilize this standard. Comments and suggestions for improvement are welcomed and should be addressed to [nrcan.gscinfo-infocgc.rncan@canada.ca](mailto:nrcan.gscinfo-infocgc.rncan@canada.ca).

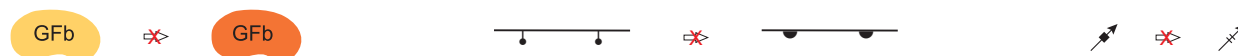
For GSC internal usage, requests for the addition of a new symbol (feature) or modification to an existing symbol (feature) in the standard must be done by filling out the GSC Feature Modification Form (PDF included with this download) and submitting it to the appropriate legend committee for review. If the committee accepts the request, the new symbol (feature) or modification will be incorporated into the next version release of the data model and symbol standard.

Although this standard is considered formalized, it is not intended to be inflexible. Certain situations may arise where an existing symbol might need to be modified **visually** to fit a particular geological situation or setting. ESRI® proprietary Cartographic Representation (CartoRep) tools should be utilized to obtain this **visual only** change.

Examples would include: change colour of point symbol to denote legacy data, alter line thickness for better clarity in complex areas, increase spacing of line ornamentation for less cluttering, change colour of a line due to the colour of the underlying unit, etc.



Examples of what cannot be changed with CartoRep would include: change official colour of a surficial map unit, completely alter the appearance of a line ornament or point symbol (i.e. circle instead of square), etc.



## How to Read this Document

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
4.05.04.001	Marker bed	distinctive lithology		0-0-0			colour can be changed with CartoRep

Symbol # assigned in the ArcGIS style file.

A short description of the feature.

Other keywords to help search for the feature.

Symbol specifications (all measurements are in millimetres). FNT indicates the GSC font number and which character, then size in millimetres.

RGB colour values.

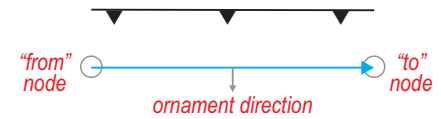
How the feature should be depicted in the map legend.

Number representing the appearance order in the map legend (if stated by the committee).

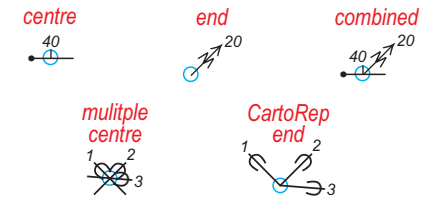
Special notes about using the symbol on the map.

## General Concepts

**RIGHT-SIDE RULE:** All line symbols in this standard follow the right-side rule. This concept places the geological feature (ornamentation) on the right-hand side of the line based on the direction of digitizing (i.e. the first vertex digitized or the “from” node to the last vertex digitized or the “to” node).



**POINT OF OBSERVATION:** All point symbols in this standard have a point of observation that is at the centre of the symbol (at centre of cyan circle), except Bedrock Lineation symbols which will have the point of observation at the end of the symbol (because they usually radiate from the centre of another symbol).



For visual clarity on a map, the user may wish to use CartoRep to change the point of observation from the centre of the symbol to the end of the symbol (such may be the case for multiple crossed striations at a single station).

**LOCATION ACCURACY:** Some line symbols in this standard have up to four levels of location accuracy depicted on the base map.

Level	Description	Example statement	Symbology *
Defined	A feature is observable and its plotted position on the map is within tolerance levels.	“I can clearly see this contact in outcrop, and I can accurately plot its position on the map.”	— Solid line
Approximate	A feature is observable, but its plotted position on the map may not be within tolerance levels.	“I can see this contact in outcrop, but the poor quality of my base map prohibits me from accurately plotting its position.”	— — — — 4.0 mm dashed line
Inferred	A feature is not directly observable (between outcrops or beneath rubble or vegetation), so its location is inferred by indirect means; therefore its plotted position on the map may not be within tolerance levels.	“I can see by the change in debris materials visible that a contact runs through here, but I can’t locate it very precisely.”	— — — — 2.0 mm dashed line
Concealed	A feature is not observable because it is completely concealed (beneath an overlying map unit or body or water or ice), although it may be observable nearby; therefore its plotted position on the map may not be within tolerance levels.	“I can see that a contact is present on both sides of this lake, but I can’t tell where it is located beneath the water.”	— — — — — 1.0 mm dashed line

\* The size values represent one of many types of lines portrayed in this Catalogue.

# 1 Topographic Base Symbolology

## 1.1 Source





The Geological Survey of Canada utilizes CanVec topographic base information for the production of the Canadian Geoscience Map series. CanVec is a digital cartographical reference product produced by Natural Resources Canada that originates from the best available data sources and offers quality topographical information in vector format. CanVec data is available at no cost on the Open Government of Canada website (<http://open.canada.ca/en>) using the Geospatial Data Extraction tool.

## 1.2 Base Modifications

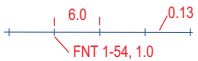




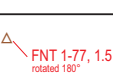










The Canadian Geoscience Map series depicts most features contained in the CanVec data layers. Some layers are omitted outright (such as wooded areas) and some layers are optional to the author (such as wetlands or buildings). The cartographer may also decide (for clarity reasons) to only depict the index contours for maps in areas of high elevation changes.




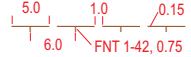
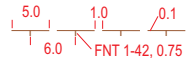










Although CanVec has an established style of topographic symbolology, the CGM series alters all colours of features to either brown (RGB 153·89·51) or blue (RGB 51·89·153) and has also grouped or modified some symbolology for clarity reasons.

## 1.3 CGM Topographic Base Symbolology







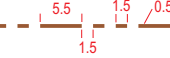






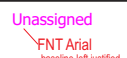
Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>1 - HYDROGRAPHIC</b>							
1.01.01.001	Water body: definite	lake, ocean	white fill colour no outline	255·255·255	not usually shown in legend		
1.01.01.002	Water body: indefinite	lake, ocean	FNT 1-173, 3.5 0.0 offset 3.5 separation white background	153·89·51	not usually shown in legend		
1.01.01.003	Water body: indefinite showing geology	lake, ocean	FNT 1-173, 3.5 0.0 offset 3.5 separation transparent background	153·89·51	not usually shown in legend		surficial option
1.01.01.004	Rapids and Falls: polygon	none	FNT 1-175, 10.0 0.0 offset 10.0 separation	102·140·204	not usually shown in legend		author's option to show on map
1.01.01.005	Permanent snow and ice	glacier, snow field	FNT 1-172, 10.0 0.0 offset 10.0 separation	204·255·255	not usually shown in legend		
1.01.01.006	Shoreline: definite	none		51·89·153	not usually shown in legend		
1.01.01.007	Shoreline: indefinite	none		51·89·153	not usually shown in legend		
1.01.01.008	Watercourse: definite	river, stream, canal		51·89·153	not usually shown in legend		
1.01.01.009	Watercourse: indefinite	river, stream, canal		51·89·153	not usually shown in legend		



Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>1 - HYDROGRAPHIC (continued)</b>							
1.01.01.010	Rapids and Falls: line	none		51-89-153	not usually shown in legend		author's option to show on map
1.01.01.012	Ford	none		153-89-51	not usually shown in legend		author's option to show on map
1.01.01.014	Rapids and Falls: point	none		51-89-153	not usually shown in legend		oriented perpendicular to line feature
1.01.01.015	Disappearing stream	none		51-89-153	not usually shown in legend		author's option to show on map
1.01.01.016	Rock	none		153-89-51	not usually shown in legend		author's option to show on map
1.01.01.018	Hydrographic obstacle	none		153-89-51	not usually shown in legend		author's option to show on map
1.01.01.019	Marina	none		153-89-51	not usually shown in legend		author's option to show on map
1.01.01.020	Reef	none		153-89-51	not usually shown in legend		author's option to show on map; outline used to form polygon on the map
1.01.01.021	Palsa bog	none		153-89-51	not usually shown in legend		author's option to show on map
1.01.01.022	String bog	none		51-89-153	not usually shown in legend		author's option to show on map
1.01.01.023	Tundra ponds	none		51-89-153	not usually shown in legend		author's option to show on map
1.01.01.024	Wetlands	none		51-89-153	not usually shown in legend		author's option to show on map
1.01.01.026	Hydrographic annotation	none		51-89-153	not usually shown in legend		point size depends on size of feature
<b>2 - TOPOGRAPHIC</b>							
1.02.01.001	Glacial debris	none		153-89-51	not usually shown in legend		author's option to show on map
1.02.01.002	Contour: index, defined	none		153-89-51	not usually shown in legend		
1.02.01.003	Contour: index, approximate	none		153-89-51	not usually shown in legend		

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>2 - TOPOGRAPHIC (continued)</b>							
1.02.01.004	Contour: intermediate, defined	none		153-89-51	not usually shown in legend		option to show on map based on density of contours
1.02.01.005	Contour: intermediate, approximate	none		153-89-51	not usually shown in legend		option to show on map based on density of contours
1.02.01.006	Contour: depression index, defined	none		153-89-51	not usually shown in legend		
1.02.01.007	Contour: depression index, approximate	none		153-89-51	not usually shown in legend		
1.02.01.008	Contour: depression intermediate, defined	none		153-89-51	not usually shown in legend		option to show on map based on density of contours
1.02.01.009	Contour: depression intermediate, approximate	none		153-89-51	not usually shown in legend		option to show on map based on density of contours
1.02.01.010	Esker	none		153-89-51	not usually shown in legend		author's option to show on map
1.02.01.011	Elevation point	none		153-89-51	not usually shown in legend		author's option to show on map; annotation depicted with text symbol 1.02.01.018
1.02.01.012	Moraine	none		153-89-51	not usually shown in legend		author's option to show on map; outline used to form polygon on the map
1.02.01.013	Sand	none		153-89-51	not usually shown in legend		author's option to show on map
1.02.01.014	Tundra polygons	none		51-89-153	not usually shown in legend		author's option to show on map
1.02.01.016	Physiographic annotation	none		153-89-51	not usually shown in legend		point size depends on size of feature
1.02.01.017	Contour numbers	none		153-89-51	not usually shown in legend		option to label only index contours based on contour density
1.02.01.018	Spot elevation	none		153-89-51	not usually shown in legend		author's option to show on map; must accompany elevation point symbol 1.02.01.011
<b>3 - CULTURAL</b>							
1.03.01.001	Building: large	none		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.002	Resource extraction	ore, aggregate peat, oil/gas		153-89-51	not usually shown in legend		author's option to show on map; outline used to form polygon on the map
1.03.01.003	Manmade land entity: line	commercial, waste landmark, tank, residential, municipal		153-89-51	not usually shown in legend		author's option to show on map; outline used to form polygon on the map

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>3 - CULTURAL (continued)</b>							
1.03.01.004	Transmission line	power, communication		153-89-51	not usually shown in legend		
1.03.01.005	Ferry	none		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.006	Trail	none		153-89-51	not usually shown in legend		
1.03.01.007	Railway: operational	none		153-89-51	not usually shown in legend		
1.03.01.009	Railway: non-operational	none		153-89-51	not usually shown in legend		
1.03.01.010	Road: highway	none		153-89-51	not usually shown in legend		
1.03.01.011	Road: local	none		153-89-51	not usually shown in legend		
1.03.01.013	Road: recreational	none		153-89-51	not usually shown in legend		annotation depicted with text symbol 1.02.01.018
1.03.01.014	Road: limited use	none		153-89-51	not usually shown in legend		
1.03.01.020	Pipeline	none		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.021	Nautical facility: line	dock, wharf, boat ramp, lock, slip		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.022	Protection structure: line	dam, breakwater, dyke, spillway		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.023	Building: small	none		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.024	Resource extraction	ore, oil/gas site, petroleum well		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.025	Manmade hydro entity	dam, fish ladder, lock gate		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.026	Manmade land entity: point	wind device, waste, tank, tower, chimney, landmark		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.027	Navigational aid	none		153-89-51	not usually shown in legend		author's option to show on map








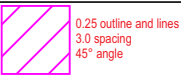

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>3 - CULTURAL (continued)</b>							
1.03.01.028	Airport or Heliport	none		153-89-51	not usually shown in legend		author's option to show on map
1.03.01.030	Well or Spring	none		51-89-153	not usually shown in legend		author's option to show on map
1.03.01.031	Nautical facility: polygon	dock, wharf, boat ramp, lock, slip		153-89-51	not usually shown in legend		author's option to show on map; outline used to form polygon on the map
1.03.01.032	Protection structure: polygon	dam, breakwater, dyke, spillway		153-89-51	not usually shown in legend		author's option to show on map; outline used to form polygon on the map
1.03.01.033	Airport or Heliport: polygon	none		153-89-51	not usually shown in legend		author's option to show on map; outline used to form polygon on the map
1.03.01.034	International boundary	none		153-89-51	not usually shown in legend		
1.03.01.035	Provincial boundary	none		153-89-51	not usually shown in legend		
1.03.01.036	Other boundary	national park, provincial park, wildlife reserve		153-89-51	not usually shown in legend		
1.03.01.041	Place name annotation	none		153-89-51	not usually shown in legend		point size depends on size of feature
1.03.01.043	Boundary annotation	none		153-89-51	not usually shown in legend		point size depends on size of feature
1.03.01.045	Transportation annotation	none		153-89-51	not usually shown in legend		point size depends on size of feature
1.03.01.046	Other feature annotation	none		153-89-51	not usually shown in legend		point size depends on size of feature
1.03.01.047	Aboriginal lands	none		153-89-51	not usually shown in legend		author's option to show on map; outline used to form polygon on the map
<b>4 - MISCELLANEOUS</b>							
1.04.01.001	Unassigned annotation	none		255-0-255	not usually shown in legend		annotation that needs to be assigned to an annotation class

## 2 Cartographic Elements

### 2.1 About















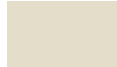
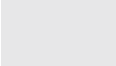
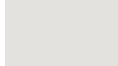












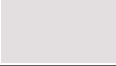
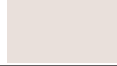











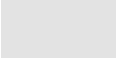

The symbology in this section mainly pertains to cartographic elements used to create the CGM surround (i.e. legend, descriptive notes, title block, border, NTS reference map, location map, etc.), geological annotation, undefined features, cartographic features (i.e. leader lines, etc.) as well as the complete GSC colour shadeset

### 2.2 CGM Cartographic Elements Symbology































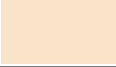


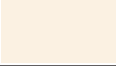
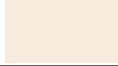
















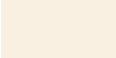


Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>1 - UNDEFINED FEATURES</b>							
2.01.01.001	Geomorphological line: undefined	none		255-0-255	not shown in legend		
2.01.01.002	Geological boundary coincident with another feature: defined	none		255-128-0	not shown in legend		
2.01.01.003	Geological boundary coincident with another feature: approximate	none		255-128-0	not shown in legend		
2.01.01.004	Geological boundary coincident with another feature: inferred	none		255-128-0	not shown in legend		
2.01.01.005	Geological boundary coincident with another feature: concealed	none		255-0-255	not shown in legend		
2.01.01.006	Geomorphological point: undefined	none		255-0-255	not shown in legend		
2.01.01.007	Field observation point: undefined	none		255-0-255	not shown in legend		
2.01.01.008	Unmapped area	none	no fill colour no outline	0-0-0	not shown in legend		
2.01.01.009	Geomorphological polygon: undefined	none		255-0-255	not shown in legend		
2.01.01.010	Map unit polygon: undefined	none		255-0-255	not shown in legend		
<b>2 - LEGEND RENDERER</b>							
2.02.01.001	Heading 1 annotation	none	<b>HEADING 1</b> FNT Arial Bold, 9pt all caps; baseline-left justified	0-0-0	used by legend renderer tool		
2.02.01.002	Heading 2 annotation	none	<b>HEADING 2</b> FNT Arial Bold, 8pt all caps; baseline-left justified	0-0-0	used by legend renderer tool		








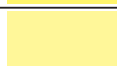
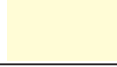






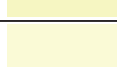
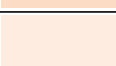
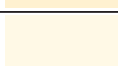



Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>2 - LEGEND RENDERER (continued)</b>							
2.02.01.003	Heading 3 annotation	none	Heading 3 FNT Arial, 8pt baseline-left justified	0-0-0	used by legend renderer tool		
2.02.01.004	Heading 4 annotation	none	HEADING 4 FNT Arial, 8pt all caps; baseline-center justified	0-0-0	used by legend renderer tool		
2.02.01.005	Heading 5 annotation	none	Heading 5 FNT Arial, 8pt baseline-left justified	0-0-0	used by legend renderer tool		
2.02.01.006	Description annotation	none	Description FNT Arial, 8pt baseline-left justified	0-0-0	used by legend renderer tool		
2.02.01.007	Grouped description annotation	none	Grouped description FNT Arial Italic, 8pt baseline-left justified	0-0-0	used by legend renderer tool		
2.02.01.008	Note annotation	none	Note FNT Arial, 8pt baseline-center justified	0-0-0	used by legend renderer tool		
2.02.01.009	Bracket annotation	none	BRACKET ANNO FNT Arial Bold, 8pt all caps; baseline-center justified	0-0-0	used by legend renderer tool		rotated 90° by renderer tool
2.02.01.010	Break annotation	none	Break Anno FNT Arial, 8pt center-center justified	0-0-0	used by legend renderer tool		
<b>3 - GEOLOGICAL ANNOTATION</b>							
2.03.01.001	Reference letter: surficial	map units	Tvg FNT Arial bottom-left justified	0-0-0	may appear in legend with symbol		point size depends on size of feature
2.03.01.002	Reference letter: bedrock	map units	Akmg FNT GSCGeology2015 bottom-left justified	0-0-0	may appear in legend with symbol		point size depends on size of feature
2.03.01.003	Mineral identification	mineral occurrence	Pb, Mn FNT Arial Bold, 8pt bottom-left justified	0-0-0	may appear in legend with symbol		
2.03.01.004	Measurement value	dip, strike, plunge	45 FNT Arial Italic, 6pt bottom-left justified	0-0-0	may appear in legend with symbol		
2.03.01.005	Striation age value	none	1 FNT Arial, 6pt bottom-left justified	0-0-0	may appear in legend with symbol		
2.03.01.006	Catalogue number	none	27819 FNT Arial Narrow, 6pt bottom-left justified	0-0-0	may appear in legend with symbol		
2.03.01.007	Sample location	none	1400 FNT Arial, 8pt bottom-left justified	0-0-0	may appear in legend with symbol		
2.03.01.008	Borehole; drill hole; diamond drill hole	none	BH DDH FNT Arial, 7pt bottom-left justified	0-0-0	may appear in legend with symbol		
2.03.01.009	Sinkhole; salt spring; hot spring	none	sh ss hs FNT Arial, 7pt bottom-left justified	0-0-0	may appear in legend with symbol		










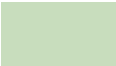


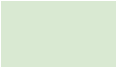
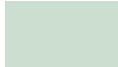

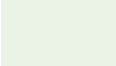
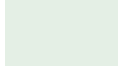
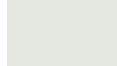




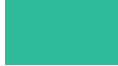




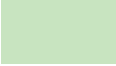


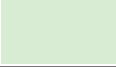
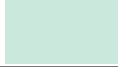

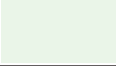
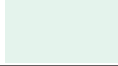
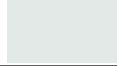














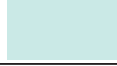
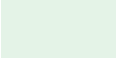
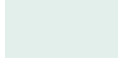
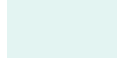
Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>3 - GEOLOGICAL ANNOTATION (continued)</b>							
2.03.01.010	Dated sample; radiocarbon date	none	10 620 ± shells GSC-65 64 m <small>FNT Arial, 7pt bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.011	Lineament showing name	none	LAMPERS <small>FNT Arial, 7pt all caps; bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.012	Fault name	none	LEWIS FAULT <small>FNT Arial, 9pt all caps; bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.013	Fold name	none	LISGAR ANTICLINE <small>FNT Arial, 9pt all caps; bottom-left justified</small>	255-0-255	may appear in legend with symbol		
2.03.01.014	Area feature name	none	LYNN SHEAR ZONE <small>FNT Arial Italic, 9pt all caps; bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.015	Mining property name	none	Sullivan <small>FNT Arial, 8pt bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.016	Isograd line value	none	40 <small>FNT Arial Bold, 8pt bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.017	Isograd descriptive text	none	BIOTITE <small>FNT Arial, 7pt all caps; bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.018	Fossil locality	none	C0148672 6400±3 <small>FNT Arial, 7pt bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.019	Unmapped area	none	Unmapped <small>FNT Arial Italic bottom-left justified</small>	0-0-0	may appear in legend with symbol		point size depends on size of feature
2.03.01.020	Photo number	none	8 <small>FNT Arial, 8pt bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.021	Cross-section indicator	none	A A' A B <small>FNT Arial Bold, 12pt all caps; bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.022	Figure number; inset	none	INSET A <small>FNT Arial Bold, 10pt all caps; bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.023	Generation values	none	IV <small>FNT Times Roman Italic, 6pt all caps; bottom-left justified</small>	0-0-0	may appear in legend with symbol		
2.03.01.024	Reference letter: surficial, white	map units	Tvg <small>FNT Arial bottom-left justified</small>	255-255-255	may appear in legend with symbol		to be used on very dark unit colours; point size depends on size of feature
2.03.01.025	Reference letter: bedrock, white	map units	Akmg <small>FNT GSCGeology2015 bottom-left justified</small>	255-255-255	may appear in legend with symbol		to be used on very dark unit colours; point size depends on size of feature
2.03.01.026	Polygon centroid	none	K <small>FNT GSC_SymbolStandard1 center-center justified</small>	255-255-255	may appear in legend with symbol		to be used to depict centroid in various geomorphology polygons (e.g. thermokarst, kettle, sinkhole, quarry, etc.)


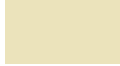




Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour
4 - GSC ARCGIS SHADESET											
2.04.01.019	Black-9	 no outline	64·64·65	2.04.01.049	Anise-9	 no outline	61·94·73	2.04.01.079	Olive-9	 no outline	156·136·70
2.04.01.017	Black-7	 no outline	110·110·112	2.04.01.047	Anise-7	 no outline	103·118·100	2.04.01.077	Olive-7	 no outline	176·157·104
2.04.01.015	Black-5	 no outline	148·149·153	2.04.01.045	Anise-5	 no outline	141·145·132	2.04.01.075	Olive-5	 no outline	195·180·139
2.04.01.013	Black-3	 no outline	189·190·193	2.04.01.043	Anise-3	 no outline	181·183·174	2.04.01.073	Olive-3	 no outline	217·207·180
2.04.01.012	Black-2	 no outline	210·211·213	2.04.01.042	Anise-2	 no outline	204·203·196	2.04.01.072	Olive-2	 no outline	228·221·202
2.04.01.011	Black-1	 no outline	231·231·232	2.04.01.041	Anise-1	 no outline	227·226·222	2.04.01.071	Olive-1	 no outline	241·237·226
2.04.01.029	Storm-9	 no outline	72·66·88	2.04.01.059	Mud-9	 no outline	114·99·70	2.04.01.089	Sepia-9	 no outline	118·67·64
2.04.01.027	Storm-7	 no outline	107·96·113	2.04.01.057	Mud-7	 no outline	141·124·98	2.04.01.087	Sepia-7	 no outline	143·99·91
2.04.01.025	Storm-5	 no outline	142·129·140	2.04.01.055	Mud-5	 no outline	166·151·131	2.04.01.085	Sepia-5	 no outline	168·133·124
2.04.01.023	Storm-3	 no outline	181·171·179	2.04.01.053	Mud-3	 no outline	200·189·174	2.04.01.083	Sepia-3	 no outline	200·175·167
2.04.01.022	Storm-2	 no outline	203·195·200	2.04.01.052	Mud-2	 no outline	216·207·197	2.04.01.082	Sepia-2	 no outline	216·198·192
2.04.01.021	Storm-1	 no outline	227·222·224	2.04.01.051	Mud-1	 no outline	234·229·222	2.04.01.081	Sepia-1	 no outline	233·224·219
2.04.01.039	Midnight-9	 no outline	56·94·98	2.04.01.069	Army-9	 no outline	110·118·74	2.04.01.099	Chocolate-9	 no outline	158·66·61
2.04.01.037	Midnight-7	 no outline	100·118·121	2.04.01.067	Army-7	 no outline	139·139·103	2.04.01.097	Chocolate-7	 no outline	176·104·89
2.04.01.035	Midnight-5	 no outline	140·146·149	2.04.01.065	Army-5	 no outline	166·165·137	2.04.01.095	Chocolate-5	 no outline	194·139·123
2.04.01.033	Midnight-3	 no outline	180·184·186	2.04.01.063	Army-3	 no outline	200·198·178	2.04.01.093	Chocolate-3	 no outline	216·179·167
2.04.01.032	Midnight-2	 no outline	203·204·204	2.04.01.062	Army-2	 no outline	216·212·199	2.04.01.092	Chocolate-2	 no outline	227·202·192
2.04.01.031	Midnight-1	 no outline	227·227·227	2.04.01.061	Army-1	 no outline	234·233·225	2.04.01.091	Chocolate-1	 no outline	240·226·220














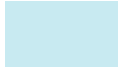

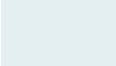
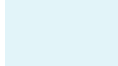
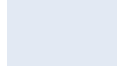




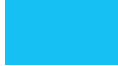





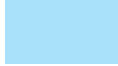
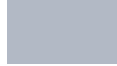

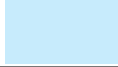
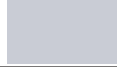

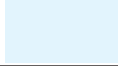
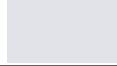















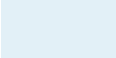

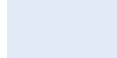

















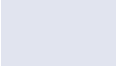














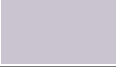


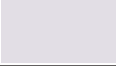

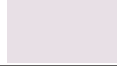















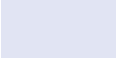


Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour
<b>4 - GSC ARCGIS SHADESET (continued)</b>											
2.04.01.109	Sand-9	 no outline	158·104·66	2.04.01.139	Brown-9	 no outline	200·110·59	2.04.01.169	Brick-9	 no outline	218·64·52
2.04.01.107	Sand-7	 no outline	175·130·96	2.04.01.137	Brown-7	 no outline	209·137·93	2.04.01.167	Brick-7	 no outline	227·110·85
2.04.01.105	Sand-5	 no outline	194·157·131	2.04.01.135	Brown-5	 no outline	222·164·130	2.04.01.165	Brick-5	 no outline	234·148·122
2.04.01.103	Sand-3	 no outline	216·194·173	2.04.01.133	Brown-3	 no outline	234·200·173	2.04.01.163	Brick-3	 no outline	243·187·167
2.04.01.102	Sand-2	 no outline	227·211·197	2.04.01.132	Brown-2	 no outline	240·216·197	2.04.01.162	Brick-2	 no outline	248·209·193
2.04.01.101	Sand-1	 no outline	240·232·223	2.04.01.131	Brown-1	 no outline	248·235·223	2.04.01.161	Brick-1	 no outline	250·230·220
2.04.01.119	Tan-9	 no outline	225·151·58	2.04.01.149	Sienna-9	 no outline	221·112·56	2.04.01.179	Earthworm-9	 no outline	198·65·80
2.04.01.117	Tan-7	 no outline	234·172·99	2.04.01.147	Sienna-7	 no outline	230·142·91	2.04.01.177	Earthworm-7	 no outline	206·108·108
2.04.01.115	Tan-5	 no outline	239·194·138	2.04.01.145	Sienna-5	 no outline	236·169·129	2.04.01.175	Earthworm-5	 no outline	219·145·139
2.04.01.113	Tan-3	 no outline	244·216·180	2.04.01.143	Sienna-3	 no outline	244·203·174	2.04.01.173	Earthworm-3	 no outline	232·185·179
2.04.01.112	Tan-2	 no outline	249·228·202	2.04.01.142	Sienna-2	 no outline	248·219·197	2.04.01.172	Earthworm-2	 no outline	239·207·200
2.04.01.111	Tan-1	 no outline	251·241·226	2.04.01.141	Sienna-1	 no outline	250·235·223	2.04.01.171	Earthworm-1	 no outline	248·230·225
2.04.01.129	Ochre-9	 no outline	203·147·63	2.04.01.159	Rust-9	 no outline	198·65·55	2.04.01.189	Crimson-9	 no outline	239·61·102
2.04.01.127	Ochre-7	 no outline	211·166·101	2.04.01.157	Rust-7	 no outline	206·108·86	2.04.01.187	Crimson-7	 no outline	242·113·128
2.04.01.125	Ochre-5	 no outline	224·189·138	2.04.01.155	Rust-5	 no outline	220·145·122	2.04.01.185	Crimson-5	 no outline	246·152·158
2.04.01.123	Ochre-3	 no outline	234·212·180	2.04.01.153	Rust-3	 no outline	233·184·167	2.04.01.183	Crimson-3	 no outline	250·191·190
2.04.01.122	Ochre-2	 no outline	241·225·202	2.04.01.152	Rust-2	 no outline	240·207·192	2.04.01.182	Crimson-2	 no outline	251·211·209
2.04.01.121	Ochre-1	 no outline	249·240·226	2.04.01.151	Rust-1	 no outline	248·229·220	2.04.01.181	Crimson-1	 no outline	253·232·231




Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour
<b>4 - GSC ARCGIS SHADESET (continued)</b>											
2.04.01.199	Tomato-9	 no outline	239-63-78	2.04.01.229	Pumpkin-9	 no outline	247-144-52	2.04.01.259	Dandelion-9	 no outline	255-220-45
2.04.01.197	Tomato-7	 no outline	243-112-105	2.04.01.227	Pumpkin-7	 no outline	249-165-95	2.04.01.257	Dandelion-7	 no outline	255-229-107
2.04.01.195	Tomato-5	 no outline	247-151-139	2.04.01.225	Pumpkin-5	 no outline	252-190-135	2.04.01.255	Dandelion-5	 no outline	255-234-149
2.04.01.193	Tomato-3	 no outline	250-190-180	2.04.01.223	Pumpkin-3	 no outline	254-215-178	2.04.01.253	Dandelion-3	 no outline	255-242-191
2.04.01.192	Tomato-2	 no outline	252-211-201	2.04.01.222	Pumpkin-2	 no outline	253-226-200	2.04.01.252	Dandelion-2	 no outline	255-248-212
2.04.01.191	Tomato-1	 no outline	253-232-225	2.04.01.221	Pumpkin-1	 no outline	254-241-225	2.04.01.251	Dandelion-1	 no outline	255-251-231
2.04.01.209	Red-9	 no outline	239-63-48	2.04.01.239	Sunset-9	 no outline	251-172-52	2.04.01.269	Yellow-9	 no outline	255-242-42
2.04.01.207	Red-7	 no outline	242-112-82	2.04.01.237	Sunset-7	 no outline	253-189-99	2.04.01.267	Yellow-7	 no outline	255-245-108
2.04.01.205	Red-5	 no outline	247-151-121	2.04.01.235	Sunset-5	 no outline	254-207-140	2.04.01.265	Yellow-5	 no outline	255-247-153
2.04.01.203	Red-3	 no outline	251-189-167	2.04.01.233	Sunset-3	 no outline	254-224-182	2.04.01.263	Yellow-3	 no outline	255-250-194
2.04.01.202	Red-2	 no outline	253-210-193	2.04.01.232	Sunset-2	 no outline	254-235-205	2.04.01.262	Yellow-2	 no outline	255-252-214
2.04.01.201	Red-1	 no outline	253-231-220	2.04.01.231	Sunset-1	 no outline	254-245-228	2.04.01.261	Yellow-1	 no outline	255-253-233
2.04.01.219	Orange-9	 no outline	244-116-52	2.04.01.249	Gold-9	 no outline	254-200-48	2.04.01.279	Lime-9	 no outline	235-231-56
2.04.01.217	Orange-7	 no outline	247-145-90	2.04.01.247	Gold-7	 no outline	255-209-103	2.04.01.277	Lime-7	 no outline	239-237-113
2.04.01.215	Orange-5	 no outline	249-173-129	2.04.01.245	Gold-5	 no outline	255-221-145	2.04.01.275	Lime-5	 no outline	242-241-154
2.04.01.213	Orange-3	 no outline	253-205-174	2.04.01.243	Gold-3	 no outline	255-234-187	2.04.01.273	Lime-3	 no outline	246-246-194
2.04.01.212	Orange-2	 no outline	253-220-197	2.04.01.242	Gold-2	 no outline	255-241-208	2.04.01.272	Lime-2	 no outline	250-250-214
2.04.01.211	Orange-1	no outline	253-236-223	2.04.01.241	Gold-1	no outline	255-249-230	2.04.01.271	Lime-1	no outline	252-252-233















Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour
<b>4 - GSC ARCGIS SHADESET (continued)</b>											
2.04.01.379	Grass-9	 no outline	92·171·84	2.04.01.409	Jade-9	 no outline	6·145·86	2.04.01.439	Forest-9	 no outline	40·120·79
2.04.01.377	Grass-7	 no outline	132·187·118	2.04.01.407	Jade-7	 no outline	85·162·116	2.04.01.437	Forest-7	 no outline	96·139·108
2.04.01.375	Grass-5	 no outline	163·202·153	2.04.01.405	Jade-5	 no outline	136·183·149	2.04.01.435	Forest-5	 no outline	138·165·140
2.04.01.373	Grass-3	 no outline	200·221·189	2.04.01.403	Jade-3	 no outline	180·207·185	2.04.01.433	Forest-3	 no outline	181·195·179
2.04.01.372	Grass-2	 no outline	217·233·210	2.04.01.402	Jade-2	 no outline	204·222·207	2.04.01.432	Forest-2	 no outline	204·212·201
2.04.01.371	Grass-1	 no outline	234·243·230	2.04.01.401	Jade-1	 no outline	228·239·229	2.04.01.431	Forest-1	 no outline	228·232·225
2.04.01.389	Shamrock-9	 no outline	81·186·87	2.04.01.419	Sea-Green-9	 no outline	0·173·129	2.04.01.449	Juniper-9	 no outline	31·120·108
2.04.01.387	Shamrock-7	 no outline	128·198·121	2.04.01.417	Sea-Green-7	 no outline	47·187·153	2.04.01.447	Juniper-7	 no outline	92·141·132
2.04.01.385	Shamrock-5	 no outline	162·212·157	2.04.01.415	Sea-Green-5	 no outline	128·203·177	2.04.01.445	Juniper-5	 no outline	136·165·158
2.04.01.383	Shamrock-3	 no outline	200·228·192	2.04.01.413	Sea-Green-3	 no outline	177·222·207	2.04.01.443	Juniper-3	 no outline	179·195·192
2.04.01.382	Shamrock-2	 no outline	216·236·212	2.04.01.412	Sea-Green-2	 no outline	203·232·221	2.04.01.442	Juniper-2	 no outline	203·213·209
2.04.01.381	Shamrock-1	 no outline	234·245·232	2.04.01.411	Sea-Green-1	 no outline	228·243·236	2.04.01.441	Juniper-1	 no outline	227·233·230
2.04.01.399	Green-9	 no outline	0·172·92	2.04.01.429	Teal-9	 no outline	0·147·118	2.04.01.459	Turquoise-9	 no outline	0·175·165
2.04.01.397	Green-7	 no outline	63·186·124	2.04.01.427	Teal-7	 no outline	80·163·143	2.04.01.457	Turquoise-7	 no outline	35·189·182
2.04.01.395	Green-5	 no outline	130·202·157	2.04.01.425	Teal-5	 no outline	133·184·167	2.04.01.455	Turquoise-5	 no outline	124·204·200
2.04.01.393	Green-3	 no outline	179·221·191	2.04.01.423	Teal-3	 no outline	179·208·200	2.04.01.453	Turquoise-3	 no outline	175·223·220
2.04.01.392	Green-2	 no outline	203·232·211	2.04.01.422	Teal-2	 no outline	203·223·215	2.04.01.452	Turquoise-2	 no outline	202·233·230
2.04.01.391	Green-1	 no outline	228·243·231	2.04.01.421	Teal-1	 no outline	227·239·234	2.04.01.451	Turquoise-1	 no outline	227·244·242

Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour
<b>4 - GSC ARCGIS SHADESET (continued)</b>											
2.04.01.289	Pear-9	 no outline	232·210·57	2.04.01.319	Leaf-9	 no outline	173·209·76	2.04.01.349	Pickle-9	 no outline	105·138·78
2.04.01.287	Pear-7	 no outline	237·222·110	2.04.01.317	Leaf-7	 no outline	189·217·117	2.04.01.347	Pickle-7	 no outline	137·157·109
2.04.01.285	Pear-5	 no outline	241·230·150	2.04.01.315	Leaf-5	 no outline	208·227·156	2.04.01.345	Pickle-5	 no outline	165·179·144
2.04.01.283	Pear-3	 no outline	245·239·191	2.04.01.313	Leaf-3	 no outline	225·238·193	2.04.01.343	Pickle-3	 no outline	200·205·182
2.04.01.282	Pear-2	 no outline	250·246·212	2.04.01.312	Leaf-2	 no outline	235·244·213	2.04.01.342	Pickle-2	 no outline	216·221·204
2.04.01.281	Pear-1	 no outline	252·250·231	2.04.01.311	Leaf-1	 no outline	245·249·232	2.04.01.341	Pickle-1	 no outline	234·237·227
2.04.01.299	Brass-9	 no outline	206·184·65	2.04.01.329	Kermit-9	 no outline	154·186·77	2.04.01.359	Spearmint-9	 no outline	133·197·83
2.04.01.297	Brass-7	 no outline	214·195·107	2.04.01.327	Kermit-7	 no outline	175·199·116	2.04.01.357	Spearmint-7	 no outline	157·206·119
2.04.01.295	Brass-5	 no outline	226·211·147	2.04.01.325	Kermit-5	 no outline	196·212·152	2.04.01.355	Spearmint-5	 no outline	185·219·157
2.04.01.293	Brass-3	 no outline	235·227·187	2.04.01.323	Kermit-3	 no outline	218·228·190	2.04.01.353	Spearmint-3	 no outline	213·233·193
2.04.01.292	Brass-2	 no outline	242·236·208	2.04.01.322	Kermit-2	 no outline	229·237·211	2.04.01.352	Spearmint-2	 no outline	223·239·212
2.04.01.291	Brass-1	 no outline	250·247·230	2.04.01.321	Kermit-1	 no outline	241·246·231	2.04.01.351	Spearmint-1	 no outline	239·247·232
2.04.01.309	Chartreuse-9	 no outline	209·222·66	2.04.01.339	Iguana-9	 no outline	155·170·75	2.04.01.369	Emerald-9	 no outline	99·157·82
2.04.01.307	Chartreuse-7	 no outline	216·227·115	2.04.01.337	Iguana-7	 no outline	175·183·111	2.04.01.367	Emerald-7	 no outline	134·172·114
2.04.01.305	Chartreuse-5	 no outline	228·234·155	2.04.01.335	Iguana-5	 no outline	196·201·147	2.04.01.365	Emerald-5	 no outline	165·191·149
2.04.01.303	Chartreuse-3	 no outline	236·242·194	2.04.01.333	Iguana-3	 no outline	217·220·186	2.04.01.363	Emerald-3	 no outline	200·214·186
2.04.01.302	Chartreuse-2	 no outline	242·246·213	2.04.01.332	Iguana-2	 no outline	228·231·208	2.04.01.362	Emerald-2	 no outline	217·227·207
2.04.01.301	Chartreuse-1	 no outline	250·251·233	2.04.01.331	Iguana-1	 no outline	241·244·230	2.04.01.361	Emerald-1	 no outline	234·241·229



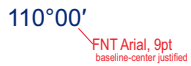


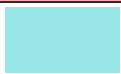









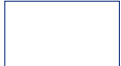
Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour
<b>4 - GSC ARCGIS SHADESET (continued)</b>											
2.04.01.469	Peacock-9	 no outline	0·149·151	2.04.01.499	Aqua-9	 no outline	0·178·202	2.04.01.529	Prussian-9	 no outline	14·122·164
2.04.01.467	Peacock-7	 no outline	73·164·168	2.04.01.497	Aqua-7	 no outline	27·190·210	2.04.01.527	Prussian-7	 no outline	82·142·178
2.04.01.465	Peacock-5	 no outline	130·185·188	2.04.01.495	Aqua-5	 no outline	117·206·223	2.04.01.525	Prussian-5	 no outline	130·167·196
2.04.01.463	Peacock-3	 no outline	177·209·211	2.04.01.493	Aqua-3	 no outline	173·224·234	2.04.01.523	Prussian-3	 no outline	176·197·216
2.04.01.462	Peacock-2	 no outline	202·223·224	2.04.01.492	Aqua-2	 no outline	200·234·241	2.04.01.522	Prussian-2	 no outline	200·214·228
2.04.01.461	Peacock-1	 no outline	227·239·240	2.04.01.491	Aqua-1	 no outline	226·244·249	2.04.01.521	Prussian-1	 no outline	226·233·243
2.04.01.479	Spruce-9	 no outline	18·121·135	2.04.01.509	Cyan-9	 no outline	0·179·240	2.04.01.539	Slate-9	 no outline	51·95·122
2.04.01.477	Spruce-7	 no outline	87·141·156	2.04.01.507	Cyan-7	 no outline	22·192·243	2.04.01.537	Slate-7	 no outline	98·119·143
2.04.01.475	Spruce-5	 no outline	134·166·178	2.04.01.505	Cyan-5	 no outline	111·208·246	2.04.01.535	Slate-5	 no outline	139·146·166
2.04.01.473	Spruce-3	 no outline	177·196·204	2.04.01.503	Cyan-3	 no outline	170·225·250	2.04.01.533	Slate-3	 no outline	178·185·197
2.04.01.472	Spruce-2	 no outline	201·213·218	2.04.01.502	Cyan-2	 no outline	199·235·252	2.04.01.532	Slate-2	 no outline	201·204·213
2.04.01.471	Spruce-1	 no outline	226·233·236	2.04.01.501	Cyan-1	 no outline	226·244·253	2.04.01.531	Slate-1	 no outline	226·227·232
2.04.01.489	Glacier-9	 no outline	0·150·183	2.04.01.519	Royal-9	 no outline	0·151·217	2.04.01.549	Ultramarine-9	 no outline	0·122·192
2.04.01.487	Glacier-7	 no outline	59·165·193	2.04.01.517	Royal-7	 no outline	45·166·222	2.04.01.547	Ultramarine-7	 no outline	73·143·204
2.04.01.485	Glacier-5	 no outline	125·186·209	2.04.01.515	Royal-5	 no outline	119·187·231	2.04.01.545	Ultramarine-5	 no outline	127·168·217
2.04.01.483	Glacier-3	 no outline	175·210·225	2.04.01.513	Royal-3	 no outline	172·211·240	2.04.01.543	Ultramarine-3	 no outline	173·197·231
2.04.01.482	Glacier-2	 no outline	200·224·235	2.04.01.512	Royal-2	 no outline	199·225·245	2.04.01.542	Ultramarine-2	 no outline	199·214·238
2.04.01.481	Glacier-1	 no outline	226·240·247	2.04.01.511	Royal-1	 no outline	225·240·251	2.04.01.541	Ultramarine-1	 no outline	225·234·246







Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour
<b>4 - GSC ARCGIS SHADESET (continued)</b>											
2.04.01.559	Denim-9	 no outline	46·95·147	2.04.01.589	Blue-9	 no outline	66·64·153	2.04.01.619	Plum-9	 no outline	114·65·130
2.04.01.557	Denim-7	 no outline	95·119·163	2.04.01.587	Blue-7	 no outline	100·95·170	2.04.01.617	Plum-7	 no outline	140·99·149
2.04.01.555	Denim-5	 no outline	135·147·184	2.04.01.585	Blue-5	 no outline	136·130·189	2.04.01.615	Plum-5	 no outline	164·134·173
2.04.01.553	Denim-3	 no outline	177·185·209	2.04.01.583	Blue-3	 no outline	175·172·213	2.04.01.613	Plum-3	 no outline	197·176·201
2.04.01.552	Denim-2	 no outline	200·205·223	2.04.01.582	Blue-2	 no outline	199·197·226	2.04.01.612	Plum-2	 no outline	213·200·218
2.04.01.551	Denim-1	 no outline	225·228·239	2.04.01.581	Blue-1	 no outline	225·223·239	2.04.01.611	Plum-1	 no outline	232·225·236
2.04.01.569	Blueberry-9	 no outline	71·66·109	2.04.01.599	Grape-9	 no outline	68·65·131	2.04.01.629	Eggplant-9	 no outline	115·66·108
2.04.01.567	Blueberry-7	 no outline	106·96·131	2.04.01.597	Grape-7	 no outline	103·96·150	2.04.01.627	Eggplant-7	 no outline	141·100·130
2.04.01.565	Blueberry-5	 no outline	141·129·156	2.04.01.595	Grape-5	 no outline	138·129·173	2.04.01.625	Eggplant-5	 no outline	166·134·156
2.04.01.563	Blueberry-3	 no outline	180·171·189	2.04.01.593	Grape-3	 no outline	178·171·201	2.04.01.623	Eggplant-3	 no outline	198·176·189
2.04.01.562	Blueberry-2	 no outline	202·196·208	2.04.01.592	Grape-2	 no outline	201·196·217	2.04.01.622	Eggplant-2	 no outline	214·199·208
2.04.01.561	Blueberry-1	 no outline	226·222·229	2.04.01.591	Grape-1	 no outline	225·223·236	2.04.01.621	Eggplant-1	 no outline	232·224·230
2.04.01.579	Indigo-9	 no outline	39·95·172	2.04.01.609	Violet-9	 no outline	112·64·152	2.04.01.639	Lilac-9	 no outline	153·63·152
2.04.01.577	Indigo-7	 no outline	89·120·186	2.04.01.607	Violet-7	 no outline	136·99·170	2.04.01.637	Lilac-7	 no outline	169·103·170
2.04.01.575	Indigo-5	 no outline	132·147·202	2.04.01.605	Violet-5	 no outline	161·135·190	2.04.01.635	Lilac-5	 no outline	188·140·191
2.04.01.573	Indigo-3	 no outline	174·185·223	2.04.01.603	Violet-3	 no outline	195·177·214	2.04.01.633	Lilac-3	 no outline	211·181·214
2.04.01.572	Indigo-2	 no outline	199·205·232	2.04.01.602	Violet-2	 no outline	212·200·227	2.04.01.632	Lilac-2	 no outline	224·204·227
2.04.01.571	Indigo-1	 no outline	225·228·243	2.04.01.601	Violet-1	 no outline	231·225·240	2.04.01.631	Lilac-1	 no outline	239·228·240




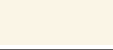








Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour	Symbol #	English Description	Symbol Specifications	RGB Colour
<b>4 - GSC ARCGIS SHADESET (continued)</b>											
2.04.01.649	Orchid-9	 no outline	156·63·128	2.04.01.679	Magenta-9	 no outline	238·56·152	2.04.01.709	Mulberry-9	 no outline	156·65·106
2.04.01.647	Orchid-7	 no outline	172·104·149	2.04.01.677	Magenta-7	 no outline	241·115·172	2.04.01.707	Mulberry-7	 no outline	174·104·130
2.04.01.645	Orchid-5	 no outline	191·140·173	2.04.01.675	Magenta-5	 no outline	245·153·193	2.04.01.705	Mulberry-5	 no outline	192·140·156
2.04.01.643	Orchid-3	 no outline	213·181·201	2.04.01.673	Magenta-3	 no outline	248·193·216	2.04.01.703	Mulberry-3	 no outline	214·180·189
2.04.01.642	Orchid-2	 no outline	225·203·218	2.04.01.672	Magenta-2	 no outline	251·213·229	2.04.01.702	Mulberry-2	 no outline	226·203·208
2.04.01.641	Orchid-1	 no outline	239·227·236	2.04.01.671	Magenta-1	 no outline	253·232·241	2.04.01.701	Mulberry-1	 no outline	240·227·230
2.04.01.659	Fuchsia-9	 no outline	195·61·151	2.04.01.689	Pink-9	 no outline	238·59·126	2.04.01.719	Maroon-9	 no outline	157·66·84
2.04.01.657	Fuchsia-7	 no outline	203·108·171	2.04.01.687	Pink-7	 no outline	240·113·148	2.04.01.717	Maroon-7	 no outline	174·103·109
2.04.01.655	Fuchsia-5	 no outline	216·147·192	2.04.01.685	Pink-5	 no outline	246·152·176	2.04.01.715	Maroon-5	 no outline	193·139·138
2.04.01.653	Fuchsia-3	 no outline	229·187·216	2.04.01.683	Pink-3	 no outline	249·192·203	2.04.01.713	Maroon-3	 no outline	215·180·179
2.04.01.652	Fuchsia-2	 no outline	237·209·228	2.04.01.682	Pink-2	 no outline	251·212·219	2.04.01.712	Maroon-2	 no outline	226·202·200
2.04.01.651	Fuchsia-1	 no outline	247·230·241	2.04.01.681	Pink-1	 no outline	253·232·237	2.04.01.711	Maroon-1	 no outline	240·227·224
2.04.01.669	Rose-9	 no outline	196·62·127	2.04.01.699	Cranberry-9	 no outline	197·64·104	2.04.01.729	Raisin-9	 no outline	117·66·87
2.04.01.667	Rose-7	 no outline	205·108·148	2.04.01.697	Cranberry-7	 no outline	206·108·129	2.04.01.727	Raisin-7	 no outline	141·100·111
2.04.01.665	Rose-5	 no outline	218·147·174	2.04.01.695	Cranberry-5	 no outline	219·146·156	2.04.01.725	Raisin-5	 no outline	166·133·139
2.04.01.663	Rose-3	 no outline	230·186·202	2.04.01.693	Cranberry-3	 no outline	231·185·190	2.04.01.723	Raisin-3	 no outline	199·175·179
2.04.01.662	Rose-2	 no outline	239·208·219	2.04.01.692	Cranberry-2	 no outline	239·207·209	2.04.01.722	Raisin-2	 no outline	215·198·200
2.04.01.661	Rose-1	 no outline	248·230·237	2.04.01.691	Cranberry-1	 no outline	248·230·230	2.04.01.721	Raisin-1	 no outline	233·224·224


Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>5 - CGM ELEMENTS</b>							
<b>5.1 - CGM surround colours</b>							
2.05.01.001	CGM base blue	none	 no outline	51·89·153	not shown in legend		
2.05.01.002	CGM base brown	none	 no outline	153·89·51	not shown in legend		
2.05.01.003	CGM base orange	none	 no outline	230·77·0	not shown in legend		
2.05.01.004	CGM black	none	 no outline	0·0·0	not shown in legend		
2.05.01.005	CGM brown	none	 no outline	217·128·38	not shown in legend		
2.05.01.006	CGM dark blue	none	 no outline	0·38·115	not shown in legend		
2.05.01.007	CGM dark brown	none	 no outline	204·102·25	not shown in legend		
2.05.01.008	CGM gold	none	 no outline	240·199·94	not shown in legend		
2.05.01.009	CGM light blue	none	 no outline	153·184·199	not shown in legend		
2.05.01.010	CGM peacock blue	none	 no outline	153·230·230	not shown in legend		
2.05.01.011	CGM red	none	 no outline	255·0·0	not shown in legend		
2.05.01.012	CGM sand	none	 no outline	250·245·230	not shown in legend		
2.05.01.013	CGM warm red	none	 no outline	255·51·0	not shown in legend		
2.05.01.014	CGM white	none	white fill colour no outline	255·255·255	not shown in legend		
<b>5.2 - CGM border</b>							
2.05.02.001	Clear graticule	none	white fill colour no outline	255·255·255	not shown in legend		
2.05.02.002	Solid graticule	none	 no outline	153·184·199	not shown in legend		



Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>5 - CGM ELEMENTS (continued)</b>							
<b>5.2 - CGM border (continued)</b>							
2.05.02.003	Border line	none		0-38-115	not shown in legend		
2.05.02.004	UTM grid line : minor	none		153-184-199	not shown in legend		
2.05.02.005	Latitude and longitude annotation	none		0-38-115	not shown in legend		
2.05.02.006	UTM grid line : major	none		153-184-199	not shown in legend		
2.05.02.007	UTM grid line : zone boundary	none		153-184-199	not shown in legend		
<b>5.3 - CGM location map</b>							
2.05.03.001	Canada land mass	none		153-230-230	not shown in legend		
2.05.03.002	Map area : small	none		255-0-0	not shown in legend		
2.05.03.003	Map area : large	none		255-0-0	not shown in legend		
2.05.03.004	Boundary	none		250-245-230	not shown in legend		
2.05.03.005	Map center	none		255-0-0	not shown in legend		
<b>5.4 - NTS reference map</b>							
2.05.04.001	Sheet number	none		0-38-115	not shown in legend		
2.05.04.002	Clip outline	none		0-38-115	not shown in legend		
2.05.04.003	CGM neatline	none		255-0-0	not shown in legend		
2.05.04.004	CGM map	none		240-199-94	not shown in legend		
2.05.04.005	Adjoining map neatline	none		204-102-25	not shown in legend		
2.05.04.006	Grid outline	none		0-38-115	not shown in legend		

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>5 - CGM ELEMENTS (continued)</b>							
<b>5.4 - NTS reference map (continued)</b>							
2.05.04.007	Land	none	 no fill colour	250-245-230	not shown in legend		
2.05.04.008	Water	none	 white fill colour no outline	255-255-255	not shown in legend		
2.05.04.009	Adjoining map neatline	none	 0.381	204-102-25	not shown in legend		
2.05.04.010	CGM neatline	none	 0.508	255-0-0	not shown in legend		
2.05.04.011	River	none	 0.127	0-38-115	not shown in legend		
2.05.04.012	Shoreline	none	 0.127	0-38-115	not shown in legend		
2.05.04.013	CGM number	none	<b>CGM 237</b> FNT Arial Bold, 10pt baseline-center justified	0-38-115	not shown in legend		
2.05.04.014	CGM number with halo	none	<b>CGM 237</b> FNT Arial Bold, 10pt 2pt halo; baseline-center justified	0-38-115 240-199-94	not shown in legend		
2.05.04.015	Index title	none	<b>NTS title</b> FNT Arial Bold, 8pt bottom-center justified	0-38-115	not shown in legend		
2.05.04.016	NTS sheet	none	<b>78-C</b> FNT Arial Narrow Bold, 6pt baseline-center justified	0-38-115	not shown in legend		
<b>5.5 - CGM titleblock</b>							
2.05.05.001	Area and province: center	none	<b>PROVINCE</b> FNT Arial, 13pt top-center justified	0-38-115	not shown in legend		
2.05.05.002	Feature type: center	none	<b>FEATURE</b> FNT Arial Bold, 13pt top-center justified	0-38-115	not shown in legend		
2.05.05.003	Map name: center	none	<b>NAME</b> FNT Arial Bold, 24pt top-center justified	0-38-115	not shown in legend		
2.05.05.004	Map scale: center	none	<b>SCALE</b> FNT Arial Bold, 13pt top-center justified	0-38-115	not shown in legend		
2.05.05.005	Map series: center	none	<b>SERIES</b> FNT Arial Bold, 17pt top-center justified	250-245-230	not shown in legend		
2.05.05.006	Area and province: corner	none	<b>PROVINCE</b> FNT Arial, 10pt top-right justified	0-38-115	not shown in legend		

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>5 - CGM ELEMENTS (continued)</b>							
<b>5.5 - CGM titleblock (continued)</b>							
2.05.05.007	Feature type: corner	none	<b>FEATURE</b> FNT Arial Bold, 10pt top-right justified	0-38-115	not shown in legend		
2.05.05.008	Map name: corner	none	<b>NAME</b> FNT Arial Bold, 18.5pt top-right justified	0-38-115	not shown in legend		
2.05.05.009	Map series: corner	none	<b>SERIES</b> FNT Arial Bold, 13.5pt top-right justified	204-102-25	not shown in legend		
<b>5.6 - CGM surround elements</b>							
2.05.06.001	Preliminary note outline	none	 0.889	255-0-0	not shown in legend		
2.05.06.002	Accompanying note outline	none	 0.889	255-0-0	not shown in legend		
2.05.06.003	Photograph outline	none	 0.176	0-38-115	not shown in legend		
2.05.06.004	Background: sand	none	 no fill colour	250-245-230	not shown in legend		
2.05.06.005	Scalebar outline	none	 .127 outline no fill colour	0-38-115	not shown in legend		
2.05.06.006	Scalebar patch	none	 .127 outline no fill colour	153-184-199 0-38-115	not shown in legend		
2.05.06.007	Background: gold	none	 no fill colour	250-245-230	not shown in legend		
2.05.06.008	Background: brown	none	 no fill colour	217-128-38	not shown in legend		
2.05.06.009	Background: white	none	white fill colour no outline	255-255-255	not shown in legend		
2.05.06.010	Accompanying note outline	none	 0.889	255-0-0	not shown in legend		
2.05.06.011	Dash line	none	 2.0 1.5 0.381	130-130-130	not shown in legend		
2.05.06.012	Figure outline	none	 0.178	0-38-115	not shown in legend		
2.05.06.013	Folding mark	none	 0.254	0-38-115	not shown in legend		

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>5 - CGM ELEMENTS (continued)</b>							
<b>5.6 - CGM surround elements (continued)</b>							
2.05.06.014	Photo credit outline	none		0-38-115	not shown in legend		
2.05.06.015	Preliminary note outline	none		255-0-0	not shown in legend		
2.05.06.016	Scalebar	none		0-38-115	not shown in legend		
2.05.06.017	Trim mark	none		217-128-39	not shown in legend		
2.05.06.018	Trim mark: white	none	0.508 white line	255-255-255	not shown in legend		
2.05.06.019	Surround text	abstract, descriptive notes, references	Blah blah 	0-38-115	not shown in legend		
2.05.06.020	Abstract text: small	none	Blah blah 	0-38-115	not shown in legend		
2.05.06.021	Surround titles	abstract, descriptive notes, references	Blah blah 	0-38-115	not shown in legend		
2.05.06.022	Accompanying note	none	Blah blah 	0-38-115	not shown in legend		
2.05.06.023	Banner text	none	Blah 	204-102-25	not shown in legend		
2.05.06.024	Catalogue number	DOI number, ISBN number	Blah blah 	0-38-115	not shown in legend		
2.05.06.025	Titleblock: center	none	Blah blah 	0-38-115	not shown in legend		
2.05.06.026	Copyright text	none	Blah blah 	0-38-115	not shown in legend		
2.05.06.027	Titleblock: corner	none	Blah blah 	0-38-115	not shown in legend		
2.05.06.028	Titleblock: cover	none	Blah blah 	0-38-115	not shown in legend		
2.05.06.029	Credit notes	none	Blah blah 	0-38-115	not shown in legend		
2.05.06.030	Edition number: corner	none	Blah blah 	250-245-230	not shown in legend		

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>5 - CGM ELEMENTS (continued)</b>							
<b>5.6 - CGM surround elements (continued)</b>							
2.05.06.031	Edition number: cover	none	Sample text FNT Arial Bold, 12pt bottom-center justified	250·245·230	not shown in legend		
2.05.06.032	Figure caption	none	Sample text FNT Arial, 8pt top-left justified	0·38·115	not shown in legend		
2.05.06.033	CGM title: lower	none	Sample text FNT Arial Bold, 17pt bottom-full justified	0·38·115	not shown in legend		
2.05.06.034	Photograph credit	none	Sample text FNT Arial, 8pt bottom-left justified	0·38·115	not shown in legend		
2.05.06.035	Preliminary note	none	Sample text FNT Arial Bold, 9pt top-center justified	0·38·115	not shown in legend		
2.05.06.036	Preliminary stripe	none	Sample FNT Arial Black, 17pt bottom-left justified	255·51·0	not shown in legend		
2.05.06.037	Recommended citation	none	Sample text FNT Arial, 8pt bottom-left justified	0·38·115	not shown in legend		
2.05.06.038	Scalebar unit	none	Sample text FNT Arial, 8pt baseline-center justified	0·38·115	not shown in legend		
2.05.06.039	CGM title: upper	none	Sample text FNT Arial Bold, 17pt bottom-center justified	250·245·230	not shown in legend		
<b>5.7 - CGM map face elements</b>							
2.05.07.001	Leader line for annotation	none	_____ 0.127	0·0·0	not shown in legend		

## 3 Surficial Symbology

### 3.1 Surficial Concepts

**SCIENCE LANGUAGE:** As presented in Deblonde et al. (2012, 2014, 2017, 2018) and Cocking et al. (2015), the Surficial Data Model, is divided into three components:

- 1) map units (polygons and boundaries);
- 2) geomorphological features represented by lines and points (includes remote and field observations, and measurements); and
- 3) geomorphological features represented by overlay polygons (includes remote and field observations).

**MAP-UNIT DESIGNATOR:** A map unit is defined with a combination of upper- and lower-case letters that constitute the map-unit designators (e.g. Cz, Ap) (*see* Section 3.2 Surficial Symbology). One or two upper-case letters defines the dominant primary genesis of the sediments, process and/or environment of deposition; for example: GL = glaciolacustrine sediments and A = alluvial sediments. The genesis is followed by one or two lower-case letters that define the category and reflect one of the following: morphology, environment of deposition, thickness of deposit, or secondary processes. If required, the category is followed by a number that defines the subcategory of the map unit. The subcategory reflects the following: a process, a depositional environment, the sediment composition, or the structure.

As a general principle, the use of a single map-unit designator per polygon is preferred. A maximum of two map-unit designators can be used in cases where the surficial cover forms a complex pattern and the map units are too small to be mapped individually, yet constitute a significant aerial extent of the total polygon (e.g. O.Tb designates an area of organic deposits with numerous outcrops of till blanket). In such instances a dot ('.') is used to separate the map-unit designators.








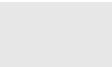
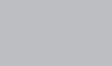
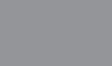


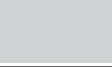

A stratigraphic relationship can be shown with a maximum of two map-unit designators separated by a slash ( '/') (e.g. Ev/GF indicates Ev (eolian veneer) overlying GF (glaciofluvial sediments)). In both cases of using multiple map-unit designators, the first or the overlying designator determines the map-unit colour.

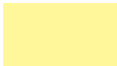



**UNIT COLOURS:** Colours for map units are characteristic and pre-assigned (*see* Section 3.2 Surficial Symbology).

**UNIT EVENT DESIGNATORS:** These are prefix letters appearing in front of the map unit label used to depict ages or geological events. They are characteristic and pre-assigned to each age or geological event (*see* Appendix 5.5).




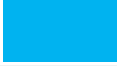

**GENERATIONS:** Point and line symbols that exhibit cross-cutting relationships have an annotation beside the feature depicting the relative age, i.e. 1, 2, 3, with 1 being the oldest.







## 3.2 Surficial Symbolology















Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Label	Legend Order	Notes on Usage
<b>1 - SURFICIAL UNITS</b>							
<b>1.1 - Colluvial deposits</b>							
3.01.01.107	Colluvial fan sediments	none	 no outline	175·130·96	Cf	0014L	
3.01.01.097	Apron or talus scree deposits	none	 no outline	176·104·89	Ca	0015L	Ca1 = stratified Ca2 = unstratified
3.01.01.155	Landslide deposits	avalanche, mud flow, retrogressive thaw	 no outline	220·145·122	Cz	0016L	Cz1 = avalanche Cz2 = mud flow Cz3 = retrogressive thaw flow Cz4 = rotational landslide Cz5 = translational landslide
3.01.01.139	Rock glacier	none	 no outline	200·110·59	Cg	0017L	
3.01.01.092	Colluvial and mass-wasting veneer	none	 no outline	227·202·192	Cv	0018L	
3.01.01.095	Colluvial and mass-wasting blanket	none	 no outline	194·139·123	Cb	0019L	
3.01.01.152	Colluvial and mass-wasting deposits, undifferentiated	none	 no outline	240·207·192	C	0020L	
<b>1.2 - Organic sediments</b>							
3.01.02.011	Fen deposits	none	 no outline	231·231·232	Owf	0004L	
3.01.02.013	Bog deposits	none	 no outline	189·190·193	Owb	0005L	
3.01.02.015	Salt marsh	none	 no outline	148·149·153	Ows	0006L	
3.01.02.023	Organic veneer	none	 no outline	181·171·179	Ov	0007L	
3.01.02.025	Organic blanket	none	 no outline	142·129·140	Ob	0008L	
3.01.02.012	Organic deposits, undifferentiated	none	 no outline	210·211·213	O	0009L	
<b>1.3 - Eolian sediments</b>							
3.01.03.295	Loess	none	 no outline	226·211·147	El	0010L	
3.01.03.299	Dunes	none	 no outline	206·184·65	Er	0011L	





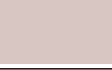









Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Label	Legend Order	Notes on Usage
<b>1 - SURFICIAL UNITS (continued)</b>							
<b>1.3 - Eolian sediments (continued)</b>							
3.01.03.292	Eolian veneer	none	 no outline	242·236·208	Ev	0012L	
3.01.03.297	Eolian sediments, undifferentiated	none	 no outline	214·195·107	E	0013L	
<b>1.4 - Alluvial sediments</b>							
3.01.04.265	Alluvial floodplain sediments	none	 no outline	255·247·153	Ap	0021L	
3.01.04.257	Alluvial fan sediments	none	 no outline	255·229·107	Af	0022L	
3.01.04.255	Intertidal or estuarine sediments	none	 no outline	255·234·149	Ai	0023L	
3.01.04.269	Alluvial terraced sediments	none	 no outline	255·242·42	At	0024L	
3.01.04.252	Alluvial veneer	none	 no outline	255·248·212	Av	0025L	
3.01.04.267	Alluvial blanket	none	 no outline	255·245·108	Ab	0026L	
3.01.04.263	Alluvial sediments, undifferentiated	none	 no outline	255·250·194	A	0027L	
<b>1.5 - Lacustrine sediments</b>							
3.01.05.582	Lacustrine beach sediments	none	 no outline	199·197·226	Lr	0028L	
3.01.05.585	Lacustrine deltaic sediments	none	 no outline	136·130·189	Ld	0029L	
3.01.05.573	Lacustrine littoral and nearshore sediments	none	 no outline	174·185·223	Ln	0030L	
3.01.05.577	Lacustrine offshore sediments	none	 no outline	89·120·186	Lo	0031L	
3.01.05.572	Lacustrine veneer	none	 no outline	199·205·232	Lv	0032L	
3.01.05.575	Lacustrine blanket	none	 no outline	132·147·202	Lb	0033L	
3.01.05.583	Lacustrine sediments, undifferentiated	none	 no outline	175·172·213	L	0034L	





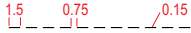




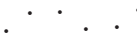












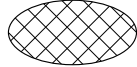

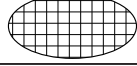
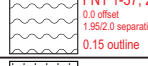
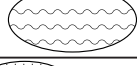
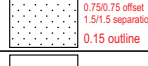













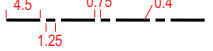
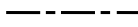

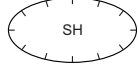











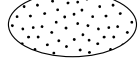








Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Label	Legend Order	Notes on Usage
<b>1 - SURFICIAL UNITS (continued)</b>							
<b>1.6 - Marine sediments</b>							
3.01.06.495	Marine terraced sediments	none	 no outline	117·206·223	Mt	0035L	
3.01.06.497	Marine beach sediments	none	 no outline	27·190·210	Mr	0036L	
3.01.06.507	Marine deltaic sediments	none	 no outline	22·192·243	Md	0037L	
3.01.06.492	Marine intertidal sediments	none	 no outline	200·234·241	Mi	0038L	
3.01.06.493	Marine littoral and nearshore sediments	none	 no outline	173·224·234	Mn	0039L	
3.01.06.509	Marine offshore sediments	none	 no outline	0·179·240	Mo	0040L	
3.01.06.502	Marine veneer	none	 no outline	199·235·252	Mv	0041L	
3.01.06.505	Marine blanket	none	 no outline	111·208·246	Mb	0042L	
3.01.06.503	Marine sediments, undifferentiated	none	 no outline	170·225·250	M	0043L	
<b>1.7 - Glaciofluvial sediments</b>							
3.01.07.249	Glaciofluvial outwash plain sediments	none	 no outline	254·200·48	GFp	0064L	
3.01.07.237	Glaciofluvial terraced sediments	none	 no outline	253·189·99	GFt	0065L	
3.01.07.225	Glaciofluvial outwash-fan sediments	none	 no outline	252·190·135	GFf	0066L	GFf1 = subaerial GFf2 = subaqueous
3.01.07.215	Glaciofluvial hummocky sediments	none	 no outline	249·173·129	GFh	0067L	
3.01.07.217	Glaciofluvial ice-contact sediments	none	 no outline	247·145·90	GFc	0068L	
3.01.07.219	Glaciofluvial kame terrace sediments	none	 no outline	244·116·52	GFk	0069L	
3.01.07.229	Esker sediments	none	 no outline	247·144·52	GFr	0070L	

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Label	Legend Order	Notes on Usage
<b>1 - SURFICIAL UNITS (continued)</b>							
<b>1.7 - Glaciofluvial sediments (continued)</b>							
3.01.07.223	Glaciofluvial veneer	none	 no outline	254·215·178	GFv	0071L	
3.01.07.247	Glaciofluvial blanket	none	 no outline	255·209·103	GFb	0072L	
3.01.07.235	Glaciofluvial sediments, undifferentiated	none	 no outline	254·207·140	GF	0073L	
<b>1.8 - Glaciolacustrine sediments</b>							
3.01.08.645	Glaciolacustrine beach sediments	none	 no outline	191·140·173	GLr	0054L	
3.01.08.613	Glaciolacustrine deltaic sediments	none	 no outline	197·176·201	GLd	0055L	
3.01.08.612	Glaciolacustrine littoral and nearshore sediments	none	 no outline	213·200·218	GLn	0056L	
3.01.08.637	Glaciolacustrine offshore sediments	none	 no outline	169·103·170	GLo	0057L	
3.01.08.615	Glaciolacustrine subaqueous outwash-fan sediments	none	 no outline	164·134·173	GLf	0058L	
3.01.08.617	Glaciolacustrine subaqueous moraine complex	none	 no outline	140·99·149	GLm	0059L	
3.01.08.635	Glaciolacustrine hummocky sediments	none	 no outline	188·140·191	GLh	0060L	
3.01.08.642	Glaciolacustrine veneer	none	 no outline	225·203·218	GLv	0061L	
3.01.08.647	Glaciolacustrine blanket	none	 no outline	172·104·149	GLb	0062L	
3.01.08.643	Glaciolacustrine sediments, undifferentiated	none	 no outline	213·181·201	GL	0063L	
<b>1.9 - Glaciomarine sediments</b>							
3.01.09.487	Glaciomarine beach sediments	none	 no outline	59·165·193	GMr	0044L	
3.01.09.525	Glaciomarine deltaic sediments	none	 no outline	130·167·196	GMd	0045L	
3.01.09.512	Glaciomarine intertidal sediments	none	 no outline	199·225·245	GMi	0046L	




Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Label	Legend Order	Notes on Usage
<b>1 - SURFICIAL UNITS (continued)</b>							
<b>1.9 - Glaciomarine sediments (continued)</b>							
3.01.09.513	Glaciomarine littoral and nearshore sediments	none	 no outline	172·211·240	GMn	0047L	
3.01.09.519	Glaciomarine offshore sediments	none	 no outline	0·151·217	GMo	0048L	
3.01.09.527	Glaciomarine submarine outwash-fan sediments	none	 no outline	82·142·178	GMf	0049L	
3.01.09.517	Glaciomarine submarine moraine complex	none	 no outline	45·166·222	GMm	0050L	
3.01.09.483	Glaciomarine veneer	none	 no outline	175·210·225	GMv	0051L	
3.01.09.485	Glaciomarine blanket	none	 no outline	125·186·209	GMb	0052L	
3.01.09.515	Glaciomarine sediments, undifferentiated	none	 no outline	119·187·231	GM	0053L	
<b>1.10 - Till</b>							
3.01.10.357	Rock-glacierized moraines	none	 no outline	157·206·119	Tg	0074L	
3.01.10.375	Hummocky till	none	 no outline	163·202·153	Th	0075L	Th1 = carbonate/calcareous
3.01.10.377	Moraine complex	none	 no outline	132·187·118	Tm	0076L	Tm1 = carbonate/calcareous
3.01.10.385	Ridged till, moraine	none	 no outline	162·212·157	Tr	0077L	Tr1 = carbonate/calcareous
3.01.10.387	Streamlined till	none	 no outline	128·198·121	Ts	0078L	Ts1 = carbonate/calcareous
3.01.10.439	Till plain	none	 no outline	40·120·79	Tp	0079L	Tp1 = carbonate/calcareous
3.01.10.057	Weathered till	none	 no outline	141·124·98	Tx	0080L	Tx1 = carbonate/calcareous
3.01.10.355	Till veneer	none	 no outline	185·219·157	Tv	0081L	Tv1 = carbonate/calcareous
3.01.10.359	Till blanket	none	 no outline	133·197·83	Tb	0082L	Tb1 = carbonate/calcareous

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Label	Legend Order	Notes on Usage
<b>1 - SURFICIAL UNITS (continued)</b>							
<b>1.10 - Till (continued)</b>							
3.01.10.373	Till, undifferentiated	none	 no outline	200·221·189	T	0083L	
<b>1.11 - Weathering deposits</b>							
3.01.11.175	Weathered bedrock or regolith veneer	none	 no outline	219·145·139	Wv	0084L	Wv1 = carbonate/calcareous
3.01.11.169	Weathered bedrock or regolith blanket	none	 no outline	218·64·52	Wb	0085L	Wb1 = carbonate/calcareous
3.01.11.177	Weathered bedrock or regolith, undifferentiated	none	 no outline	206·108·108	W	0086L	W1 = carbonate/calcareous
<b>1.12 - Undifferentiated deposits</b>							
3.01.12.082	Undifferentiated deposits	none	 no outline	216·198·192	U	0089L	
<b>1.13 - Bedrock</b>							
3.01.13.192	Sedimentary bedrock	none	 no outline	252·211·201	R1	0090L	
3.01.13.187	Igneous bedrock	none	 no outline	242·133·128	R2	0091L	
3.01.13.183	Metamorphic bedrock	none	 no outline	250·191·190	R3	0092L	
3.01.13.185	Bedrock, undifferentiated	none	 no outline	246·152·158	R	0093L	
<b>1.14 - Anthropogenic deposits</b>							
3.01.14.715	Anthropogenic deposits, undifferentiated	none	 no outline	193·139·138	H	0003L	
<b>1.15 - Glacial ice or snowpack</b>							
3.01.15.001	Snowpacks	none	 FNT 1-172, 10.0 0.0 offset 10.0 separation no outline	217·255·255	Isn	0001L	do not label polygons for this unit unless map uses both glacier units
3.01.15.002	Glacier or icefield or icecap	none	 FNT 1-172, 10.0 0.0 offset 10.0 separation no outline	179·255·255	I	0002L	do not label polygons for this unit unless map uses both glacier units
<b>1.16 - Volcanic sediments</b>							
3.01.16.705	Volcanic pyroclastic sediments	none	 no outline	192·140·156	Vpy	0087L	
3.01.16.707	Volcanic deposits, undifferentiated	none	 no outline	174·104·130	V	0088L	

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>2 - MAP UNIT BOUNDARIES</b>							
3.02.01.001	Geological contact: defined	none		0-0-0		0094L	
3.02.01.002	Geological contact: approximate	none		0-0-0		0095L	
3.02.01.003	Geological contact: inferred	none		0-0-0		0096L	
3.02.01.004	Geological contact: concealed	none		0-0-0		0097L	
3.02.01.005	Limit of mapping	none		0-0-0		0098L	
3.02.01.006	Limit of mapping: neatline	none		77-230-0	not shown on map		
<b>3 - ANTHROPOGENIC</b>							
3.03.01.001	Drillhole location	none		0-0-0		0273L	annotation depicted with text symbol 2.03.01.008
3.03.01.002	Pit: small, active	none		0-0-0		0262L	
3.03.01.003	Pit: small, inactive	none		0-0-0		0261L	
3.03.01.004	Quarry: small, active	none		0-0-0		0268L	
3.03.01.005	Quarry: small, inactive	none		0-0-0		0267L	
3.03.01.006	Made ground (fill)	none		0-0-0		0264L	
3.03.01.007	Mine tailing	none		0-0-0		0263L	
3.03.01.008	Peat bog mining	none		0-0-0		0269L	
3.03.01.009	Pit: large	none		0-0-0		0259L 0260L	inactive: centroid (⊗) must be added as annotation (FNT 1-39); active: centroid (⊗) must be added as annotation (FNT 1-38)
3.03.01.010	Quarry: large	none		0-0-0		0265L 0266L	inactive: centroid (⊗) must be added as annotation (FNT 1-41); active: centroid (⊗) must be added as annotation (FNT 1-40)

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - BEDROCK</b>							
3.04.01.001	Sinkhole: small	none	 FNT 1-43, 3.0	0-0-0		0254L	
3.04.01.002	Outcrop	none	 FNT 1-84, 1.5	0-0-0		0272L	
3.04.01.003	Tor	none	 FNT 1-85, 1.8	0-0-0		0252L	
3.04.01.005	Bedrock scarp	none	 FNT 1-51, 1.0	0-0-0		0257L	
3.04.01.006	Lineament or lineation in bedrock	none	 FNT 1-51, 1.0	0-0-0		0258L	
3.04.01.007	Sinkhole: large	none	 FNT 1-42, 1.0 2.0 separation 0.2 outline	0-0-0	 SH	0253L	centroid (SH) must be added as annotation (FNT 1-44)
3.04.01.008	Mineral occurrence	none	 FNT 1-244, 1.5	0-0-0		0270L	annotation depicted with text symbol 2.03.01.003
<b>5 - EOLIAN</b>							
3.05.01.001	Deflation landform: paleowind direction known	none	 FNT 1-86, 3.0	0-0-0		0135L	
3.05.01.002	Paleowind measurement	none	 FNT 1-113, 5.0	0-0-0		0133L	
3.05.01.003	Dune Crest: large	none	 FNT 1-113, 5.0	0-0-0		0137L	symbol 3.15.01.002 to be used in legend
3.05.01.005	Active dune field	none	 FNT 1-36, 10.0 0.3 circle 0.0 offset 1.0/1.0 separation 0.15 outline	0-0-0		0136L	
3.05.01.006	Eolian lag deposit (deflation surface)	none	 FNT 1-36, 10.0 10.0 separation 0.15 outline	0-0-0		0141L	
3.05.01.007	Deflation landform: paleowind direction unknown	none	 FNT 1-186, 3.0	0-0-0		0134L	
3.05.01.008	Dune Crest: small, known	none	 FNT 1-196, 3.0	0-0-0		0139L	symbol should have an angle of rotation
3.05.01.009	Dune Crest: small, unknown	none	 FNT 1-196, 3.0	255-0-0		0138L	
<b>6 - GLACIAL</b>							
3.06.01.001	Kettle: small	none	 FNT 1-87, 3.0	0-0-0		0153L	





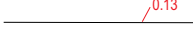



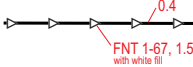
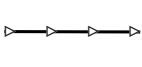

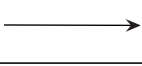
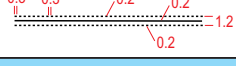
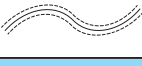








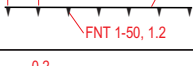


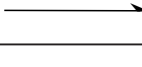
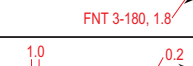
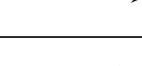

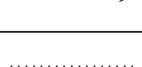
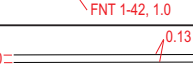
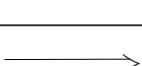


Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>6 - GLACIAL (continued)</b>							
3.06.01.003	Arête	none		0-0-0		0256L	
3.06.01.004	Cirque headwall	none		0-0-0		0255L	
3.06.01.005	Crevasse ridge	none		0-128-255		0200L	symbol 3.15.01.015 to be used in legend
3.06.01.006	Major moraine ridge: lateral/laterofrontal	none		0-0-0		0184L	
3.06.01.007	Major moraine ridge: lateral/laterofrontal ice-cored	none		0-0-0		0187L	
3.06.01.008	Major moraine ridge: medial	none		0-0-0		0185L	
3.06.01.009	Major moraine ridge: medial ice-cored	none		0-0-0		0188L	
3.06.01.010	Major moraine ridge: end	none		0-0-0		0186L	
3.06.01.011	Major moraine ridge: end ice-cored	none		0-0-0		0189L	
3.06.01.012	Minor moraine ridge: large	none		0-0-0		0186L	symbol 3.15.01.003 to be used in legend
3.06.01.013	Kettle: large	none		0-0-0		0152L	centroid (K) must be added as annotation (FNT 1-45)
3.06.01.014	Recently deglaciated area	none		255-255-255		0104L	white pattern over any geological unit colour
3.06.01.015	Minor moraine ridge: small, known	none		0-0-0		0183L	symbol should have an angle of rotation
3.06.01.017	Minor moraine ridge: small, unknown	none		255-0-0		0182L	
<b>7 - ICE-CONTACT</b>							
3.07.01.001	Ice-contact delta	none		0-0-0		0162L 0163L	unknown: no angle of rotation; known: symbol should have an angle of rotation
3.07.01.002	Kame	none		0-0-0		0193L	
3.07.01.003	Buried esker ridge: known	none		0-0-0		0195L	

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>7 - ICE-CONTACT (continued)</b>							
3.07.01.004	Buried esker ridge: unknown	none		0-0-0		0194L	
3.07.01.005	Esker ridge: known	none		0-0-0		0197L	
3.07.01.006	Esker ridge: unknown	none		0-0-0		0196L	
3.07.01.007	Ice-contact scarp	none		0-0-0		0190L	
3.07.01.008	Ice-pushed ridge	none		0-0-0		0191L	
3.07.01.009	Ice-thrust ridge	none		0-0-0		0192L	
3.07.01.010	Esker ridge with beach ridge/strandlines: known or inferred	none		0-0-0		0199L	
3.07.01.011	Esker ridge with beach ridge/strandlines: unknown	none		0-0-0		0198L	
<b>8 - ICE-MOVEMENT</b>							
3.08.01.001	Buried drumlin ridge: small	none		0-0-0		0206L	symbol should have an angle of rotation
3.08.01.002	Buried drumlinoid ridge or fluting: small	none		0-0-0		0202L	symbol should have an angle of rotation
3.08.01.003	Crag-and-tail ridge: small	none		0-0-0		0212L	symbol should have an angle of rotation
3.08.01.004	Drumlin ridge: small	none		0-0-0		0208L	symbol should have an angle of rotation
3.08.01.005	Drumlinoid ridge or fluting: small	none		0-0-0		0204L	symbol should have an angle of rotation
3.08.01.006	Fluted bedrock or drift: small, known	none		0-0-0		0224L	symbol should have an angle of rotation
3.08.01.007	Fluted bedrock or drift: small, unknown	none		0-0-0		0222L	symbol should have an angle of rotation
3.08.01.008	Striation: poorly defined, known	none		0-0-0		0244L	symbol should have an angle of rotation; symbol 3.15.01.001 to be used in legend if ages exist
3.08.01.009	Striation: poorly defined, unknown	none		0-0-0		0243L	symbol should have an angle of rotation















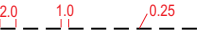
















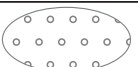


Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>8 - ICE-MOVEMENT (continued)</b>							
3.08.01.010	Striation: well defined, known	none		0-0-0		0246L	symbol should have an angle of rotation; symbol 3.15.01.001 to be used in legend if ages exist
3.08.01.011	Striation: well defined, unknown	none		0-0-0		02245L	symbol should have an angle of rotation
3.08.01.012	Till fabric measurement location: known	none		0-0-0		0241L	symbol should have an angle of rotation
3.08.01.014	Buried drumlin ridge: large	none		0-0-0		0205L	
3.08.01.015	Buried drumlinoid ridge or fluting: large	none		0-0-0		0201L	
3.08.01.016	Crag-and-tail ridge: large	none		0-0-0		0211L	
3.08.01.017	Drumlin ridge: large	none		0-0-0		0207L	
3.08.01.018	Drumlinoid ridge or fluting: large	none		0-0-0		0203L	
3.08.01.019	Fluted bedrock or drift: large, known	none		0-0-0		0223L	
3.08.01.020	Fluted bedrock or drift: large, unknown	none		0-0-0		0221L	
3.08.01.021	Groove: large, known	none		0-0-0		0216L	
3.08.01.022	Groove: large, unknown	none		0-0-0		0215L	
3.08.01.024	Ice-flow direction: known	none		0-255-255		0226L	
3.08.01.025	Ice-flow direction: unknown	none		0-255-255		0225L	
3.08.01.026	Till fabric measurement location: unknown	none		0-0-0		0240L	symbol should have an angle of rotation
3.08.01.029	Fluted bedrock or drift: small, poorly defined, known	none		0-0-0		0220L	symbol should have an angle of rotation
3.08.01.030	Fluted bedrock or drift: small, poorly defined, unknown	none		0-0-0		0218L	symbol should have an angle of rotation





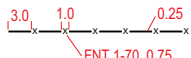

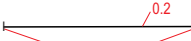

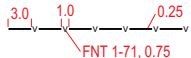
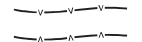



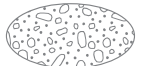





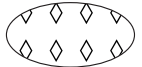




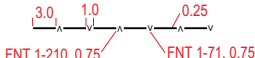



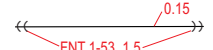





Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>8 - ICE-MOVEMENT (continued)</b>							
3.08.01.033	Fluted bedrock or drift: large, poorly defined, known	none		0-0-0		0219L	
3.08.01.034	Fluted bedrock or drift: large, poorly defined, unknown	none		0-0-0		0217L	
3.08.01.035	Striation from legacy data: poorly defined, known	none		255-0-0		0248L	symbol should have an angle of rotation
3.08.01.036	Striation from legacy data: poorly defined, unknown	none		255-0-0		0247L	symbol should have an angle of rotation
3.08.01.037	Striation from legacy data: well defined, known	none		255-0-0		0250L	symbol should have an angle of rotation
3.08.01.038	Striation from legacy data: well defined, unknown	none		255-0-0		0249L	symbol should have an angle of rotation
3.08.01.039	Pre-crag ridge: small	none		0-0-0		0214L	symbol should have an angle of rotation
3.08.01.040	Pre-crag ridge: large	none		0-0-0		0213L	
3.08.01.041	Dispersal train margin: defined, large, left	none		0-0-0		0230L	symbol 3.15.01.010 to be used in legend
3.08.01.042	Dispersal train margin: defined, large, right	none		0-0-0		0231L	symbol 3.15.01.010 to be used in legend
3.08.01.043	Dispersal train margin: approximate, large, left	none		0-0-0		0232L	symbol 3.15.01.011 to be used in legend
3.08.01.044	Dispersal train margin: approximate, large, right	none		0-0-0		0233L	symbol 3.15.01.011 to be used in legend
3.08.01.045	Buried crag-and-tail ridge: small	none		0-0-0		0210L	symbol should have an angle of rotation
3.08.01.046	Buried crag-and-tail ridge: large	none		0-0-0		0209L	
<b>9 - MASS-WASTING</b>							
3.09.01.001	Avalanche track: small	none		0-0-0		0106L	symbol should have an angle of rotation
3.09.01.002	Debris flow: small	none		0-0-0		0108L	symbol should have an angle of rotation
3.09.01.003	Landslide scar	none		0-0-0		0113L 0113L	unknown: no angle of rotation; known: symbol should have an angle of rotation









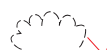

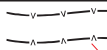
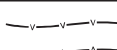




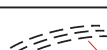
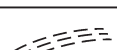












Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>9 - MASS-WASTING (continued)</b>							
3.09.01.004	Retrogressive thaw flow	none		0-0-0		0114L 0114L	unknown: no angle of rotation; known: symbol should have an angle of rotation
3.09.01.005	Slope movement: unspecified	none		0-0-0		0115L	symbol should have an angle of rotation
3.09.01.006	Landslide escarpment: active	none		0-0-0		0112L	symbol 3.15.01.004 to be used in legend
3.09.01.007	Landslide escarpment: inactive	none		0-0-0		0111L	symbol 3.15.01.005 to be used in legend
3.09.01.008	Avalanche track: large	none		0-0-0		0106L	
3.09.01.009	Debris flow: large	none		0-0-0		0107L	
3.09.01.010	Tension fracture	none		0-0-0		0109L	
<b>10 - PALEODRAINAGE</b>							
3.10.01.001	Alluvial fan	none		0-0-0		0143L 0143L	unknown: no angle of rotation; known: symbol should have an angle of rotation
3.10.01.002	Piping depression	none		0-0-0		0110L	
3.10.01.003	Paleocurrent measurement: sediments	none		0-0-0		0169L	symbol should have an angle of rotation
3.10.01.004	Paleocurrent measurement: bedrock (p, s-forms)	none		0-0-0		0242L	symbol should have an angle of rotation
3.10.01.005	Meltwater channel: major	none		0-0-0		0174L 0174L	opposite side must be digitized backwards; unknown: symbol 3.15.01.005 to be used in legend; known: symbol 3.15.01.014 to be used in legend
3.10.01.006	Meltwater channel lateral: left	none		0-0-0		0172L	uphill on left
3.10.01.007	Meltwater channel lateral: right	none		0-0-0		0173L	uphill on right
3.10.01.008	Meltwater channel: minor, known	none		0-0-0		0171L	
3.10.01.009	Meltwater channel: minor, unknown	none		0-0-0		0170L	
3.10.01.010	Paleodrainage direction	none		0-0-0		0168L	

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>10 - PALEODRAINAGE (continued)</b>							
3.10.01.011	Partly buried channel scarp	none		0-0-0		0178L	opposite side must be digitized backwards; symbol 3.15.01.008 to be used in legend
3.10.01.012	Spillway: known	none		0-0-0		0167L	
3.10.01.013	Buried valley: known	none		0-0-0		0180L	
3.10.01.014	Buried valley: unknown	none		0-0-0		0179L	
3.10.01.015	Subglacial meltwater corridor margin: defined	none		0-0-0		0177L	opposite side must be digitized backwards; symbol 3.15.01.012 to be used in legend
3.10.01.016	Subglacial meltwater corridor margin: approximate	none		0-0-0		0176L	opposite side must be digitized backwards; symbol 3.15.01.013 to be used in legend
3.10.01.017	Spillway: unknown	none		0-0-0		0166L	
3.10.01.018	Meltwater erosional depression	none		0-0-0		0175L	
<b>11 - PALEOGEOGRAPHY</b>							
3.11.01.001	Ice divide: defined	none		255-0-0		0237L	
3.11.01.002	Ice divide: approximate	none		255-0-0		0236L	
3.11.01.003	Ice stream margin: defined	none		0-0-255		0235L	
3.11.01.004	Ice stream margin: approximate	none		0-0-255		0234L	
3.11.01.005	Limit of glaciation: defined	none		0-0-0		0239L	
3.11.01.006	Limit of glaciation: approximate	none		0-0-0		0238L	
3.11.01.007	Limit of submergence: glaciolacustrine, defined	none		0-0-0		0159L	
3.11.01.008	Limit of submergence: glaciolacustrine, approximate	none		0-0-0		0158L	

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>11 - PALEOGEOGRAPHY (continued)</b>							
3.11.01.011	Limit of submergence: lacustrine, defined	none		0-128-255		0155L	
3.11.01.012	Limit of submergence: lacustrine, approximate	none		0-128-255		0154L	
3.11.01.013	Limit of submergence: marine, defined	none		128-0-255		0157L	
3.11.01.014	Limit of submergence: marine, approximate	none		128-0-255		0156L	
<b>12 - PERMAFROST / PERIGLACIAL</b>							
3.12.01.001	Palsa or lithalsa	none		0-0-0		0124L	
3.12.01.002	Patterned ground: small	none		0-0-0		0121L	
3.12.01.003	Pingo	none		0-0-0		0126L	
3.12.01.004	Rock glacier	none		0-0-0		0128L	
3.12.01.005	Rock pingo	none		0-0-0		0129L	
3.12.01.006	Thermokarst depression: small	none		0-0-0		0119L	
3.12.01.012	Rock blister	none		0-0-0		0130L	
3.12.01.013	Rock burst	none		0-0-0		0131L	
3.12.01.014	Cryoplanation terrace scarp	none		0-0-0		0116L	
3.12.01.015	Limit or permafrost	none		0-0-0		0117L	
3.12.01.016	Patterned ground: large	none		132-134-136		0120L	
3.12.01.017	Thermokarst depression: large	none		0-0-0		0118L	centroid (K) must be added as annotation (FNT 1-48)

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>12 - PERMAFROST / PERIGLACIAL (continued)</b>							
3.12.01.019	Ground ice observation	none	 FNT 1-123, 3.0	0-0-0		0132L	
3.12.01.020	Nivation hollow	none	 FNT 1-42, 1.0 3.0 separation 0.2 outline	0-0-0		0102L	centroid (N) must be added as annotation (FNT 1-181)
3.12.01.022	Gelifluction or solifluction lobe	none	 FNT 1-102, 3.0	0-0-0		0127L	
3.12.01.023	Felsenmeer: large	none	 FNT 1-46, 1.5 4.0/5.0 separation 1.0/2.5 offset 0.15 outline	132-134-136		0120L	
3.12.01.024	Felsenmeer: small	none	 FNT 1-46, 2.0	0-0-0		0121L	
<b>13 - SHORELINE</b>							
3.13.01.001	Delta: known	none	 FNT 1-106, 4.0	0-0-0		0161L	symbol should have an angle of rotation
3.13.01.002	Beach crest	none	 2.0 1.0 0.25	0-0-0		0151L	multiple lines must be digitized manually; symbol 3.15.01.009 to be used in legend
3.13.01.004	Terrace scarp	none	 1.0 0.25 FNT 1-76, 1.25	0-0-0		0148L	
3.13.01.010	Delta: unknown	none	 FNT 1-106, 4.0	255-0-0		0160L	
3.13.01.011	Pre-existing coastline	none	 2.0 1.0 0.25	255-0-0		0147L	
<b>14 - MISCELLANEOUS</b>							
3.14.01.001	Iceberg scour: small	none	 FNT 1-187, 5.0	0-0-0		0165L	
3.14.01.002	Erratic observation	none	 FNT 1-120, 2.0	0-0-0		0229L	
3.14.01.003	Fossil observation	none	 FNT 1-121, 3.0	0-0-0		0274L	
3.14.01.004	Gossan observation	none	 FNT 1-122, 3.0	0-0-0		0271L	
3.14.01.005	Extensive gullied terrain	none	 FNT 1-186, 1.0 3.0/6.0 separation 1.5/3.0 offset 0.15 outline	132-134-136		0140L	
3.14.01.006	Sample location	none	 FNT 1-55, 1.5	0-0-0		0278L	annotation depicted with text symbol 2.03.01.007

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - MISCELLANEOUS (continued)</b>							
3.14.01.007	Station location: ground observation	none	 FNT 1-124, 1.5	0-0-0		0276L	
3.14.01.008	Station location: remote observation	none	 FNT 1-125, 2.5	0-0-0		0275L	
3.14.01.009	Alluvial bar or levee ridge	none	 FNT 1-70, 0.75	0-0-0		0142L	
3.14.01.010	Iceberg scour: large	none	 FNT 1-54, 1.25	0-0-0		0164L	
3.14.01.011	Ravine scarp	none	 FNT 1-71, 0.75	0-0-0		0149L	opposite side must be digitized backwards; symbol 3.15.01.006 to be used in legend
3.14.01.012	Spring, hot spring, cold water spring	none	 FNT 1-207, 3.0	0-0-0		0099L	
3.14.01.013	Lag deposit (washed scoured lag)	none	 FNT 1-34, 10.0 separation 0.15 outline	132-134-136		0144L	
3.14.01.014	Reworked sediments (by waves, meltwater)	none	 FNT 1-35, 10.0 separation 0.15 outline	132-134-136		0145L	
3.14.01.015	Surface boulder concentration (boulder lag)	none	 FNT 1-33, 10.0 separation 0.15 outline	132-134-136		0146L	
3.14.01.017	Evaporites	none	 FNT 1-197, 3.0 separation 0.15 outline	0-0-0		0103L	
3.14.01.018	Dated sample location	none	 FNT 1-198, 3.0	0-0-0		0277L	annotation depicted with text symbol 2.03.01.010
3.14.01.019	Hummock	none	 FNT 1-208, 3.0	0-0-0		0125L	
3.14.01.020	Erosional crest	none	 FNT 1-210, 0.75 FNT 1-71, 0.75	0-0-0		0150L	
3.14.01.021	Sediment transport direction: known	none	 FNT 1-53, 1.5 FNT 1-52, 1.8	0-0-0		0228L	
3.14.01.022	Sediment transport direction: unknown	none	 FNT 1-53, 1.5	0-0-0		0227L	
3.14.01.023	Annular depression: large	none	 0.3 outline no fill	255-0-0		0100L	
3.14.01.024	Annular depression: small	none	 FNT 1-211, 3.0	255-0-0		0101L	

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>15 - LEGEND SYMBOLOGY</b>							
3.15.01.001	Ice-flow measurement - crossed striae	none	 FNT 1-190, 6.0	0-0-0		0251L	
3.15.01.002	Dune crest: large	none	 FNT 1-164, 11.0	0-0-0		0137L	
3.15.01.003	Minor moraine ridge: large	none	 FNT 1-165, 9.0	0-0-0		0186L	
3.15.01.004	Landslide escarpment: active	none	 FNT 1-166, 10.0	0-0-0		0112L	
3.15.01.005	Landslide escarpment: inactive	none	 FNT 1-167, 10.0	0-0-0		0111L	
3.15.01.006	Ravine scarp	none	 FNT 1-169, 15.0	0-0-0		0149L	
3.15.01.007	Major meltwater channel: unknown	none	 FNT 1-168, 12.0	0-0-0		0174L	
3.15.01.008	Partly buried channel scarp	none	 FNT 1-170, 12.0	0-0-0		0178L	
3.15.01.009	Beach crest	none	 FNT 1-171, 13.0	0-0-0		0161L	
3.15.01.010	Dispersal train: defined	none	 FNT 1-217, 12.0	0-0-0		0232L; 0233L	
3.15.01.011	Dispersal train: approximate	none	 FNT 1-218, 12.0	0-0-0		0230L; 0231L	
3.15.01.012	Subglacial meltwater corridor margin: defined	none	 FNT 1-219, 12.0	0-0-0		0177L	
3.15.01.013	Subglacial meltwater corridor margin: approximate	none	 FNT 1-220, 12.0	0-0-0		0176L	
3.15.01.014	Major meltwater channel: known	none	 FNT 1-245, 12.0	0-0-0		0174L	
3.15.01.015	Crevasse fill ridge	none	 FNT 3-166, 9.0	0-128-255		0200L	



# 4 Bedrock Symbolology

## 4.1 Bedrock Concepts

**MINERAL ABBREVIATIONS:** The Bedrock Legend Committee has decided that annotation for mineral occurrences (point) and alteration zones (polygon) will be shown as mineral abbreviations (*see* Appendix 5.1, which are based on Whitney and Evans (2010).

**UNIT COLOURS:** Colours for map units must be chosen from available shades in the current GSC ArcGIS Shadeset (section 2.2 of this document), but the Bedrock Legend Committee suggests the following guidelines.

Phanerozoic units:

It is recommended that the colour design for Phanerozoic sedimentary and metamorphic units follow as closely as possible that of the International Commission on Stratigraphy (ICS) International Chronostratigraphic Chart (*see* Appendix 5.2). As required, modified shades can be added for broader age divisions.

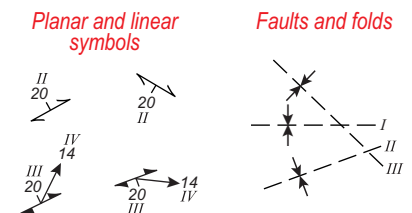
For volcanic rocks, shades of green are recommended, with lighter shades for felsic and alkalic compositions, and darker shades for those that are mafic and ultramafic. For plutonic rocks, the following colour shades are recommended: lighter and darker pink tones for granitic, syenitic, and tonalitic rocks; orange for carbonatitic rocks; and shades of lilac and purple for gabbroic and peridotitic rocks.

Precambrian units:

For Precambrian units, colours on the ICS chart tend to be too restrictive. Consequently, the following range of colours are recommended to properly reflect common lithological compositions: shades of yellow, grey, and brown for sandier to muddier clastic rocks; shades of blue for carbonate rocks; shades of green for volcanic rocks; shades of red and fuchsia for felsic plutonic rocks; shades of violet and purple for mafic and ultramafic units; and shades of pale pink and orange for (ortho) gneissic units.

In order to emphasize potential domainal affinities of Precambrian map units, the use of differing colour palettes for different tectonic domains can be considered (e.g. in order to distinguish the Archean Slave from Churchill cratons shades of grey and salmon, versus shades of pink and orange, respectively, could be used).

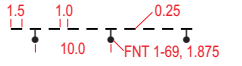
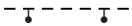
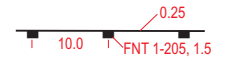

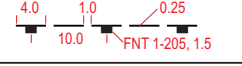
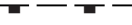






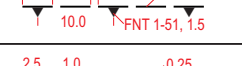



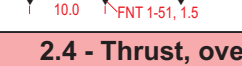

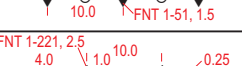







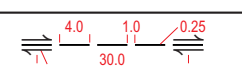



**GENERATIONS:** Instead of creating hundreds of symbols to indicate the generation of a feature, the Bedrock Legend Committee has decided generation will be shown as an annotation beside the feature. The annotation will utilize roman numerals (Times Roman Italic font). Annotation for line features (faults and folds) is placed at the end of the line feature (or as close as possible) and for point features (planar and linear), it is placed near the dip or plunge value (keeping the dip or plunge value closest to the symbol).



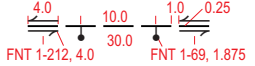
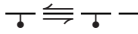
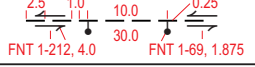
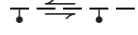
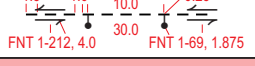
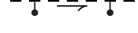
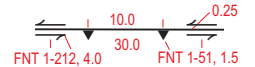
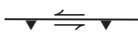
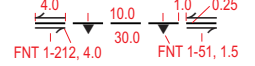
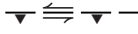
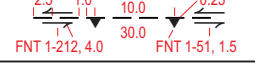
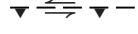
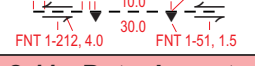
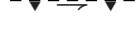
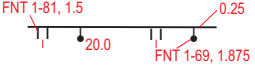
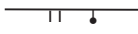
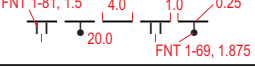

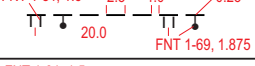

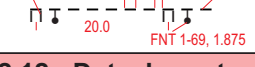
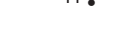
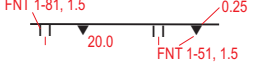
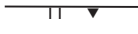
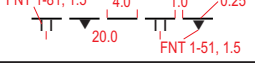

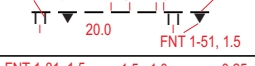

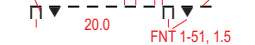

**AGE DESIGNATORS:** Also known as the “GSC Special Font”, these are special characters used to depict certain bedrock units on the map face and in surround information. All characters necessary are contained within the GSCGeology2015 true type font. In 2015, the Bedrock Legend Committee reviewed the list of age designators, some new designations were added, whereas others were determined to be obsolete (*see* Appendix 5.3).

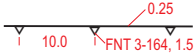

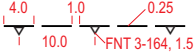
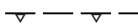
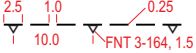
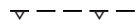
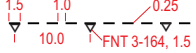
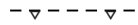
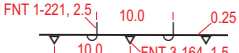
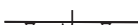
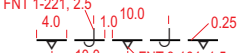

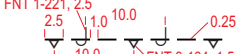

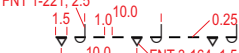
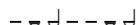



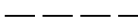

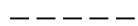

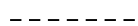
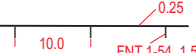

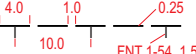
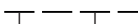

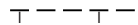
## 4.2 Bedrock Symbolology

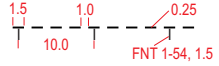
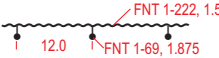

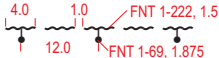
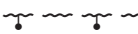
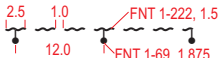

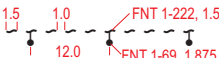
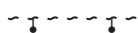
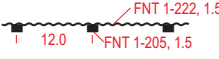
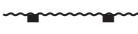
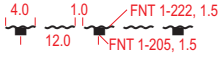

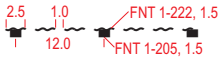

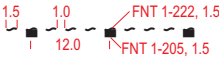

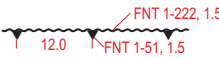
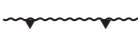
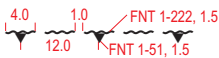
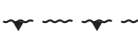




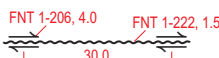

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>1 - MAP UNIT BOUNDARIES</b>							
<b>1.1 - Geological contacts</b>							
4.01.01.001	Geological contact: defined	facies change		0-0-0			
4.01.01.002	Geological contact: approximate	facies change		0-0-0			
4.01.01.003	Geological contact: inferred	facies change		0-0-0			
4.01.01.004	Geological contact: concealed	facies change		0-0-0			
4.01.03.001	Depositional escarpment: defined	none		0-0-0			
4.01.03.002	Depositional escarpment: approximate	none		0-0-0			
<b>1.2 - Unit constructs</b>							
4.01.02.001	Limit of mapping	none		0-0-0			
4.01.02.002	Limit of mapping: neatline	none		77-230-0	not shown on map		
4.01.02.003	Mapping precision change	none		0-0-0			
4.01.02.004	Nomenclature change	none		0-0-0			
4.01.02.005	Other unit construct	none		0-0-0			
<b>2 - FAULTS</b>							
<b>2.1 - Normal</b>							
4.02.01.001	Normal: defined	none		0-0-0			
4.02.01.002	Normal: approximate	none		0-0-0			
4.02.01.003	Normal: inferred	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>2 - FAULTS (continued)</b>							
<b>2.1 - Normal (continued)</b>							
4.02.01.004	Normal: concealed	none		0-0-0			
<b>2.2 - Reverse</b>							
4.02.02.001	Reverse: defined	none		0-0-0			
4.02.02.002	Reverse: approximate	none		0-0-0			
4.02.02.003	Reverse: inferred	none		0-0-0			
4.02.02.004	Reverse: concealed	none		0-0-0			
<b>2.3 - Thrust</b>							
4.02.03.001	Thrust: defined	none		0-0-0			
4.02.03.002	Thrust: approximate	none		0-0-0			
4.02.03.003	Thrust: inferred	none		0-0-0			
4.02.03.004	Thrust: concealed	none		0-0-0			
<b>2.4 - Thrust, overturned</b>							
4.02.04.001	Thrust, overturned: defined	none		0-0-0			
4.02.04.002	Thrust, overturned: approximate	none		0-0-0			
4.02.04.003	Thrust, overturned: inferred	none		0-0-0			
4.02.04.004	Thrust, overturned: concealed	none		0-0-0			
<b>2.5 - Strike-slip, dextral</b>							
4.02.05.001	Strike-slip, dextral: defined	transform dextral		0-0-0			
4.02.05.002	Strike-slip, dextral: approximate	transform dextral		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>2 - FAULTS (continued)</b>							
<b>2.5 - Strike-slip, dextral (continued)</b>							
4.02.05.003	Strike-slip, dextral: inferred	transform dextral		0-0-0			
4.02.05.004	Strike-slip, dextral: concealed	transform dextral		0-0-0			
<b>2.6 - Strike-slip, sinistral</b>							
4.02.06.001	Strike-slip, sinistral: defined	transform sinistral		0-0-0			
4.02.06.002	Strike-slip, sinistral: approximate	transform sinistral		0-0-0			
4.02.06.003	Strike-slip, sinistral: inferred	transform sinistral		0-0-0			
4.02.06.004	Strike-slip, sinistral: concealed	transform sinistral		0-0-0			
<b>2.7 - Oblique-slip, dextral extensional</b>							
4.02.07.001	Oblique-slip, dextral extensional: defined	none		0-0-0			
4.02.07.002	Oblique-slip, dextral extensional: approximate	none		0-0-0			
4.02.07.003	Oblique-slip, dextral extensional: inferred	none		0-0-0			
4.02.07.004	Oblique-slip, dextral extensional: concealed	none		0-0-0			
<b>2.8 - Oblique-slip, dextral contractional</b>							
4.02.08.001	Oblique-slip, dextral contractional: defined	none		0-0-0			
4.02.08.002	Oblique-slip, dextral contractional: approximate	none		0-0-0			
4.02.08.003	Oblique-slip, dextral contractional: inferred	none		0-0-0			
4.02.08.004	Oblique-slip, dextral contractional: concealed	none		0-0-0			
<b>2.9 - Oblique-slip, sinistral extensional</b>							
4.02.09.001	Oblique-slip, sinistral extensional: defined	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>2 - FAULTS (continued)</b>							
<b>2.9 - Oblique-slip, sinistral extensional (continued)</b>							
4.02.09.002	Oblique-slip, sinistral extensional: approximate	none		0-0-0			
4.02.09.003	Oblique-slip, sinistral extensional: inferred	none		0-0-0			
4.02.09.004	Oblique-slip, sinistral extensional: concealed	none		0-0-0			
<b>2.10 - Oblique-slip, sinistral contractional</b>							
4.02.10.001	Oblique-slip, sinistral contractional: defined	none		0-0-0			
4.02.10.002	Oblique-slip, sinistral contractional: approximate	none		0-0-0			
4.02.10.003	Oblique-slip, sinistral contractional: inferred	none		0-0-0			
4.02.10.004	Oblique-slip, sinistral contractional: concealed	none		0-0-0			
<b>2.11 - Detachment, extensional</b>							
4.02.11.001	Detachment, extensional: defined	none		0-0-0			
4.02.11.002	Detachment, extensional: approximate	none		0-0-0			
4.02.11.003	Detachment, extensional: inferred	none		0-0-0			
4.02.11.004	Detachment, extensional: concealed	none		0-0-0			
<b>2.12 - Detachment, contractional</b>							
4.02.12.001	Detachment, contractional: defined	none		0-0-0			
4.02.12.002	Detachment, contractional: approximate	none		0-0-0			
4.02.12.003	Detachment, contractional: inferred	none		0-0-0			
4.02.12.004	Detachment, contractional: concealed	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>2 - FAULTS (continued)</b>							
<b>2.13 - Back-thrust</b>							
4.02.13.001	Back-thrust: defined	none		0-0-0			
4.02.13.002	Back-thrust: approximate	none		0-0-0			
4.02.13.003	Back-thrust: inferred	none		0-0-0			
4.02.13.004	Back-thrust: concealed	none		0-0-0			
<b>2.14 - Back-thrust, overturned</b>							
4.02.14.001	Back-thrust, overturned: defined	none		0-0-0			
4.02.14.002	Back-thrust, overturned: approximate	none		0-0-0			
4.02.14.003	Back-thrust, overturned: inferred	none		0-0-0			
4.02.14.004	Back-thrust, overturned: concealed	none		0-0-0			
<b>2.15 - Generic</b>							
4.02.15.001	Generic: defined	motion undefined		0-0-0			
4.02.15.002	Generic: approximate	motion undefined		0-0-0			
4.02.15.003	Generic: inferred	motion undefined		0-0-0			
4.02.15.004	Generic: concealed	motion undefined		0-0-0			
<b>2.16 - Generic, downthrown known</b>							
4.02.16.001	Generic, downthrown known: defined	none		0-0-0			
4.02.16.002	Generic, downthrown known: approximate	none		0-0-0			
4.02.16.003	Generic, downthrown known: inferred	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>2 - FAULTS (continued)</b>							
<b>2.16 - Generic, downthrown known (continued)</b>							
4.02.16.004	Generic, downthrown known: concealed	none		0-0-0	- T - - - T -		
<b>3 - SHEARS</b>							
<b>3.1 - Normal</b>							
4.03.01.001	Normal: defined	none		0-0-0			
4.03.01.002	Normal: approximate	none		0-0-0			
4.03.01.003	Normal: inferred	none		0-0-0			
4.03.01.004	Normal: concealed	none		0-0-0			
<b>3.2 - Reverse</b>							
4.03.02.001	Reverse: defined	none		0-0-0			
4.03.02.002	Reverse: approximate	none		0-0-0			
4.03.02.003	Reverse: inferred	none		0-0-0			
4.03.02.004	Reverse: concealed	none		0-0-0			
<b>3.3 - Thrust</b>							
4.03.03.001	Thrust: defined	none		0-0-0			
4.03.03.002	Thrust: approximate	none		0-0-0			
4.03.03.003	Thrust: inferred	none		0-0-0			
4.03.03.004	Thrust: concealed	none		0-0-0			
<b>3.4 - Strike-slip, dextral</b>							
4.03.04.001	Strike-slip, dextral: defined	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>3 - SHEARS (continued)</b>							
<b>3.4 - Strike-slip, dextral (continued)</b>							
4.03.04.002	Strike-slip, dextral: approximate	none		0-0-0			
4.03.04.003	Strike-slip, dextral: inferred	none		0-0-0			
4.03.04.004	Strike-slip, dextral: concealed	none		0-0-0			
<b>3.5 - Strike-slip, sinistral</b>							
4.03.05.001	Strike-slip, sinistral: defined	none		0-0-0			
4.03.05.002	Strike-slip, sinistral: approximate	none		0-0-0			
4.03.05.003	Strike-slip, sinistral: inferred	none		0-0-0			
4.03.05.004	Strike-slip, sinistral: concealed	none		0-0-0			
<b>3.6 - Oblique-slip, dextral extensional</b>							
4.03.06.001	Oblique-slip, dextral extensional: defined	none		0-0-0			
4.03.06.002	Oblique-slip, dextral extensional: approximate	none		0-0-0			
4.03.06.003	Oblique-slip, dextral extensional: inferred	none		0-0-0			
4.03.06.004	Oblique-slip, dextral extensional: concealed	none		0-0-0			
<b>3.7 - Oblique-slip, dextral contractional</b>							
4.03.07.001	Oblique-slip, dextral contractional: defined	none		0-0-0			
4.03.07.002	Oblique-slip, dextral contractional: approximate	none		0-0-0			
4.03.07.003	Oblique-slip, dextral contractional: inferred	none		0-0-0			
4.03.07.004	Oblique-slip, dextral contractional: concealed	none		0-0-0			



Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>3 - SHEARS (continued)</b>							
<b>3.8 - Oblique-slip, sinistral extensional</b>							
4.03.08.001	Oblique-slip, sinistral extensional: defined	none		0-0-0			
4.03.08.002	Oblique-slip, sinistral extensional: approximate	none		0-0-0			
4.03.08.003	Oblique-slip, sinistral extensional: inferred	none		0-0-0			
4.03.08.004	Oblique-slip, sinistral extensional: concealed	none		0-0-0			
<b>3.9 - Oblique-slip, sinistral contractional</b>							
4.03.09.001	Oblique-slip, sinistral contractional: defined	none		0-0-0			
4.03.09.002	Oblique-slip, sinistral contractional: approximate	none		0-0-0			
4.03.09.003	Oblique-slip, sinistral contractional: inferred	none		0-0-0			
4.03.09.004	Oblique-slip, sinistral contractional: concealed	none		0-0-0			
<b>3.10 - Detachment, extensional</b>							
4.03.10.001	Detachment, extensional: defined	none		0-0-0			
4.03.10.002	Detachment, extensional: approximate	none		0-0-0			
4.03.10.003	Detachment, extensional: inferred	none		0-0-0			
4.03.10.004	Detachment, extensional: concealed	none		0-0-0			
<b>3.11 - Detachment, contractional</b>							
4.03.11.001	Detachment, contractional: defined	none		0-0-0			
4.03.11.002	Detachment, contractional: approximate	none		0-0-0			
4.03.11.003	Detachment, contractional: inferred	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>3 - SHEARS (continued)</b>							
<b>3.11 - Detachment, contractional (continued)</b>							
4.03.11.004	Detachment, contractional: concealed	none		0-0-0			
<b>3.12 - Generic</b>							
4.03.12.001	Generic: defined	none		0-0-0			
4.03.12.002	Generic: approximate	none		0-0-0			
4.03.12.003	Generic: inferred	none		0-0-0			
4.03.12.004	Generic: concealed	none		0-0-0			
<b>4 - FOLDS</b>							
<b>4.1 - Anticline</b>							
4.04.01.001	Anticline: defined	none		0-0-0			
4.04.01.002	Anticline: approximate	none		0-0-0			
4.04.01.003	Anticline: inferred	none		0-0-0			
4.04.01.004	Anticline: concealed	none		0-0-0			
<b>4.2 - Anticline, overturned</b>							
4.04.02.001	Anticline, overturned: defined	none		0-0-0			
4.04.02.002	Anticline, overturned: approximate	none		0-0-0			
4.04.02.003	Anticline, overturned: inferred	none		0-0-0			
4.04.02.004	Anticline, overturned: concealed	none		0-0-0			
<b>4.3 - Anticline, asymmetrical</b>							
4.04.03.001	Anticline, asymmetrical: defined	none		0-0-0			



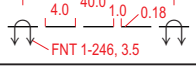
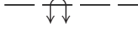
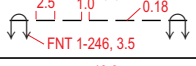

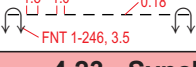

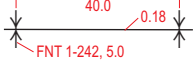

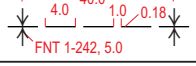
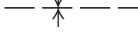
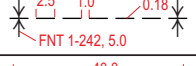

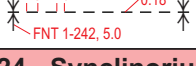



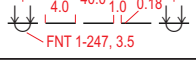
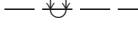
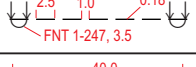
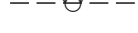
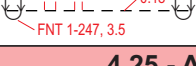

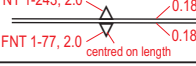

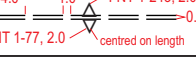

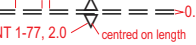

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.3 - Anticline, asymmetrical (continued)</b>							
4.04.03.002	Anticline, asymmetrical: approximate	none		0-0-0			
4.04.03.003	Anticline, asymmetrical: inferred	none		0-0-0			
4.04.03.004	Anticline, asymmetrical: concealed	none		0-0-0			
<b>4.4 - Anticline, synformal</b>							
4.04.04.001	Anticline, synformal: defined	none		0-0-0			
4.04.04.002	Anticline, synformal: approximate	none		0-0-0			
4.04.04.003	Anticline, synformal: inferred	none		0-0-0			
4.04.04.004	Anticline, synformal: concealed	none		0-0-0			
<b>4.5 - Anticline, synformal overturned</b>							
4.04.05.001	Anticline, synformal overturned: defined	none		0-0-0			
4.04.05.002	Anticline, synformal overturned: approximate	none		0-0-0			
4.04.05.003	Anticline, synformal overturned: inferred	none		0-0-0			
4.04.05.004	Anticline, synformal overturned: concealed	none		0-0-0			
<b>4.6 - Syncline</b>							
4.04.06.001	Syncline: defined	none		0-0-0			
4.04.06.002	Syncline: approximate	none		0-0-0			
4.04.06.003	Syncline: inferred	none		0-0-0			
4.04.06.004	Syncline: concealed	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.7 - Syncline, overturned</b>							
4.04.07.001	Syncline, overturned: defined	none		0-0-0			
4.04.07.002	Syncline, overturned: approximate	none		0-0-0			
4.04.07.003	Syncline, overturned: inferred	none		0-0-0			
4.04.07.004	Syncline, overturned: concealed	none		0-0-0			
<b>4.8 - Syncline, asymmetrical</b>							
4.04.08.001	Syncline, asymmetrical: defined	none		0-0-0			
4.04.08.002	Syncline, asymmetrical: approximate	none		0-0-0			
4.04.08.003	Syncline, asymmetrical: inferred	none		0-0-0			
4.04.08.004	Syncline, asymmetrical: concealed	none		0-0-0			
<b>4.9 - Syncline, antiformal</b>							
4.04.09.001	Syncline, antiformal: defined	none		0-0-0			
4.04.09.002	Syncline, antiformal: approximate	none		0-0-0			
4.04.09.003	Syncline, antiformal: inferred	none		0-0-0			
4.04.09.004	Syncline, antiformal: concealed	none		0-0-0			
<b>4.10 - Syncline, antiformal overturned</b>							
4.04.10.001	Syncline, antiformal overturned: defined	none		0-0-0			
4.04.10.002	Syncline, antiformal overturned: approximate	none		0-0-0			
4.04.10.003	Syncline, antiformal overturned: inferred	none		0-0-0			

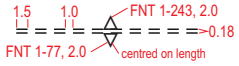



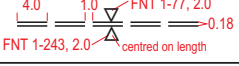

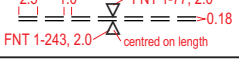

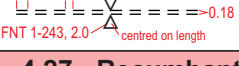



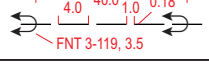

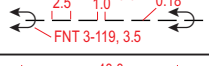

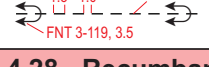

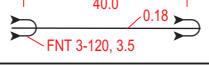

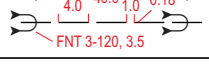

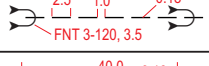

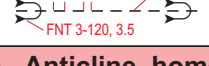

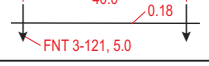

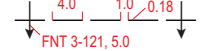

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.10 - Syncline, antiformal overturned (continued)</b>							
4.04.10.004	Syncline, antiformal overturned: concealed	none		0-0-0			
<b>4.11 - Antiform</b>							
4.04.11.001	Antiform: defined	none		0-0-0			
4.04.11.002	Antiform: approximate	none		0-0-0			
4.04.11.003	Antiform: inferred	none		0-0-0			
4.04.11.004	Antiform: concealed	none		0-0-0			
<b>4.12 - Antiform, overturned</b>							
4.04.12.001	Antiform, overturned: defined	none		0-0-0			
4.04.12.002	Antiform, overturned: approximate	none		0-0-0			
4.04.12.003	Antiform, overturned: inferred	none		0-0-0			
4.04.12.004	Antiform, overturned: concealed	none		0-0-0			
<b>4.13 - Antiform, asymmetrical</b>							
4.04.13.001	Antiform, asymmetrical: defined	none		0-0-0			
4.04.13.002	Antiform, asymmetrical: approximate	none		0-0-0			
4.04.13.003	Antiform, asymmetrical: inferred	none		0-0-0			
4.04.13.004	Antiform, asymmetrical: concealed	none		0-0-0			
<b>4.14 - Synform</b>							
4.04.14.001	Synform: defined	none		0-0-0			
4.04.14.002	Synform: approximate	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.14 - Synform (continued)</b>							
4.04.14.003	Synform: inferred	none		0-0-0	--- v ---		
4.04.14.004	Synform: concealed	none		0-0-0	--- v ---		
<b>4.15 - Synform, overturned</b>							
4.04.15.001	Synform, overturned: defined	none		0-0-0	--- v ---		
4.04.15.002	Synform, overturned: approximate	none		0-0-0	--- v ---		
4.04.15.003	Synform, overturned: inferred	none		0-0-0	--- v ---		
4.04.15.004	Synform, overturned: concealed	none		0-0-0	--- v ---		
<b>4.16 - Synform, asymmetrical</b>							
4.04.16.001	Synform, asymmetrical: defined	none		0-0-0	--- v ---		
4.04.16.002	Synform, asymmetrical: approximate	none		0-0-0	--- v ---		
4.04.16.003	Synform, asymmetrical: inferred	none		0-0-0	--- v ---		
4.04.16.004	Synform, asymmetrical: concealed	none		0-0-0	--- v ---		
<b>4.17 - Monocline, anticlinal bend</b>							
4.04.17.001	Monocline, anticlinal bend: defined	none		0-0-0	--- v ---		
4.04.17.002	Monocline, anticlinal bend: approximate	none		0-0-0	--- v ---		
4.04.17.003	Monocline, anticlinal bend: inferred	none		0-0-0	--- v ---		
4.04.17.004	Monocline, anticlinal bend: concealed	none		0-0-0	--- v ---		
<b>4.18 - Monocline, anticlinal bend overturned</b>							
4.04.18.001	Monocline, anticlinal bend overturned: defined	none		0-0-0	--- v ---		

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.18 - Monocline, anticlinal bend overturned (continued)</b>							
4.04.18.002	Monocline, anticlinal bend overturned: approximate	none		0-0-0			
4.04.18.003	Monocline, anticlinal bend overturned: inferred	none		0-0-0			
4.04.18.004	Monocline, anticlinal bend overturned: concealed	none		0-0-0			
<b>4.19 - Monocline, synclinal bend</b>							
4.04.19.001	Monocline, synclinal bend: defined	none		0-0-0			
4.04.19.002	Monocline, synclinal bend: approximate	none		0-0-0			
4.04.19.003	Monocline, synclinal bend: inferred	none		0-0-0			
4.04.19.004	Monocline, synclinal bend: concealed	none		0-0-0			
<b>4.20 - Monocline, synclinal bend overturned</b>							
4.04.20.001	Monocline, synclinal bend overturned: defined	none		0-0-0			
4.04.20.002	Monocline, synclinal bend overturned: approximate	none		0-0-0			
4.04.20.003	Monocline, synclinal bend overturned: inferred	none		0-0-0			
4.04.20.004	Monocline, synclinal bend overturned: concealed	none		0-0-0			
<b>4.21 - Anticlinorium</b>							
4.04.21.001	Anticlinorium: defined	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.21.002	Anticlinorium: approximate	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.21.003	Anticlinorium: inferred	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.21.004	Anticlinorium: concealed	none		0-0-0			plunge arrow added with CartoRep when needed

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.22 - Anticlinorium, overturned</b>							
4.04.22.001	Anticlinorium, overturned: defined	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.22.002	Anticlinorium, overturned: approximate	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.22.003	Anticlinorium, overturned: inferred	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.22.004	Anticlinorium, overturned: concealed	none		0-0-0			plunge arrow added with CartoRep when needed
<b>4.23 - Synclinorium</b>							
4.04.23.001	Synclinorium: defined	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.23.002	Synclinorium: approximate	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.23.003	Synclinorium: inferred	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.23.004	Synclinorium: concealed	none		0-0-0			plunge arrow added with CartoRep when needed
<b>4.24 - Synclinorium, overturned</b>							
4.04.24.001	Synclinorium, overturned: defined	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.24.002	Synclinorium, overturned: approximate	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.24.003	Synclinorium, overturned: inferred	none		0-0-0			plunge arrow added with CartoRep when needed
4.04.24.004	Synclinorium, overturned: concealed	none		0-0-0			plunge arrow added with CartoRep when needed
<b>4.25 - Arch</b>							
4.04.25.001	Arch: defined	none		0-0-0			
4.04.25.002	Arch: approximate	none		0-0-0			
4.04.25.003	Arch: inferred	none		0-0-0			









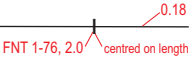

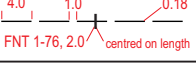
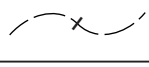

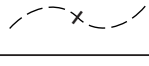
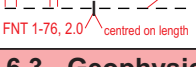


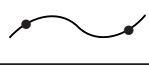


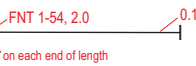



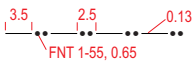



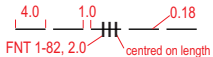
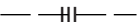
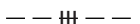
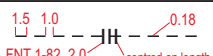







Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.25 - Arch (continued)</b>							
4.04.25.004	Arch: concealed	none		0-0-0	== =  == =		
<b>4.26 - Trough</b>							
4.04.26.001	Trough: defined	none		0-0-0	== =  == =		
4.04.26.002	Trough: approximate	none		0-0-0	== =  == =		
4.04.26.003	Trough: inferred	none		0-0-0	== =  == =		
4.04.26.004	Trough: concealed	none		0-0-0	== =  == =		
<b>4.27 - Recumbent, anticlinal</b>							
4.04.27.001	Recumbent, anticlinal: defined	none		0-0-0	—  —		
4.04.27.002	Recumbent, anticlinal: approximate	none		0-0-0	—  —		
4.04.27.003	Recumbent, anticlinal: inferred	none		0-0-0	—  —		
4.04.27.004	Recumbent, anticlinal: concealed	none		0-0-0	—  —		
<b>4.28 - Recumbent, synclinal</b>							
4.04.28.001	Recumbent, synclinal: defined	none		0-0-0	—  —		
4.04.28.002	Recumbent, synclinal: approximate	none		0-0-0	—  —		
4.04.28.003	Recumbent, synclinal: inferred	none		0-0-0	—  —		
4.04.28.004	Recumbent, synclinal: concealed	none		0-0-0	—  —		
<b>4.29 - Anticline, homeoclinic, upright</b>							
4.04.29.001	Anticline, homeoclinic, upright: defined	none		0-0-0	—  —		
4.04.29.002	Anticline, homeoclinic, upright: approximate	none		0-0-0	—  —		

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.29 - Anticline, homeoclinic, upright (continued)</b>							
4.04.29.003	Anticline, homeoclinic, upright: inferred	none		0-0-0	---↓---		
4.04.29.004	Anticline, homeoclinic, upright: concealed	none		0-0-0	---↓---		
<b>4.30 - Anticline, contraclinal, overturned</b>							
4.04.30.001	Anticline, contraclinal, overturned: defined	none		0-0-0	—↓—		
4.04.30.002	Anticline, contraclinal, overturned: approximate	none		0-0-0	—↓—		
4.04.30.003	Anticline, contraclinal, overturned: inferred	none		0-0-0	---↓---		
4.04.30.004	Anticline, contraclinal, overturned: concealed	none		0-0-0	---↓---		
<b>4.31 - Syncline, homeoclinic, upright</b>							
4.04.31.001	Syncline, homeoclinic, upright: defined	none		0-0-0	—↓—		
4.04.31.002	Syncline, homeoclinic, upright: approximate	none		0-0-0	—↓—		
4.04.31.003	Syncline, homeoclinic, upright: inferred	none		0-0-0	---↓---		
4.04.31.004	Syncline, homeoclinic, upright: concealed	none		0-0-0	---↓---		
<b>4.32 - Syncline, contraclinal, overturned</b>							
4.04.32.001	Syncline, contraclinal, overturned: defined	none		0-0-0	—↓—		
4.04.32.002	Syncline, contraclinal, overturned: approximate	none		0-0-0	—↓—		
4.04.32.003	Syncline, contraclinal, overturned: inferred	none		0-0-0	---↓---		
4.04.32.004	Syncline, contraclinal, overturned: concealed	none		0-0-0	---↓---		
<b>4.33 - Antiform, homeoclinic, upright</b>							
4.04.33.001	Antiform, homeoclinic, upright: defined	none		0-0-0	—↓—		

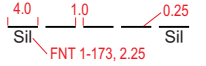
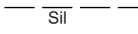
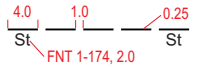
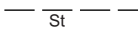
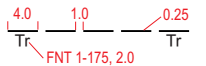
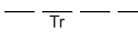
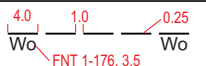
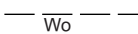
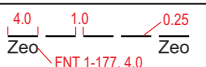
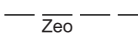




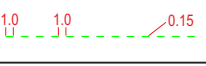






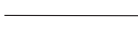
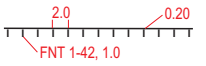

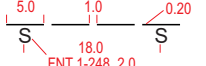
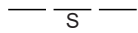
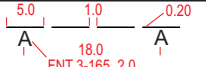


Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.33 - Antiform, homeoclinic, upright (continued)</b>							
4.04.33.002	Antiform, homeoclinic, upright: approximate	none		0-0-0			
4.04.33.003	Antiform, homeoclinic, upright: inferred	none		0-0-0			
4.04.33.004	Antiform, homeoclinic, upright: concealed	none		0-0-0			
<b>4.34 - Antiform, contraclinal, overturned</b>							
4.04.34.001	Antiform, contraclinal, overturned: defined	none		0-0-0			
4.04.34.002	Antiform, contraclinal, overturned: approximate	none		0-0-0			
4.04.34.003	Antiform, contraclinal, overturned: inferred	none		0-0-0			
4.04.34.004	Antiform, contraclinal, overturned: concealed	none		0-0-0			
<b>4.35 - Synform, homeoclinic, upright</b>							
4.04.35.001	Synform, homeoclinic, upright: defined	none		0-0-0			
4.04.35.002	Synform, homeoclinic, upright: approximate	none		0-0-0			
4.04.35.003	Synform, homeoclinic, upright: inferred	none		0-0-0			
4.04.35.004	Synform, homeoclinic, upright: concealed	none		0-0-0			
<b>4.36 - Synform, contraclinal, overturned</b>							
4.04.36.001	Synform, contraclinal, overturned: defined	none		0-0-0			
4.04.36.002	Synform, contraclinal, overturned: approximate	none		0-0-0			
4.04.36.003	Synform, contraclinal, overturned: inferred	none		0-0-0			
4.04.36.004	Synform, contraclinal, overturned: concealed	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>4 - FOLDS (continued)</b>							
<b>4.37 - Neutral, attitude unknown, generation undefined</b>							
4.04.37.001	Neutral, attitude unknown, generation undefined: defined	none		0-0-0			
4.04.37.002	Neutral, attitude unknown, generation undefined: approximate	none		0-0-0			
4.04.37.003	Neutral, attitude unknown, generation undefined: inferred	none		0-0-0			
4.04.37.004	Neutral, attitude unknown, generation undefined: concealed	none		0-0-0			
<b>5 - THIN LITHOLOGIES</b>							
<b>5.1 - Thin unit</b>							
4.05.01.001	Thin unit: defined	dyke, sill		0-0-0			colour can be changed with CartoRep
4.05.01.002	Thin unit: approximate	dyke, sill		0-0-0			colour can be changed with CartoRep
4.05.01.003	Thin unit: inferred	dyke, sill		0-0-0			colour can be changed with CartoRep
4.05.01.004	Thin unit: concealed	dyke, sill		0-0-0			colour can be changed with CartoRep
<b>5.2 - Discontinuous thin unit</b>							
4.05.02.001	Discontinuous thin unit	none		0-0-0			never a boundary; colour can be changed with CartoRep
<b>5.3 - Vein</b>							
4.05.03.001	Vein: defined	none		0-0-0			colour can be changed with CartoRep
4.05.03.002	Vein: approximate	none		0-0-0			colour can be changed with CartoRep
4.05.03.003	Vein: inferred	none		0-0-0			colour can be changed with CartoRep
4.05.03.004	Vein: concealed	none		0-0-0			colour can be changed with CartoRep
<b>5.4 - Marker bed</b>							
4.05.04.001	Marker bed	distinctive lithology		0-0-0			colour can be changed with CartoRep

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>6 - TRACES</b>							
<b>6.1 - Bedding form line</b>							
4.06.01.001	Bedding form line: defined	foliation form line, undefined form line		0·0·0			colour can be changed with CartoRep
4.06.01.002	Bedding form line: approximate	foliation form line, undefined form line		0·0·0			colour can be changed with CartoRep
4.06.01.003	Bedding form line: inferred	foliation form line, undefined form line		0·0·0			colour can be changed with CartoRep
4.06.01.004	Bedding form line: concealed	foliation form line, undefined form line		0·0·0			colour can be changed with CartoRep
<b>6.2 - Joint / Fracture</b>							
4.06.02.001	Joint or fracture: defined	none		0·0·0			
4.06.02.002	Joint or fracture: approximate	none		0·0·0			
4.06.02.003	Joint or fracture: inferred	none		0·0·0			
4.06.02.004	Joint or fracture: concealed	none		0·0·0			
<b>6.3 - Geophysical anomaly</b>							
4.06.03.001	Geophysical anomaly, positive	none		0·0·0			
4.06.03.002	Geophysical anomaly, negative	none		0·0·0			
<b>6.4 - Structural line of section</b>							
4.06.04.001	Structural line of section	cross-section		0·0·0			
<b>6.5 - Survey line</b>							
4.06.05.001	Survey line	seismic survey, geophysical survey		255·0·255			
<b>6.6 - Other trace</b>							
4.06.06.001	Other trace	none		0·0·0			










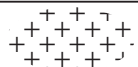






















Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>6 - TRACES (continued)</b>							
<b>6.7 - Lineament</b>							
4.06.07.001	Lineament: defined	none		0-0-0			
4.06.07.002	Lineament: approximate	none		0-0-0			
4.06.07.003	Lineament: inferred	none		0-0-0			
4.06.07.004	Lineament: concealed	none		0-0-0			
<b>7 - MEASURED SECTIONS</b>							
<b>7.1 - Measured section</b>							
4.07.01.001	Measured section	none		0-0-0			
<b>8 - FIELD OBSERVATIONS</b>							
<b>8.1 - Station</b>							
4.08.01.001	Visited location	none		0-0-0			
4.08.01.002	Remote observation	aerial observation, imagery observation		0-0-0			colour can be changed using CartoRep
4.08.01.003	Archival or historical observation	published, observation		102-102-102			colour can be changed using CartoRep
<b>8.2 - Photograph</b>							
4.08.02.001	Photograph location	none		0-0-0			symbol rotated based on camera angle
<b>8.3 - Outcrop</b>							
4.08.03.001	Isolated outcrop	none		0-0-0			
<b>9 - LAB RESULTS</b>							
<b>9.1 - Fossil</b>							
4.09.01.001	Fossil location	none		0-0-0			annotated with c-number, o-number, etc.; annotation depicted with text symbol 2.03.01.018
<b>9.2 - Geochronology</b>							
4.09.02.001	Geochronology	none		255-0-0 0-0-0			annotated with age and sample number, or reference number (2.03.01.010) to a table; colour can be changed using CartoRep to distinguish isotopic systems

















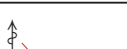



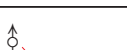



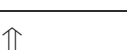

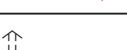

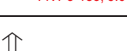



Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>10 - ISOGRADS</b>							
<b>10.1 - Isograd</b>							
4.10.01.001	Isograd: actinolite	none		0·0·0	— $\overline{\text{Act}}$ — —		mineral code on high temperature side
4.10.01.002	Isograd: andalusite	none		0·0·0	— $\overline{\text{And}}$ — —		mineral code on high temperature side
4.10.01.003	Isograd: biotite	none		0·0·0	— $\overline{\text{Bt}}$ — —		mineral code on high temperature side
4.10.01.004	Isograd: chlorite	none		0·0·0	— $\overline{\text{Chl}}$ — —		mineral code on high temperature side
4.10.01.005	Isograd: clinopyroxene	none		0·0·0	— $\overline{\text{Cpx}}$ — —		mineral code on high temperature side
4.10.01.006	Isograd: cordierite	none		0·0·0	— $\overline{\text{Crđ}}$ — —		mineral code on high temperature side
4.10.01.007	Isograd: diopside	none		0·0·0	— $\overline{\text{Di}}$ — —		mineral code on high temperature side
4.10.01.008	Isograd: fosterite	none		0·0·0	— $\overline{\text{Fo}}$ — —		mineral code on high temperature side
4.10.01.009	Isograd: garnet	none		0·0·0	— $\overline{\text{Grť}}$ — —		mineral code on high temperature side
4.10.01.010	Isograd: hornblende	none		0·0·0	— $\overline{\text{Hbl}}$ — —		mineral code on high temperature side
4.10.01.011	Isograd: K-feldspar	none		0·0·0	— $\overline{\text{Kfs}}$ — —		mineral code on high temperature side
4.10.01.012	Isograd: kyanite	none		0·0·0	— $\overline{\text{Ky}}$ — —		mineral code on high temperature side
4.10.01.013	Isograd: melt	none		0·0·0	— $\overline{\text{Liq}}$ — —		mineral code on high temperature side
4.10.01.014	Isograd: muscovite	none		0·0·0	— $\overline{\text{Ms}}$ — —		mineral code on high temperature side
4.10.01.015	Isograd: orthopyroxene	none		0·0·0	— $\overline{\text{Opx}}$ — —		mineral code on high temperature side
4.10.01.016	Isograd: prehnite-pumpellyite	none		0·0·0	— $\overline{\text{Prh-Pmp}}$ — —		mineral code on high temperature side





















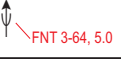

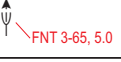

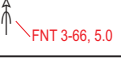

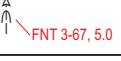





Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>10 - ISOGRADS (continued)</b>							
<b>10.1 - Isograd (continued)</b>							
4.10.01.017	Isograd: sillimanite	none		0-0-0			mineral code on high temperature side
4.10.01.018	Isograd: staurolite	none		0-0-0			mineral code on high temperature side
4.10.01.019	Isograd: tremolite	none		0-0-0			mineral code on high temperature side
4.10.01.020	Isograd: wollastonite	none		0-0-0			mineral code on high temperature side
4.10.01.021	Isograd: zeolite	none		0-0-0			mineral code on high temperature side
<b>11 - LIMITS</b>							
<b>11.1 - Limit lines</b>							
4.11.01.001	Outcrop extent	none		0-0-0			could also be depicted as polygon 4.11.02.001 on map
4.11.01.002	Gas field	none		255-0-0			could also be depicted as polygon 4.11.02.002 on map
4.11.01.003	Oil field	none		0-255-0			could also be depicted as polygon 4.11.02.003 on map
4.11.01.004	Extent of bitumen	none		128-0-255			could also be depicted as polygon 4.11.02.004 on map
4.11.01.005	Geothermal field	none		0-255-255			could also be depicted as polygon 4.11.02.005 on map
4.11.01.006	Surface mine	quarry		0-0-0			could also be depicted as polygon 4.11.02.006 on map
4.11.01.007	Edge of sinkhole	crater, caldera		0-0-0			could also be depicted as polygon 4.11.02.007 on map
4.11.01.008	Front of penetrative strain	none		0-0-0			could also be depicted as polygon 4.11.02.008 on map
4.11.01.009	Front of alteration	front of mineralization		0-0-0			could also be depicted as polygon 4.11.02.009 on map
<b>11.2 - Limit polygons</b>							
4.11.02.001	Outcrop	none	4.11.01.001 used as outline	0-0-0			























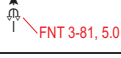

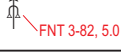

















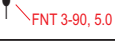

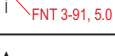

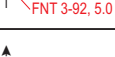

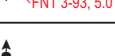















Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>11 - LIMITS (continued)</b>							
<b>11.2 - Limit polygons (continued)</b>							
4.11.02.002	Gas field	none	4.11.01.002 used as outline	255-0-0			
4.11.02.003	Oil field	none	4.11.01.003 used as outline	0-255-0			
4.11.02.004	Bitumen	none	4.11.01.004 used as outline	128-0-255			
4.11.02.005	Geothermal field	none	4.11.01.005 used as outline	0-255-255			
4.11.02.006	Surface mine	quarry	4.11.01.006 used as outline	0-0-0			centroid for either active (⚡) or inactive (⚡) must be added as annotation
4.11.02.007	Sinkhole	crater, caldera	4.11.01.007 used as outline	0-0-0			centroid for either sinkhole (SH), crater (CR), or caldera (CA) must be added as annotation
4.11.02.008	Penetrative strain	none	4.11.01.008 used as outline	0-0-0			
4.11.02.009	Alteration zone	mineralization	4.11.01.009 used as outline	0-0-0			overprint pattern 4.12.01.004 can be used instead of outline
<b>11.3 - Limit digitizing lines</b>							
4.11.03.001	Fault zone boundary	none		77-230-0	most likely depicted as overprint 4.12.01.001 on map		only used to digitize line
4.11.03.002	Shear zone boundary	none		77-230-0	most likely depicted as overprint 4.12.01.002 on map		only used to digitize line
4.11.03.003	Breccia zone boundary	none		77-230-0	most likely depicted as overprint 4.12.01.002 on map		only used to digitize line
4.11.03.004	Gossan boundary	none		77-230-0	most likely depicted as overprint 4.12.01.004 on map		only used to digitize line
4.11.03.005	Drift boundary	none		77-230-0	most likely depicted as overprint 4.12.01.005 on map		only used to digitize line
4.11.03.006	Porphyritic zone boundary	none		77-230-0	most likely depicted as overprint 4.12.01.006 on map		only used to digitize line
<b>12 - OVERPRINTS</b>							
<b>12.1 - Overprint patterns</b>							
4.12.01.001	Fault zone	none		0-0-0			colour can be changed using CartoRep

































Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>12 - OVERPRINTS (continued)</b>							
<b>12.1 - Overprint patterns (continued)</b>							
4.12.01.002	Shear zone	none	 FNT 1-37, 2.0 1.5 offset 3.0 separation staggered	0-0-0			colour can be changed using CartoRep
4.12.01.003	Breccia zone	none	 FNT 1-251, 10.0 0.0 offset 11.0 separation	0-0-0			colour can be changed using CartoRep
4.12.01.004	Alteration zone	mineralization zone gossan	 0.2 circle 0.75 offset 1.5 separation staggered	255-0-0			centroid for mineral code or gossan (G) must be added as annotation
4.12.01.005	Drift	none	 FNT 1-36, 10.0 0.0 offset 10.0 separation	0-0-0			colour can be changed using CartoRep
4.12.01.006	Porphyritic zone (option 1)	none	 FNT 1-85, 2.0 1.0 offset 4.0 separation staggered	0-0-0			colour can be changed using CartoRep
4.12.01.007	Porphyritic zone (option 2)	none	 FNT 3-96, 10.0 0.0 offset 10.0 separation	0-0-0			colour can be changed using CartoRep
<b>13 - LINEAR ORIENTATIONS</b>							
<b>13.1 - Primary lineations</b>							
4.13.01.001	Sedimentary lineation, traverse to flow direction, oscillatory flow: measured (e.g. symmetrical ripple crests)	none	 FNT 3-38, 5.0	0-0-0			
4.13.01.002	Sedimentary lineation, traverse to flow direction, oscillatory flow: estimated (e.g. symmetrical ripple crests)	none	 FNT 3-39, 5.0	0-0-0			
4.13.01.003	Sedimentary lineation, traverse to flow direction, unidirectional: measured (includes asymmetrical ripple crests, dune crests, etc.)	none	 FNT 3-40, 5.0	0-0-0			
4.13.01.004	Sedimentary lineation, traverse to flow direction, unidirectional: estimated (includes asymmetrical ripple crests, dune crests, etc.)	none	 FNT 3-41, 5.0	0-0-0			
4.13.01.005	Sedimentary lineation, parallel to flow direction, two solutions: measured (includes parting lineation, gutter casts, etc.)	none	 FNT 3-42, 5.0	0-0-0			
4.13.01.006	Sedimentary lineation, parallel to flow direction, two solutions: estimated (includes parting lineation, gutter casts, etc.)	none	 FNT 3-43, 5.0	0-0-0			
4.13.01.007	Sedimentary lineation, parallel to flow direction, unidirectional; flow down-plunge: measured (includes scours, flutes, prod marks, trough cross-bedding or cross lamination axis, imbrication, etc.)	tool mark	 FNT 3-44, 5.0	0-0-0			
4.13.01.008	Sedimentary lineation, parallel to flow direction, unidirectional; flow down-plunge: estimated (includes scours, flutes, prod marks, trough cross-bedding or cross lamination axis, imbrication, etc.)	tool mark	 FNT 3-45, 5.0	0-0-0			
4.13.01.009	Sedimentary lineation, parallel to flow direction, unidirectional; flow up-plunge: measured	tool mark	 FNT 3-46, 5.0	0-0-0			
4.13.01.010	Sedimentary lineation, parallel to flow direction, unidirectional; flow up-plunge: estimated	tool mark	 FNT 3-47, 5.0	0-0-0			

































Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>13 - LINEAR ORIENTATIONS (continued)</b>							
<b>13.1 - Primary lineations (continued)</b>							
4.13.01.011	Prod mark: measured	none		0-0-0			
4.13.01.012	Prod mark: estimated	none		0-0-0			
4.13.01.013	Parting lineation: measured	none		0-0-0			
4.13.01.014	Parting lineation: estimated	none		0-0-0			
4.13.01.015	Trough axis: measured	none		0-0-0			
4.13.01.016	Trough axis: estimated	none		0-0-0			
4.13.01.017	Slump fold hinge, S: measured	slump S		0-0-0			
4.13.01.018	Slump fold hinge, S: estimated	slump S		0-0-0			
4.13.01.019	Slump fold hinge, Z: measured	slump Z		0-0-0			
4.13.01.020	Slump fold hinge, Z: estimated	slump Z		0-0-0			
4.13.01.021	Igneous flow lineation: measured	none		0-0-0			
4.13.01.022	Igneous flow lineation: estimated	none		0-0-0			
4.13.01.023	Interpreted paleoflow, unidirectional flow; measured	none		0-0-0			
4.13.01.024	Interpreted paleoflow, unidirectional flow; estimated	none		0-0-0			
4.13.01.025	Interpreted paleoflow, bipolar flow; measured	none		0-0-0			
4.13.01.026	Interpreted paleoflow, bipolar flow; estimated	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>13 - LINEAR ORIENTATIONS (continued)</b>							
<b>13.1 - Primary lineations (continued)</b>							
4.13.01.027	Interpreted paleoflow, unidirectional flow, two solutions; measured	none		0-0-0			
4.13.01.028	Interpreted paleoflow, unidirectional flow, two solutions; estimated	none		0-0-0			
4.13.01.029	Slump fold hinge; measured	none		0-0-0			
4.13.01.030	Slump fold hinge; estimated	none		0-0-0			
<b>13.2 - Fold hinges</b>							
4.13.02.001	General: measured	none		0-0-0			
4.13.02.002	General: estimated	none		0-0-0			
4.13.02.003	Soft sediment: measured	none		0-0-0			
4.13.02.004	Soft sediment: estimated	none		0-0-0			
4.13.02.005	Anticline: measured	none		0-0-0			
4.13.02.006	Anticline: estimated	none		0-0-0			
4.13.02.007	Syncline: measured	none		0-0-0			
4.13.02.008	Syncline: estimated	none		0-0-0			
4.13.02.009	Antiform: measured	none		0-0-0			
4.13.02.010	Antiform: estimated	none		0-0-0			
4.13.02.011	Synform: measured	none		0-0-0			
4.13.02.012	Synform: estimated	none		0-0-0			































Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>13 - LINEAR ORIENTATIONS (continued)</b>							
<b>13.2 - Fold hinges (continued)</b>							
4.13.02.013	Minor S: measured	S crenulation		0-0-0			
4.13.02.014	Minor S: estimated	S crenulation		0-0-0			
4.13.02.015	Minor Z: measured	Z crenulation		0-0-0			
4.13.02.016	Minor Z: estimated	Z crenulation		0-0-0			
4.13.02.017	Minor U: measured	U crenulation		0-0-0			
4.13.02.018	Minor U: estimated	U crenulation		0-0-0			
4.13.02.019	Crenulation: measured	none		0-0-0			
4.13.02.020	Crenulation: estimated	none		0-0-0			
4.13.02.021	Axis of sheath fold: measured	none		0-0-0			
4.13.02.022	Axis of sheath fold: estimated	none		0-0-0			
4.13.02.023	Axis of sheath antiform: measured	none		0-0-0			
4.13.02.024	Axis of sheath antiform: estimated	none		0-0-0			
4.13.02.025	Axis of sheath synform: measured	none		0-0-0			
4.13.02.026	Axis of sheath synform: estimated	none		0-0-0			
<b>13.3 - Deformation lineations</b>							
4.13.03.001	Intersection lineation: measured	cleavage-bedding, cleavage-cleavage		0-0-0			
4.13.03.002	Intersection lineation: estimated	cleavage-bedding, cleavage-cleavage		0-0-0			























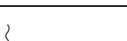







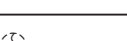

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>13 - LINEAR ORIENTATIONS (continued)</b>							
<b>13.3 - Deformation lineations (continued)</b>							
4.13.03.003	Fault striae: measured	fault grooves, slickenslides, mineral growth fibres		0-0-0			
4.13.03.004	Fault striae: estimated	fault grooves, slickenslides, mineral growth fibres		0-0-0			
4.13.03.005	Mineral lineation: measured	none		0-0-0			
4.13.03.006	Mineral lineation: estimated	none		0-0-0			
4.13.03.007	Stretching lineation: measured	rodding		0-0-0			
4.13.03.008	Stretching lineation: estimated	rodding		0-0-0			
4.13.03.009	Boudinage axis: measured	boudin		0-0-0			
4.13.03.010	Boudinage axis: estimated	boudin		0-0-0			
4.13.03.011	Mullions: measured	none		0-0-0			
4.13.03.012	Mullions: estimated	none		0-0-0			
<b>13.4 - Glacial lineations</b>							
4.13.04.001	Glacial striae: measured	glacial grooves		0-0-0			
4.13.04.002	Glacial striae: estimated	glacial grooves		0-0-0			
<b>14 - PLANAR ORIENTATIONS</b>							
<b>14.1 - Bedding</b>							
4.14.01.001	Bedding: inclined, measured, younging known	none		0-0-0			
4.14.01.002	Bedding: inclined, measured, younging unknown	none		0-0-0			
4.14.01.003	Bedding: inclined, estimated, younging known	none		0-0-0			













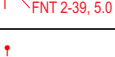

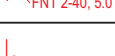



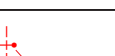













Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.1 - Bedding (continued)</b>							
4.14.01.004	Bedding: inclined, estimated, younging unknown	none	 FNT 2-36, 5.0	0-0-0			
4.14.01.005	Bedding: overturned <180, measured, younging known	none	 FNT 2-37, 5.0	0-0-0			
4.14.01.006	Bedding: overturned <180, estimated, younging known	none	 FNT 2-38, 5.0	0-0-0			
4.14.01.007	Bedding: overturned >180, measured, younging known	none	 FNT 2-39, 5.0	0-0-0			
4.14.01.008	Bedding: overturned >180, estimated, younging known	none	 FNT 2-40, 5.0	0-0-0			
4.14.01.009	Bedding: vertical, measured, younging known	none	 FNT 2-41, 5.0	0-0-0			
4.14.01.010	Bedding: vertical, measured, younging unknown	none	 FNT 2-42, 5.0	0-0-0			
4.14.01.011	Bedding: vertical, estimated, younging known	none	 FNT 2-43, 5.0	0-0-0			
4.14.01.012	Bedding: vertical, estimated, younging unknown	none	 FNT 2-44, 5.0	0-0-0			
4.14.01.013	Bedding: horizontal, measured	none	 FNT 2-45, 3.5	0-0-0			
4.14.01.014	Bedding: horizontal, estimated	none	 FNT 2-46, 3.5	0-0-0			
<b>14.2 - Eutaxitic and Igneous layering</b>							
4.14.02.001	Eutaxitic and igneous layering: inclined, measured, younging known	none	 FNT 2-47, 5.0	0-0-0			
4.14.02.002	Eutaxitic and igneous layering: inclined, measured, younging unknown	none	 FNT 2-48, 5.0	0-0-0			
4.14.02.003	Eutaxitic and igneous layering: inclined, estimated, younging known	none	 FNT 2-49, 5.0	0-0-0			
4.14.02.004	Eutaxitic and igneous layering: inclined, estimated, younging unknown	none	 FNT 2-50, 5.0	0-0-0			
4.14.02.005	Eutaxitic and igneous layering: overturned <180, measured, younging known	none	 FNT 2-51, 5.0	0-0-0			

































Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.2 - Eutaxitic and Igneous layering (continued)</b>							
4.14.02.006	Eutaxitic and igneous layering: overturned <180, estimated, younging known	none	 FNT 2-52, 5.0	0-0-0			
4.14.02.009	Eutaxitic and igneous layering: vertical, measured, younging known	none	 FNT 2-53, 5.0	0-0-0			
4.14.02.010	Eutaxitic and igneous layering: vertical, measured, younging unknown	none	 FNT 2-54, 5.0	0-0-0			
4.14.02.011	Eutaxitic and igneous layering: vertical, estimated, younging known	none	 FNT 2-55, 5.0	0-0-0			
4.14.02.012	Eutaxitic and igneous layering: vertical, estimated, younging unknown	none	 FNT 2-56, 5.0	0-0-0			
4.14.02.013	Eutaxitic and igneous layering: horizontal, measured	none	 FNT 2-57, 3.5	0-0-0			
4.14.02.014	Eutaxitic and igneous layering: horizontal, estimated	none	 FNT 2-58, 3.5	0-0-0			
<b>14.3 - Igneous layering, pillows</b>							
4.14.03.001	Igneous layering, pillows: inclined, measured, younging known	none	 FNT 2-61, 5.0	0-0-0			
4.14.03.002	Igneous layering, pillows: inclined, measured, younging unknown	none	 FNT 2-62, 5.0	0-0-0			
4.14.03.003	Igneous layering, pillows: inclined, estimated, younging known	none	 FNT 2-63, 5.0	0-0-0			
4.14.03.004	Igneous layering, pillows: inclined, estimated, younging unknown	none	 FNT 2-64, 5.0	0-0-0			
4.14.03.005	Igneous layering, pillows: overturned <180, measured, younging known	none	 FNT 2-65, 5.0	0-0-0			
4.14.03.006	Igneous layering, pillows: overturned <180, estimated, younging known	none	 FNT 2-66, 5.0	0-0-0			
4.14.03.009	Igneous layering, pillows: vertical, measured, younging known	none	 FNT 2-67, 5.0	0-0-0			
4.14.03.010	Igneous layering, pillows: vertical, measured, younging unknown	none	 FNT 3-97, 5.0	0-0-0			
4.14.03.011	Igneous layering, pillows: vertical, estimated, younging known	none	 FNT 2-68, 5.0	0-0-0			



























































Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.3 - Igneous layering, pillows (continued)</b>							
4.14.03.012	Igneous layering, pillows: vertical, estimated, younging unknown	none	 FNT 3-98, 5.0	0-0-0			
4.14.03.013	Igneous layering, pillows: horizontal, measured	none	 FNT 2-69, 3.5	0-0-0			
4.14.03.014	Igneous layering, pillows: horizontal, estimated	none	 FNT 2-70, 3.5	0-0-0			
<b>14.4 - Flow and Compositional layering</b>							
4.14.04.001	Flow and compositional layering: inclined, measured, younging known	none	 FNT 2-71, 5.0	0-0-0			
4.14.04.002	Flow and compositional layering: inclined, measured, younging unknown	none	 FNT 2-72, 5.0	0-0-0			
4.14.04.003	Flow and compositional layering: inclined, estimated, younging known	none	 FNT 2-73, 5.0	0-0-0			
4.14.04.004	Flow and compositional layering: inclined, estimated, younging unknown	none	 FNT 2-74, 5.0	0-0-0			
4.14.04.005	Flow and compositional layering: overturned <180, measured, younging known	none	 FNT 2-75, 5.0	0-0-0			
4.14.04.006	Flow and compositional layering: overturned <180, estimated, younging known	none	 FNT 2-76, 5.0	0-0-0			
4.14.04.009	Flow and compositional layering: vertical, measured, younging known	none	 FNT 2-77, 5.0	0-0-0			
4.14.04.010	Flow and compositional layering: vertical, measured, younging unknown	none	 FNT 2-78, 5.0	0-0-0			
4.14.04.011	Flow and compositional layering: vertical, estimated, younging known	none	 FNT 2-79, 5.0	0-0-0			
4.14.04.012	Flow and compositional layering: vertical, estimated, younging unknown	none	 FNT 2-80, 5.0	0-0-0			
4.14.04.013	Flow and compositional layering: horizontal, measured	none	 FNT 2-81, 3.5	0-0-0			
4.14.04.014	Flow and compositional layering: horizontal, estimated	none	 FNT 2-82, 3.5	0-0-0			





























Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.5 - Crossbed foreset</b>							
4.14.05.002	Crossbed foreset: inclined, measured	none		0-0-0			
4.14.05.004	Crossbed foreset: inclined, estimated	none		0-0-0			
4.14.05.010	Crossbed foreset: vertical, measured	none		0-0-0			
4.14.05.012	Crossbed foreset: vertical, estimated	none		0-0-0			
4.14.05.013	Crossbed foreset: horizontal, measured	none		0-0-0			
4.14.05.014	Crossbed foreset: horizontal, estimated	none		0-0-0			
<b>14.6 - Stylolitic surface</b>							
4.14.06.001	Stylolitic surface: inclined, measured, younging known	none		0-0-0			
4.14.06.002	Stylolitic surface: inclined, measured, younging unknown	none		0-0-0			
4.14.06.003	Stylolitic surface: inclined, estimated, younging known	none		0-0-0			
4.14.06.004	Stylolitic surface : inclined, estimated, younging unknown	none		0-0-0			
4.14.06.009	Stylolitic surface: vertical, measured, younging known	none		0-0-0			
4.14.06.010	Stylolitic surface: vertical, measured, younging unknown	none		0-0-0			
4.14.06.011	Stylolitic surface: vertical, estimated, younging known	none		0-0-0			
4.14.06.012	Stylolitic surface: vertical, estimated, younging unknown	none		0-0-0			
4.14.06.013	Stylolitic surface: horizontal, measured	none		0-0-0			
4.14.06.014	Stylolitic surface: horizontal, estimated	none		0-0-0			





























Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.7 - Contact</b>							
4.14.07.001	Contact: inclined, measured, younging known	none		255-0-0			
4.14.07.002	Contact: inclined, measured, younging unknown	none		255-0-0			
4.14.07.003	Contact: inclined, estimated, younging known	none		255-0-0			
4.14.07.004	Contact: inclined, estimated, younging unknown	none		255-0-0			
4.14.07.005	Contact: overturned <180, measured, younging known	none		255-0-0			
4.14.07.006	Contact: overturned <180, estimated, younging known	none		255-0-0			
4.14.07.007	Contact: overturned >180, measured, younging known	none		255-0-0			
4.14.07.008	Contact: overturned >180, estimated, younging known	none		255-0-0			
4.14.07.009	Contact: vertical, measured, younging known	none		255-0-0			
4.14.07.010	Contact: vertical, measured, younging unknown	none		255-0-0			
4.14.07.011	Contact: vertical, estimated, younging known	none		255-0-0			
4.14.07.012	Contact: vertical, estimated, younging unknown	none		255-0-0			
4.14.07.013	Contact: horizontal, measured	none		255-0-0			
4.14.07.014	Contact: horizontal, estimated	none		255-0-0			
<b>14.8 - Dyke and Sill margin</b>							
4.14.08.001	Dyke and sill margin: inclined, measured	none		0-0-0			
4.14.08.002	Dyke and sill margin: inclined, estimated	none		0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.8 - Dyke and Sill margin (continued)</b>							
4.14.08.003	Dyke and sill margin: vertical, measured	none	 FNT 2-107, 5.0	0-0-0			
4.14.08.004	Dyke and sill margin: vertical, estimated	none	 FNT 2-108, 5.0	0-0-0			
4.14.08.005	Dyke and sill margin: horizontal, measured	none	 FNT 2-109, 3.5	0-0-0			
4.14.08.006	Dyke and sill margin: horizontal, estimated	none	 FNT 2-110, 3.5	0-0-0			
<b>14.9 - Vein margin</b>							
4.14.09.001	Vein margin: inclined, measured	none	 FNT 2-111, 5.0	0-0-0			
4.14.09.002	Vein margin: inclined, estimated	none	 FNT 2-112, 5.0	0-0-0			
4.14.09.003	Vein margin: vertical, measured	none	 FNT 2-113, 5.0	0-0-0			
4.14.09.004	Vein margin: vertical, estimated	none	 FNT 2-114, 5.0	0-0-0			
4.14.09.005	Vein margin: horizontal, measured	none	 FNT 2-115, 3.5	0-0-0			
4.14.09.006	Vein margin: horizontal, estimated	none	 FNT 2-116, 3.5	0-0-0			
<b>14.10 - Joint and Fracture</b>							
4.14.10.001	Joint and fracture: inclined, measured	none	 FNT 2-117, 5.0	0-0-0			
4.14.10.002	Joint and fracture: inclined, estimated	none	 FNT 2-178, 5.0	0-0-0			
4.14.10.003	Joint and fracture: vertical, measured	none	 FNT 2-118, 5.0	0-0-0			
4.14.10.004	Joint and fracture: vertical, estimated	none	 FNT 2-179, 5.0	0-0-0			
4.14.10.005	Joint and fracture: horizontal, measured	none	 FNT 2-119, 3.5	0-0-0			
4.14.10.006	Joint and fracture: horizontal, estimated	none	 FNT 2-180, 3.5	0-0-0			





























Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.11 - Fracture zone margin</b>							
4.14.11.001	Fracture zone margin: inclined, measured	none		0-0-0			
4.14.11.002	Fracture zone margin: inclined, estimated	none		0-0-0			
4.14.11.003	Fracture zone margin: vertical, measured	none		0-0-0			
4.14.11.004	Fracture zone margin: vertical, estimated	none		0-0-0			
4.14.11.005	Fracture zone margin: horizontal, measured	none		0-0-0			
4.14.11.006	Fracture zone margin: horizontal, estimated	none		0-0-0			
<b>14.12 - Fault plane, unknown sense</b>							
4.14.12.001	Fault plane, unknown sense: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.12.002	Fault plane, unknown sense: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.13 - Fault plane, normal</b>							
4.14.13.001	Fault plane, normal: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.13.002	Fault plane, normal: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.14 - Fault plane, reverse</b>							
4.14.14.001	Fault plane, reverse: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.14.002	Fault plane, reverse: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.15 - Fault plane, thrust</b>							
4.14.15.001	Fault plane, thrust: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.15.002	Fault plane, thrust: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.15.003	Fault plane, thrust: overturned <180, measured	none		0-0-0			



























Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.15 - Fault plane, thrust (continued)</b>							
4.14.15.004	Fault plane, thrust: overturned <180, estimated	none	 FNT 2-195, 5.0	0-0-0			
<b>14.16 - Fault plane, dextral</b>							
4.14.16.001	Fault plane, dextral: measured	none	 FNT 2-196, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.16.002	Fault plane, dextral: estimated	none	 FNT 2-197, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.17 - Fault plane, sinistral</b>							
4.14.17.001	Fault plane, sinistral: measured	none	 FNT 2-198, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.17.002	Fault plane, sinistral: estimated	none	 FNT 2-199, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.18 - Fault plane, dextral extensional</b>							
4.14.18.001	Fault plane, dextral extensional: measured	none	 FNT 2-200, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.18.002	Fault plane, dextral extensional: estimated	none	 FNT 2-201, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.19 - Fault plane, dextral contractional</b>							
4.14.19.001	Fault plane, dextral contractional: measured	none	 FNT 2-202, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.19.002	Fault plane, dextral contractional: estimated	none	 FNT 2-203, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.20 - Fault plane, sinistral extensional</b>							
4.14.20.001	Fault plane, sinistral extensional: measured	none	 FNT 2-204, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.20.002	Fault plane, sinistral extensional: estimated	none	 FNT 2-205, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.21 - Fault plane, sinistral contractional</b>							
4.14.21.001	Fault plane, sinistral contractional: measured	none	 FNT 2-206, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.21.002	Fault plane, sinistral contractional: estimated	none	 FNT 2-207, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")





























Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.22 - Fault plane, horizontal</b>							
4.14.22.001	Fault plane, horizontal: measured	none		0-0-0			
4.14.22.002	Fault plane, horizontal: estimated	none		0-0-0			
<b>14.23 - Fault plane, vertical dip-slip</b>							
4.14.23.001	Fault plane, vertical dip-slip: measured	none		0-0-0			
4.14.23.002	Fault plane, vertical dip-slip: estimated	none		0-0-0			
<b>14.24 - Shear band and zone, unknown sense</b>							
4.14.24.001	Shear band and zone, unknown sense: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.24.002	Shear band and zone, unknown sense: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.25 - Shear band and zone, normal</b>							
4.14.25.001	Shear band and zone, normal: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.25.002	Shear band and zone, normal: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.26 - Shear band and zone, reverse</b>							
4.14.26.001	Shear band and zone, reverse: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.26.002	Shear band and zone, reverse: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.27 - Shear band and zone, dextral</b>							
4.14.27.001	Shear band and zone, dextral: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.27.002	Shear band and zone, dextral: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.28 - Shear band and zone, sinistral</b>							
4.14.28.001	Shear band and zone, sinistral: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.28.002	Shear band and zone, sinistral: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")



























Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.29 - Shear band and zone, horizontal</b>							
4.14.29.001	Shear band and zone, horizontal: measured	none		0-0-0			
4.14.29.002	Shear band and zone, horizontal: estimated	none		0-0-0			
<b>14.30 - Shear band and zone, vertical dip-slip</b>							
4.14.30.001	Shear band and zone, vertical dip-slip: measured	none		0-0-0			
4.14.30.002	Shear band and zone, vertical dip-slip: estimated	none		0-0-0			
<b>14.31 - Shear zone, dextral-normal</b>							
4.14.31.001	Shear zone, dextral-normal: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.31.002	Shear zone, dextral-normal: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.32 - Shear zone, dextral-reverse</b>							
4.14.32.001	Shear zone, dextral-reverse: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.32.002	Shear zone, dextral-reverse: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.33 - Shear zone, sinistral-normal</b>							
4.14.33.001	Shear zone, sinistral-normal: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.33.002	Shear zone, sinistral-normal: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.34 - Shear zone, sinistral-reverse</b>							
4.14.34.001	Shear zone, sinistral-reverse: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.34.002	Shear zone, sinistral-reverse: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.35 - Axial plane, not defined</b>							
4.14.35.001	Axial plane, not defined: measured	transpositional		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.35.002	Axial plane, not defined: estimated	transpositional		0-0-0			vertical and horizontal shown with annotation ("0" or "90")











Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.36 - Axial plane, anticline</b>							
4.14.36.001	Axial plane, anticline: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.36.002	Axial plane, anticline: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.37 - Axial plane, syncline</b>							
4.14.37.001	Axial plane, syncline: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.37.002	Axial plane, syncline: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.38 - Axial plane, crenulation</b>							
4.14.38.001	Axial plane, crenulation: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.38.002	Axial plane, crenulation: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.39 - Axial plane, kink-band</b>							
4.14.39.001	Axial plane, kink-band: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.39.002	Axial plane, kink-band: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.40 - Axial plane, minor S fold</b>							
4.14.40.001	Axial plane, minor S fold: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.40.002	Axial plane, minor S fold: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.41 - Axial plane, minor Z fold</b>							
4.14.41.001	Axial plane, minor Z fold: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.41.002	Axial plane, minor Z fold: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.42 - Axial plane, minor U fold</b>							
4.14.42.001	Axial plane, minor U fold: measured	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.42.002	Axial plane, minor U fold: estimated	none		0-0-0			vertical and horizontal shown with annotation ("0" or "90")

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>14 - PLANAR ORIENTATIONS (continued)</b>							
<b>14.43 - Cleavage</b>							
4.14.43.001	Cleavage: measured	cleavage-slaty, cleavage-spaced	 FNT 2-248, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.43.002	Cleavage: estimated	cleavage-slaty, cleavage-spaced	 FNT 2-249, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.44 - Cleavage, crenulation</b>							
4.14.44.001	Cleavage, crenulation: measured	none	 FNT 2-250, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.44.002	Cleavage, crenulation: estimated	none	 FNT 2-251, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.45 - Schistosity and Foliation</b>							
4.14.45.001	Schistosity and foliation: measured	none	 FNT 2-252, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.45.002	Schistosity and foliation: estimated	none	 FNT 2-253, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.46 - Gneissosity</b>							
4.14.46.001	Gneissosity: measured	none	 FNT 2-254, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.46.002	Gneissosity: estimated	none	 FNT 2-255, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.47 - Foliation, mylonitic</b>							
4.14.47.001	Foliation, mylonitic: measured	none	 FNT 3-33, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.47.002	Foliation, mylonitic: estimated	none	 FNT 3-34, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>14.48 - Foliation, transposed bedding</b>							
4.14.48.001	Foliation, transposed bedding: measured	none	 FNT 1-254, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
4.14.48.002	Foliation, transposed bedding: estimated	none	 FNT 1-255, 5.0	0-0-0			vertical and horizontal shown with annotation ("0" or "90")
<b>15 - MINERAL EXPLORATION</b>							
<b>15.1 - Drillholes</b>							
4.15.01.001	Drillhole	diamond, tricone, reverse circulation shot hole, undefined	 FNT 1-83, 2.0	0-0-0			annotated with "DDH" or drillhole number/name; annotation depicted with text symbol 2.03.01.008

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>15 - MINERAL EXPLORATION (continued)</b>							
<b>15.2 - Mineral occurrences</b>							
4.15.02.001	Gossan	none	 FNT 1-122, 3.0	0-0-0			
4.15.02.002	Deposit	deposit	 FNT 1-244, 3.0	0-0-0			annotation depicted with text symbol 2.03.01.003
4.15.02.003	Mine: active	production, producing	 FNT 1-40, 3.0	0-0-0			annotation depicted with text symbol 2.03.01.003
4.15.02.004	Mine: inactive	past production	 FNT 1-41, 3.0	0-0-0			annotation depicted with text symbol 2.03.01.003
4.15.02.005	Prospect	prospect	 FNT 1-244, 3.0	128-128-128			annotation depicted with text symbol 2.03.01.003
4.15.02.006	Occurrence	mineralization occurs in grab samples or diamond drill intersection	 FNT 1-89, 2.5	0-0-0			annotation depicted with text symbol 2.03.01.003
<b>16 - WELLS</b>							
<b>16.1 - Oil</b>							
4.16.01.001	Oil well: producing	none	 FNT 3-103, 3.0	0-0-0			
4.16.01.002	Oil well: suspended	none	 FNT 3-104, 6.0	0-0-0			
4.16.01.003	Oil well: abandoned	none	 FNT 3-105, 4.5	0-0-0			
4.16.01.004	Oil well: injection or disposal	none	 FNT 3-106, 4.5	0-0-0			
<b>16.2 - Gas</b>							
4.16.02.001	Gas well: producing	none	 FNT 3-107, 5.0	0-0-0			
4.16.02.002	Gas well: suspended	none	 FNT 3-108, 6.0	0-0-0			
4.16.02.003	Gas well: abandoned	none	 FNT 3-109, 5.0	0-0-0			
4.16.02.004	Gas well: injection or disposal	none	 FNT 3-110, 5.0	0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>16 - WELLS (continued)</b>							
<b>16.3 - Oil and Gas</b>							
4.16.03.001	Oil and gas well: producing	none	 FNT 3-111, 5.0	0-0-0			
4.16.03.002	Oil and gas well: suspended	none	 FNT 3-112, 6.0	0-0-0			
4.16.03.003	Oil and gas well: abandoned	none	 FNT 3-113, 5.0	0-0-0			
4.16.03.004	Oil and gas well: injection or disposal	none	 FNT 3-114, 5.0	0-0-0			
<b>16.4 - Water</b>							
4.16.04.001	Water well: producing	none	 FNT 3-103, 3.0	0-255-255			
4.16.04.002	Water well: suspended	none	 FNT 3-104, 6.0	0-255-255			
4.16.04.003	Water well: abandoned	none	 FNT 3-105, 4.5	0-255-255			
4.16.04.004	Water well: injection or disposal	none	 FNT 3-106, 4.5	0-255-255			
<b>16.5 - Steam</b>							
4.16.05.001	Steam well: producing	none	 FNT 3-115, 3.0	0-255-255			
4.16.05.002	Steam well: suspended	none	 FNT 3-116, 6.0	0-255-255			
4.16.05.003	Steam well: abandoned	none	 FNT 3-117, 4.5	0-255-255			
4.16.05.004	Steam well: injection or disposal	none	 FNT 3-118, 4.5	0-255-255			
<b>16.6 - Dry</b>							
4.16.06.001	Dry well: abandoned	none	 FNT 3-99, 5.0	0-0-0			

Symbol #	English Description	Other Keywords	Symbol Specifications	RGB Colour	Legend Appearance	Legend Order	Notes on Usage
<b>16 - WELLS (continued)</b>							
<b>16.7 - Unknown</b>							
4.16.07.001	Unknown well: producing	none		0-0-0			
4.16.07.002	Unknown well: suspended	none		0-0-0			
4.16.07.003	Unknown well: abandoned	none		0-0-0			
4.16.07.004	Unknown well: injection or disposal	none		0-0-0			

# 5 Appendix

## 5.1 Mineral Abbreviations

Whitney, D. L. and Evans, B.W, 2010. Abbreviations for names of rock-forming minerals; *in* American Mineralogist, Volume 95, No. 1, p. 185–187.  
<https://doi.org/10.2138/am.2010.3371>

Acm	acmite	Act	actinolite	Adl	adularia	Aeg	aegirine
Ak	åkermanite	Ab	albite	Afs	alkali feldspar	Aln	allanite
Alm	almandine	Als	aluminosilicate	Alu	alunite	Amk	amakinite
Ame	amesite	Amp	amphibole	Anl	analcime (analcite)	Ant	anatase
And	andalusite	Adr	andradite	Ang	anglesite	Anh	anhydrite
Ank	ankerite	Ann	annite	An	anorthite	Ano	anorthoclase
Ath	anthophyllite	Atg	antigorite	Ap	apatite	Apo	apophyllite
Arg	aragonite	Arf	arvedsonite	Arm	armalcolite	Apy	arsenopyrite
Aug	augite	Aw	awaruite	Ax	axinite	Bab	babingtonite
Bdy	baddeleyite	Brt	barite (baryte)	Brs	barroisite	Bei	beidellite
Brl	beryl	Bt	biotite	Bxb	bixbyite	Bhm	böhmite (boehmite)
Bn	bornite	Brk	brookite	Brc	brucite	Bst	bustamite
Cal	calcite	Ccn	cancrinite	Cnl	cannilloite	Cb	carbonate mineral
Car	carpholite	Cst	cassiterite	Cel	celadonite	Clt	celestine
Cls	celsian	Cer	cerussite	Cbz	chabazite	Cct	chalcocite
Ccp	chalcopyrite	Chm	chamosite	Chs	chesterite	Chl	chlorite
Cld	chloritoid	Chn	chondrodite	Chr	chromite	Ccl	chrysocolla
Ctl	chrysotile	Cin	cinnabar	Cam	clinoamphibole	Clc	clinochlore
Cen	clinoenstatite	Cfs	clinoferrosilite	Chu	clinohumite	Cpt	clinoptilolite
Cpx	clinopyroxene	Czo	clinozoisite	Cln	clintonite	Coe	coesite
Coh	cohenite	Crd	cordierite	Crr	corrensite	Crn	corundum
Cv	covellite	Crs	cristobalite	Crt	crossite	Crl	cryolite
Cbn	cubanite	Cum	cumingtonite	Cpr	cuprite	Csp	cuspidine
Dph	daphnite	Dat	datolite	Db	daubreelite	Dee	deerite

Dia	diamond	Dsp	diaspore	Dck	dickite	Dg	digenite
Di	diopside	Dpt	diopase	Dol	dolomite	Drv	dravite
Dum	dumortierite	Eas	eastonite	Ec	ecandrewsite	Eck	eckermannite
Ed	edenite	Elb	elbaite	Ell	ellenbergerite	Eng	enargite
En	enstatite (ortho-)	Ep	epidote	Eri	erionite	Esk	eskolait
Ess	esseneite	Eud	eudialite	Fas	fassaite	Fa	fayalite
Fsp	feldspar	Fac	ferro-actinolite	Fath	ferro-anthophyllite	Fbrs	ferrobarroisite
Fcar	ferrocarpholite	Fcel	ferroceladonite	Fec	ferro-eckermannite	Fed	ferro-edenite
Fgd	ferrogedrite	Fgl	ferroglaucophane	Fkrs	ferrokaersutite	Fny	ferronyboite
Fprg	ferropargasite	Frct	ferrichterite	Fs	ferrosilite	Fts	ferrotschermakite
Fwn	ferrowinchite	Fi	fibrolite (fibrous sillimanite)	Fl	flourite	Fo	forsterite
Fos	foshagite	Frk	franklinite	Ful	fullerite	Ghn	gahnite
Glx	galaxite	Gn	galena	Grt	garnet	Ged	gedrite
Gh	gehlenite	Gk	geikielite	Gbs	gibbsite	Gis	gismondine
Glt	glauconite	Gln	glaucophane	Gme	gmelinite	Gth	goethite
Gdd	grandierite	Gr	graphite	Gre	greenalite	Grs	grossular
Gru	grunerite	Gp	gypsum	Hal	halite	Hrm	harmotome
Hst	hastingsite	Hsm	hausmannite	Hyn	haüyne	Hzi	heazlewoodite
Hd	hedengergite	Hem	hematite	Hc	hercynite	Hul	heulandite
Hbn	hibonite	Hbs	hibschite	Hgb	högbomite	Hol	hollandite
Hlm	holmquistite	Hbl	hornblende	Hw	howieite	Hu	humite
Hgr	hydrogrossular	Hyp	hypersthene	Ill	illite	Ilm	ilmenite
Ilv	ilvaite	Jd	jadeite	Jrs	jarosite	Jim	jimthompsonite
Jhn	johannsenite	Krs	kaersutite	Kls	kalsilite	Kam	kamacite
Kln	kaolinite	Ktp	kataphorite	Kfs	K-feldspar	Khl	K-hollandite
Kir	kirschsteinite	Krn	kornrupine	Kos	kosmochlor	Kut	kutnohorite (kunahorite)
Ky	kyanite	Lrn	larnite	Lmt	laumontite	Lws	lawsonite
Lzl	lazulite	Lzr	lazurite	Lpd	lepidolite	Lct	leucite
Lm	limonite	Liq	liquid	Lz	lizardite	Lo	löllingite (loellingite)

Mgh	maghemite	Marf	magnesio-arfvedsonite	Mcar	magnesiocarpholite	Mfr	magnesioferrite
Mhs	magnesiohastingsite	Mhb	magnesiohornblende	Mkt	magnesiokatophorite	Mrbk	magnesioriebeckite
Msdg	magnesiosadanagite	Mst	magnesiostraurolite	Mtm	magnesiotaramite	Mws	magnesioiwustite
Mgs	magnesite	Mag	magnetite	Maj	majorite	Mlc	malachite
Mng	manganosite	Mrc	marcasite	Mrg	margarite	Mar	marialite
Mei	meionite	Mll	melilite	Mw	merwinite	Mes	mesolite
Mc	microcline	Mr	millerite	Mns	minnesotaite	Mog	moganite
Mol	molybdenite	Mnz	monazite	Mtc	monticellite	Mnt	montmorillonite
Mor	mordenite	Mul	mullite	Ms	muscovite	Ntr	natrolite
Nph	nepheline	Nrb	norbergite	Nsn	nosean	Nyb	nyböite
Ol	olivine	Omp	omphacite	Opl	opal	Opq	opaque mineral
Orp	orpiment	Oam	orthoamphibole	Or	orthoclase	Oen	orthoestatite
Opx	orthopyroxene	Osm	osumilite	Plg	palygorskite	Pg	paragonite
Prg	pargasite	Pct	pectolite	Pn	pentlandite	Per	periclase
Prv	pervoskite	Ptl	petalite	PhA	phase A	Ph	phengite
Php	phillipsite	Phl	phlogopite	Pmt	piemontite	Pgt	pigeonite
Pl	plagioclase	Prh	prehnite	Prm	prismatine	Psb	pseudobrookite
Pmp	pumpeillyite-(Al)	Py	pyrite	Pcl	pyrochlore	Prp	pyrope
Pph	pyrophanite	Prl	pyrophyllite	Pxf	pyroxferroite	Pxm	pyroxmangite
Po	pyrrhotite	Qnd	qandilite	Qz	quartz	Rnk	rankinite
Rlg	realgar	Rds	rhodochrosite	Rdn	rhodonite	Rct	richterite
Rbk	riebeckite	Rwd	ringwoodite	Rdr	roedderite	Rsm	rossmanite
Rt	rutile	Sdg	sadanagaite	Sa	sanidine	Sap	saponite
Spr	sapphirine	Scp	scapolite	Sch	scheelite	Srl	schorl
Scb	schreibersite	Sep	sepiolite	Ser	sericite	Srp	serpentine
Sd	siderite	Sil	sillimanite	Sme	smectite	Sdl	sodalite
Sps	spessartine	Sp	sphalerite	Spn	sphene (titanite)	Spl	spinel
Spd	spodumene	Spu	spurrite	St	staurolite	Stv	stevensite
Stb	stilbite	Stp	stilpnomelane	Sti	stishovite	Str	strontianite



Sud	sudoite	Syl	sylvite	Tae	taenite	Tlc	talc
Trm	taramite	Tnt	tennantite	Tnr	tenorite	Tep	tephroite
Ttr	tetrahedrite	Thm	thomsonite	Thr	thorite	Tly	tilleyite
Ttn	titanite (sphene)	Tpz	topaz	Tur	tourmaline	Tr	tremolite
Trd	tridymite	Tro	troilite	Ts	tschermakite	Usp	ulvöspinel
Urn	uraninite	Uv	uvarovite	Vtr	vaterite	Vrm	vermiculite
Ves	vesuvianite	Wds	wadsleyite	Wag	wagnerite	Wrk	wairakite
Wav	wavellite	Wht	whitlockite	Wlm	willmenite	Wnc	winchite
Wth	witherite	Wo	wollastonite	Wur	wurtzite	Wus	wüstite
Xtm	xenotime	Xon	xonolite	Yug	yugawaralite	Zeo	zeolite
Znw	zinnwaldite	Zrn	zircon	Zo	zoisite		

## 5.2 International Chronostratigraphic Chart

Cohen, K.M., Harper, D.A.T., and Gibbard, P.L., 2020. ICS International Chronostratigraphic Chart 2020/01; International Commission on Stratigraphy, IUGS. <[www.stratigraphy.org](http://www.stratigraphy.org)> (accessed: March 11, 2020)

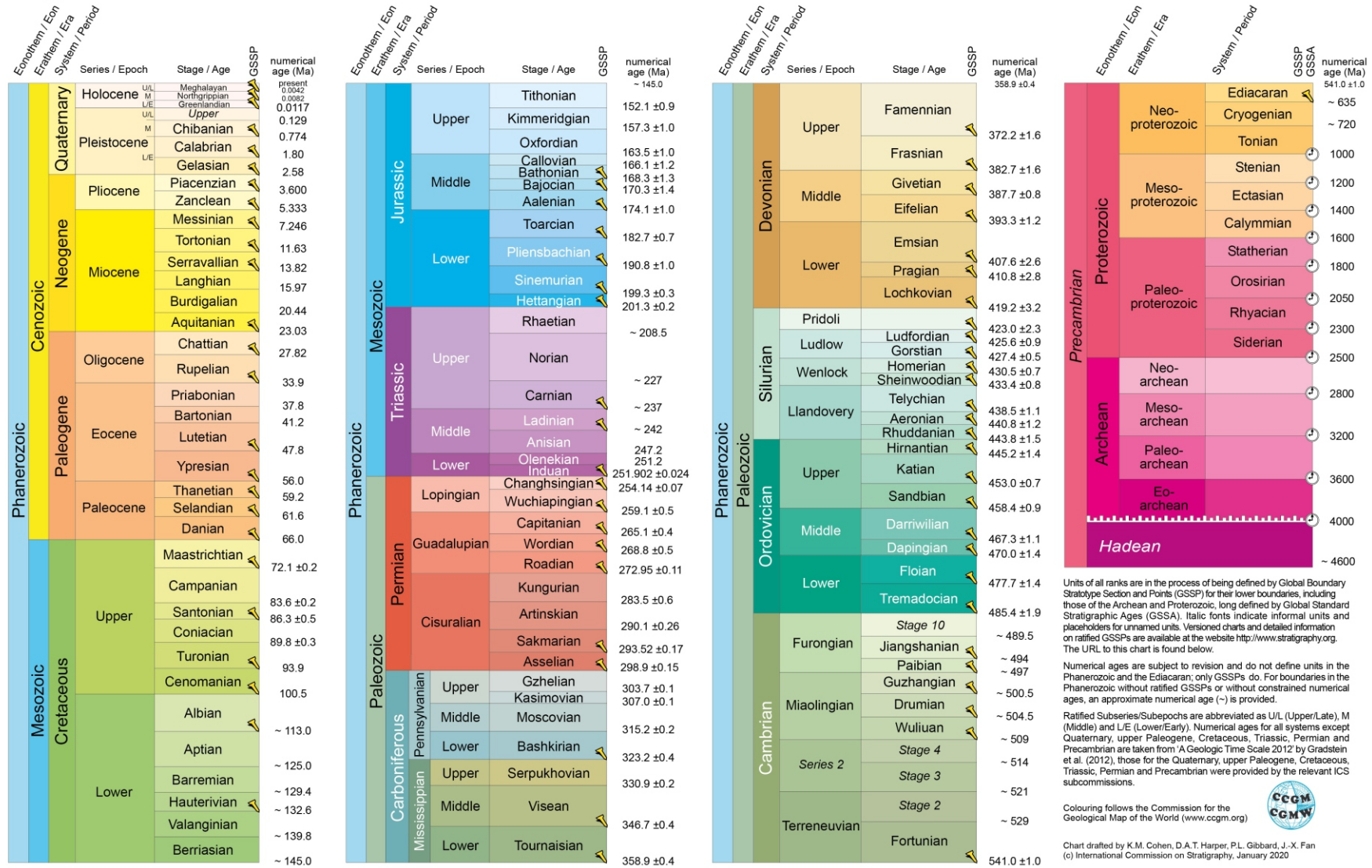


# INTERNATIONAL CHRONOSTRATIGRAPHIC CHART

[www.stratigraphy.org](http://www.stratigraphy.org)

International Commission on Stratigraphy

v 2020/01



Units of all ranks are in the process of being defined by Global Boundary Stratotype Section and Points (GSSP) for their lower boundaries, including those of the Archean and Proterozoic, long defined by Global Standard Stratigraphic Ages (GSSA). Italic fonts indicate informal units and placeholders for unnamed units. Versioned charts and detailed information on ratified GSSPs are available at the website <http://www.stratigraphy.org>. The URL to this chart is found below.

Numerical ages are subject to revision and do not define units in the Phanerozoic and the Ediacaran; only GSSPs do. For boundaries in the Phanerozoic without ratified GSSPs or without constrained numerical ages, an approximate numerical age (~) is provided.

Ratified Subseries/Subepochs are abbreviated as U/L (Upper/Late), M (Middle) and L/E (Lower/Early). Numerical ages for all systems except Quaternary, upper Paleogene, Cretaceous, Triassic, Permian and Precambrian are taken from 'A Geologic Time Scale 2012' by Gradstein et al. (2012), those for the Quaternary, upper Paleogene, Cretaceous, Triassic, Permian and Precambrian were provided by the relevant ICS subcommissions.

Colouring follows the Commission for the Geological Map of the World ([www.ccmw.org](http://www.ccmw.org))



Chart drafted by K.M. Cohen, D.A.T. Harper, P.L. Gibbard, J.-X. Fan (c) International Commission on Stratigraphy, January 2020

To cite: Cohen, K.M., Finney, S.C., Gibbard, P.L. & Fan, J.-X. (2013; updated) The ICS International Chronostratigraphic Chart. Episodes 36: 199-204.

URL: <http://www.stratigraphy.org/ICSChart/ChronostratChart2020-01.pdf>

### 5.3 GSC Age Designators

The GSCGeology TrueType font contains the following:

- Full set of special age character (see table below) at full point size and stored under ALT-key locations (hold down the ALT key and enter the four digit code to obtain the special character).
- Full alphabet of capital letters at an 80% scaled factor and stored under regular keyboard locations.
- Full alphabet of lower case letters at full point size and stored under regular keyboard locations.
- Full set of numbers at full point size and stored under regular keyboard locations.
- Only three symbol characters (dash, comma, and slash) at full point size and stored under regular keyboard locations.

**Note: Please consult the CGM Production Design Specifications document (pages 35-36) for the proper process in using these age designators.**

AGCCCKCDEEE  
HHJMMMNOOQ  
PPPPPPPPQRS  
SSSTTnmpeABC  
DEFGHIJKLMNOP  
QRSTUVWXYZabc  
defghijklmnopqrs  
tuvwxyz0123456  
789\,-

Name	Symbol	ALT Key	Character(s)	ArcGIS Code
Archean	Ä	161	i	Ar
Calymmian	Ç	162	ç	Cl
Cambrian	€	163	£	Cm
Carboniferous	C	164	¤	Cb
Cenozoic	C	165	¥	Cn
Cretaceous	K	166	¦	Ct
Cryogenian	Ç	167	§	Cy
Devonian	D	168	¨	Dv
Ectasian	E	169	©	Et
Ediacaran	E	170	ª	Ed
Eoarchean	eÄ	0202+0161	Êi	Ea
Eocene	Ê	171	«	Ec
Hadean	H	172	¬	Ha
Holocene	H	174	®	Ho
Jurassic	J	175	ˆ	Jr
Mesoarchean	mÄ	0200+0161	Èi	Ma
Mesoproterozoic	mP	0200+0190	È¾	Mp
Mesozoic	M	176	°	Mz
Miocene	M	177	±	Mi
Mississippian	M	178	²	Ms
Neoarchean	nÄ	0199+0161	Çi	Na
Neogene	N	179	³	Ng

Name	Symbol	ALT Key	Character(s)	ArcGIS Code
Neoproterozoic	nP	0199+0190	Ç¾	Np
Oligocene	O	180	´	Og
Ordovician	O	181	µ	Od
Orosirian	Q	182	¶	Os
Paleoarchean	pÄ	0201+0161	Éi	Pa
Paleocene	P	183	·	Pc
Paleogene	P	184	,	Pg
Paleoproterozoic	pP	0201+0190	É¾	Pp
Paleozoic	P	185	¹	Pz
Pennsylvanian	P	186	º	Pn
Permian	P	187	»	Pr
Pleistocene	P	188	¼	Ps
Pliocene	P	189	½	Pi
Proterozoic	P	190	¾	Pt
Quaternary	Q	191	¿	Qt
Rhyacian	R	192	À	Rh
Siderian	S	193	Á	Sd
Silurian	S	194	Â	Sl
Statherian	S	195	Ã	St
Stenian	S	196	Ä	Se
Tonian	T	197	Å	To
Triassic	T	198	Æ	Tr

Age modifiers can be added before the unit reference including Lower, l; Middle, m; Upper, u; Early, E; Middle, M; and Late, L.




























































































Obsolete designators include Aphebian, **A**; Hadrynian, **H**; Helikian, **H**; Neohelikian, **N**; Paleohelikian, **P**; Precambrian, (n/a); Recent, **R**; and Tertiary, **T**.

## 5.4 GSC SymbolStandard TrueType Fonts

















































































































































Three TrueType fonts were developed in-house by the Geological Survey of Canada to store marker symbols, line ornamentations and patterns for use with an ESRI® style file. As seen in the following charts, each symbol is assigned to an ASCII character code. Some character codes are reserved and cannot be utilized.

### GSC SymbolStandard 1


## GSC SymbolStandard 2

																
	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
																
	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
																
	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
																
	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
																
	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
											Act	And	Bt	Chl		
	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
							</									

## GSC SymbolStandard 3

															
32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
															
48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
															
64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
															
80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
															
96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
															
112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
															
128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
															
176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
															
192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

## 5.5 Surficial Geological Events

Prefix	Group	Event Name
r	Chronostratigraphy	Recent
n	Chronostratigraphy	Neoglacial
eh	Chronostratigraphy	Early Holocene
h	Chronostratigraphy	Holocene
p	Chronostratigraphy	Pleistocene
lp	Chronostratigraphy	Late Pleistocene
mp	Chronostratigraphy	Middle Pleistocene
ep	Chronostratigraphy	Early Pleistocene
w	Chronostratigraphy	Wisconsin(an)
lw	Chronostratigraphy	Late Wisconsin(an)
plw	Chronostratigraphy	Pre-Late Wisconsin(an)
mw	Chronostratigraphy	Middle Wisconsin(an)
ew	Chronostratigraphy	Early Wisconsin(an)
pi	Chronostratigraphy	Pliocene
s	Chronostratigraphy	Sangamon(ian)
q	Chronostratigraphy	Quaternary
mq	Chronostratigraphy	Middle Quaternary
l	Ice provenance	Laurentide Ice Sheet
pl	Ice provenance	Pre-Laurentide Ice
c	Ice provenance	Cordilleran Ice Sheet
hy	Ice provenance	Hybrid montane and Laurentide Ice
l	Ice provenance	Innuitian Ice
mi	Ice provenance	Melville Ice
ks	Ice provenance	Keewatin Sector Ice
ls	Ice provenance	Labrador Sector Ice
a	Glaciation	Amundsen glaciation
ar	Glaciation	Amundsen glaciation (Russell stade)
av	Glaciation	Amundsen glaciation (Viscount Melville lobe)
am	Glaciation	Amundsen glaciation (M'Clure stade)
amw	Glaciation	Amundsen glaciation (M'Clure stade, Prince of Wales lobe)
amt	Glaciation	Amundsen glaciation (M'Clure stade, Thesiger lobe)

Prefix	Group	Event Name
amp	Glaciation	Amundsen glaciation (M'Clure stade, Prince Alfred lobe)
t	Glaciation	Thomsen glaciation
b	Glaciation	Banks glaciation
m	Glaciation	McConnell glaciation
bu	Glaciation	Buckland glaciation
pbu	Glaciation	Pre-Buckland glaciation
re	Glaciation	Reid glaciation
pr	Glaciation	Pre-Reid glaciations
k	Glaciation	Klaza glaciation
ns	Glaciation	Nansen glaciation
mm	Glaciation	Mountain River glaciation
gr	Glaciation	Gayna River glaciation
v	Glaciation	Vashon glaciation
pv	Glaciation	Pre-Vashon glaciation
f	Glaciation	Fraser glaciation
pf	Glaciation	Pre-Fraser glaciation
il	Glaciation	Illinoian glaciation
lbi	Interglaciation	Liverpool Bay interglaciation
mb	Interglaciation	Morgan Bluffs interglaciation
cc	Interglaciation	Cape Collinson interglaciation
fa	Glacial advance/readvance	Fraser glaciation ice advance
tl	Glacial advance/readvance	Tutsieta Lake Phase ice advance
kl	Glacial advance/readvance	Kelly Lake Phase ice advance
kc	Glacial advance/readvance	Katherine Creek Phase ice advance
si	Glacial advance/readvance	Sitidgi Stade ice advance
tu	Glacial advance/readvance	Tuk Phase ice advance
tp	Glacial advance/readvance	Toker Point Stade/Member ice advance
fb	Glacial advance/readvance	Franklin Bay Stade ice advance
mr	Glacial advance/readvance	Mason River glaciation ice advance
hb	Glacial advance/readvance	Hadley Bay readvance
un	Other	Uncertain; Uncorrelated; Undifferentiated age



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