GSC Geologic Symbol Standard Style File - Surficial Symbols

These symbols accompany the GSC Surficial Geodatabase model version 2.4 and is up to date as of March 25, 2020

Symbols are organized by legend order appearance

- **Isn** Glacier Ice or Snowpack: snowpacks (3.01.15.001)
- **I** Glacier Ice or Snowpack: Glacier-icefield-icecap (3.01.15.002)
- **H** Anthropogenic deposits: undifferentiated (3.01.14.715)
- **Owf** Organic deposits: fen (3.01.02.011)
- **Owb** Organic deposits: bog (3.01.02.013)
- **Ows** Organic deposits: salt marsh (3.01.02.015)
- **Ov** Organic deposits: veneer (3.01.02.023)
- **Ob** Organic deposits: blanket (3.01.02.025)
- **O** Organic deposits: undifferentiated (3.01.02.012)
- **El** Eolian sediments: loess (3.01.03.295)
- **Er** Eolian sediments: dunes (3.01.03.299)
- **Ev** Eolian sediments: veneer (3.01.03.292)
- **E** Eolian sediments: undifferentiated (3.01.03.297)
- **Cf** Colluvial and Mass-wasting deposits: fan (3.01.01.107)
- **Ca** Colluvial and Mass-wasting deposits: apron or talus scree (3.01.01.097)
  Ca1 - stratified, Ca2 - unstratified
- **Cz** Colluvial and Mass-wasting deposits: landslide (3.01.01.155)
  Cz1 - avalanche, Cz2 - mud flow, Cz3 - retrogressive thaw flow, Cz4 - rotational landslide, Cz5 - translational landslide
- **Cg** Colluvial and Mass-wasting deposits: rock-glacier (3.01.01.139)
- **Cv** Colluvial and Mass-wasting deposits: veneer (3.01.01.092)
- **Cb** Colluvial and Mass-wasting deposits: blanket (3.01.01.095)
- **C** Colluvial and Mass-wasting deposits: undifferentiated (3.01.01.152)
- **Ap** Alluvial sediments: floodplain (3.01.04.265)
- **Af** Alluvial sediments: fan (3.01.04.257)
- **Ai** Alluvial sediments: intertidal or estuarine (3.01.04.255)
- **At** Alluvial sediments: terraced (3.01.04.269)
- **Av** Alluvial sediments: veneer (3.01.04.252)
- **Ab** Alluvial sediments: blanket (3.01.04.267)
- **A** Alluvial sediments: undifferentiated (3.01.04.263)
- **Lr** Lacustrine sediments: beach (3.01.05.582)
- **Ld** Lacustrine sediments: deltaic (3.01.05.585)
- **Ln** Lacustrine sediments: littoral and nearshore (3.01.05.573)
- **Lo** Lacustrine sediments: offshore (3.01.05.577)
- **Lv** Lacustrine sediments: veneer (3.01.05.572)
- **Lb** Lacustrine sediments: blanket (3.01.05.575)
- **L** Lacustrine sediments: undifferentiated (3.01.05.583)
- **Mt** Marine sediments: terraced (3.01.06.495)
- **Mr** Marine sediments: beach (3.01.06.497)
- **Md** Marine sediments: deltaic (3.01.06.507)
- **Mi** Marine sediments: intertidal (3.01.06.492)
- **Mn** Marine sediments: littoral and nearshore (3.01.06.493)
- **Mo** Marine sediments: offshore (3.01.06.509)
- **Mv** Marine sediments: veneer (3.01.06.502)
- **Mb** Marine sediments: blanket (3.01.06.505)
- **M** Marine sediments: undifferentiated (3.01.06.503)
- **GMr** Glaciomarine sediments: beach (3.01.09.487)
- **GMd** Glaciomarine sediments: deltaic (3.01.09.525)
- **GMi** Glaciomarine sediments: intertidal (3.01.09.512)
- **GMn** Glaciomarine sediments: littoral and nearshore (3.01.09.513)
- **GMo** Glaciomarine sediments: offshore (3.01.09.519)
- **GMf** Glaciomarine sediments: submarine outwash-fan (3.01.09.527)
- **GMm** Glaciomarine sediments: submarine moraine (3.01.09.517)
- **GMv** Glaciomarine sediments: veneer (3.01.09.483)
- **GMb** Glaciomarine sediments: blanket (3.01.09.485)
- **GM** Glaciomarine sediments: undifferentiated (3.01.09.515)
- **GLr** Glaciolacustrine sediments: beach (3.01.08.645)
- **GLd** Glaciolacustrine sediments: deltaic (3.01.08.613)
- **GLn** Glaciolacustrine sediments: littoral and nearshore (3.01.08.612)
- **GLo** Glaciolacustrine sediments: offshore (3.01.08.637)
- **GLf** Glaciolacustrine sediments: subaqueous outwash-fan (3.01.08.615)
- **GLm** Glaciolacustrine sediments: subaqueous moraine (3.01.08.617)
- **GLh** Glaciolacustrine sediments: hummocky (3.01.08.635)
- **GLv** Glaciolacustrine sediments: veneer (3.01.08.642)
- **GLb** Glaciolacustrine sediments: blanket (3.01.08.647)
- **GL** Glaciolacustrine sediments: undifferentiated (3.01.08.643)
- **GFp** Glaciofluvial sediments: outwash plain (3.01.07.249)
- **GFt** Glaciofluvial sediments: terraced (3.01.07.237)
- **GFf** Glaciofluvial sediments: outwash-fan (3.01.07.225)
  GFf1 - subaerial, GFf2 - subaqueous
- **GFh** Glaciofluvial sediments: hummocky (3.01.07.215)
- **GFc** Glaciofluvial sediments: ice-contact (3.01.07.217)
- **GFk** Glaciofluvial sediments: kame terrace (3.01.07.219)
- **GFr** Glaciofluvial sediments: esker (3.01.07.229)
- **GFv** Glaciofluvial sediments: veneer (3.01.07.223)
- **GFb** Glaciofluvial sediments: blanket (3.01.07.247)
- **GF** Glaciofluvial sediments: undifferentiated (3.01.07.235)
- **Tg** Glacial sediments: rock-glacierized moraine (3.01.10.357)
- **Th** Glacial sediments: hummocky till (3.01.10.375)
  Th1 - carbonate/calcareous
- **Tm** Glacial sediments: moraine complex (3.01.10.377)
  Tm1 - carbonate/calcareous
- **Tr** Glacial sediments: ridged till, moraine (3.01.10.385)
  Tr1 - carbonate/calcareous
- **Ts** Glacial sediments: streamlined till (3.01.10.387)
  Ts1 - carbonate/calcareous
- **Tp** Glacial sediments: till plain (3.01.10.439)
  Tp1 - carbonate/calcareous
- **Tx** Glacial sediments: weathered till (3.01.10.057)
  Tx1 - carbonate/calcareous
- **Tv** Glacial sediments: veneer (3.01.10.355)
  Tv1 - carbonate/calcareous
- **Tb** Glacial sediments: blanket (3.01.10.359)
  Tb1 - carbonate/calcareous
- **T** Glacial sediments: undifferentiated (3.01.10.373)
- **Wv** Weathered bedrock or regolith: veneer (3.01.11.175)
  Wv1 - carbonate/calcareous
- **Wb** Weathered bedrock or regolith: blanket (3.01.11.169)
  Wb1 - carbonate/calcareous
- **W** Weathered bedrock or regolith: undifferentiated (3.01.11.177)
  W1 - carbonate/calcareous
- **Vpy** Volcanic deposits: pyroclastic sediments (3.01.16.705)
- **V** Volcanic deposits: undifferentiated (3.01.16.707)
- **U** Undifferentiated deposits: undifferentiated (3.01.12.082)
- **R1** Bedrock: sedimentary (3.01.13.192)
- **R2** Bedrock: igneous (3.01.13.187)
- **R3** Bedrock: metamorphic (3.01.13.183)
- **R** Bedrock: undifferentiated (3.01.13.185)

- Geological contact: defined (3.02.01.001)
- Geological contact: approximate (3.02.01.002)
- Geological contact: inferred (3.02.01.003)
- Geological contact: concealed (3.02.01.004)
- Limit of mapping (3.02.01.005)
- Spring, hotspring, cold water spring observation location (3.14.01.012)
- Annular depression: large (3.14.01.023)
- Annular depression: small (3.14.01.024)
- Nivation hollow (3.12.01.020)
  Centroid must be added with CartoRepresentation
- Evaporites (3.14.01.017)
- Recently deglaciated area (3.06.01.014)
  White pattern over colour of geological unit
- Avalanche track: large (3.09.01.008)
- Avalanche track: small (3.09.01.001)
  Marker symbol should be oriented
- Debris flow track: large (3.09.01.009)
- Debris flow track: small (3.09.01.002)
  Marker symbol should be oriented
- Tension fracture (3.09.01.010)
- Piping depression (3.10.01.002)
- Landslide: escarpment inactive (3.09.01.007)
  Special marker symbol exists for legend
- Landslide: escarpment active (3.09.01.006)
  Special marker symbol exists for legend
- Landslide: scar direction unknown (3.09.01.003)
- Landslide: scar direction known (3.09.01.003)
  Marker symbol should be oriented
- Retrogressive thaw flow: direction unknown (3.09.01.004)
- Retrogressive thaw flow: direction known (3.09.01.004)
  Marker symbol should be oriented
- Unspecified slope movement (3.09.01.005)
  Marker symbol should be oriented
- Cryoplanation terrace scarp (3.12.01.014)
- Limit of permafrost (3.12.01.015)
- Thermokarst depression: large (3.12.01.017)
  Centroid must be added with CartoRepresentation
- Thermokarst depression: small (3.12.01.006)
- Patterned ground: large (3.12.01.016)
- Patterned ground: small (3.12.01.002)
- Felsenmeer: large (3.12.01.023)
- Felsenmeer: small (3.12.01.024)
- Palsa or lithalsa (3.12.01.001)
- Hummock (3.14.01.019)
- Pingo (3.12.01.003)
- Gelifluction or solifluction lobe (3.12.01.022)
- Rock glacier (3.12.01.004)
- Rock pingo (3.12.01.005)
- Rock blister (3.12.01.012)
- Rock burst (3.12.01.013)
- Ground ice observation (3.12.01.019)
- Paleowind measurement location (3.05.01.002)
  Marker symbol should be oriented
- Deflation landform: paleowind direction unknown (3.05.01.007)
- Deflation landform: paleowind direction known (3.05.01.001)
  Marker symbol should be oriented
- Dune: active dune field (3.05.01.005)
- Dune: large (3.05.01.003)
  Special marker symbol exists for legend
- Dune: small, paleowind direction unknown (3.05.01.009)
- Dune: small, paleowind direction known (3.05.01.008)
  Marker symbol should be oriented
- Extensive gullied terrain (3.14.01.005)
- Eolian lag deposit [deflation surface] (3.05.01.006)
- Alluvial bar or levee ridge (3.14.01.009)
- Alluvial fan: paleocurrent direction unknown (3.10.01.001)
- Alluvial fan: paleocurrent direction known (3.10.01.001)
  Marker symbol should be oriented
- Lag deposit [washed scoured lag] (3.14.01.013)
- Reworked sediments [by waves, meltwater] (3.14.01.014)
- Surface boulder concentration [boulder lag] (3.14.01.015)
- Pre-existing coastline (3.13.01.011)
- Terrace scarp (3.13.01.004)
- Ravine scarp (3.14.01.011)
  Opposite side must be digitized backwards
  Special marker symbol exists for legend
- Erosional crest (3.14.01.020)
- Beach crest (3.13.01.002)
  Multiple lines must be digitized manually
  Special marker symbol exists for legend
- Kettle: large (3.06.01.013)
  Centroid must be added with CartoRepresentation
- Kettle: small (3.06.01.001)
- Limit of submergence: lacustrine approximate (3.11.01.012)
- Limit of submergence: lacustrine defined (3.11.01.011)
- Limit of submergence: marine approximate (3.11.01.014)
- Limit of submergence: marine defined (3.11.01.013)
- Limit of submergence: glaciolacustrine approximate (3.11.01.008)
- Limit of submergence: glaciolacustrine defined (3.11.01.007)
- Delta: paleocurrent direction unknown (3.13.01.010)
- Delta: paleocurrent direction known (3.13.01.001)
  Marker symbol should be oriented
- Ice-contact delta: paleocurrent direction unknown (3.07.01.001)
- Ice-contact delta: paleocurrent direction known (3.07.01.001)
  Marker symbol should be oriented
- Iceberg scour: large (3.14.01.010)
- Iceberg scour: small (3.14.01.001)
- Spillway: central axis, paleocurrent direction unknown (3.10.01.017)
- Spillway: central axis, paleocurrent direction known (3.10.01.012)
- Paleodrainage direction (3.10.01.010)
- Paleocurrent measurement: sediments (3.10.01.003)
  Marker symbol should be oriented

- Meltwater channel: minor paleocurrent direction unknown (3.10.01.009)
- Meltwater channel: minor paleocurrent direction known (3.10.01.008)
- Meltwater channel: minor lateral (3.10.01.006)
  Uphill on left
- Meltwater channel: minor lateral (3.10.01.007)
  Uphill on right
- Meltwater channel: major paleocurrent direction unknown (3.10.01.005)
  Opposite side must be digitized backwards
  Special marker symbol exists for legend
- Meltwater channel: major paleocurrent direction known (3.10.01.005)
  Opposite side must be digitized backwards
  Paleodrainage direction symbol (3.10.01.010) must be present
  Special marker symbol exists for legend
- Meltwater erosional depression (3.10.01.018)
- Subglacial meltwater corridor margin: approximate (3.10.01.016)
  Opposite side must be digitized backwards
  Special marker symbol exists for legend
- Subglacial meltwater corridor margin: defined (3.10.01.015)
  Opposite side must be digitized backwards
  Special marker symbol exists for legend
- Partly buried channel scarp (3.10.01.011)
  Opposite side must be digitized backwards
  Special marker symbol exists for legend
- Buried valley: central axis, paleodrainage direction unknown (3.10.01.014)
- Buried valley: central axis, paleodrainage direction known (3.10.01.013)
- Moraine ridge: minor large (3.06.01.012)
  Special marker symbol exists for legend
- Moraine ridge: minor small, orientation unknown (3.06.01.017)
- Moraine ridge: minor small, orientation known (3.06.01.015)
  Marker symbol should be oriented
- Moraine ridge: major lateral (3.06.01.006)
- Moraine ridge: major medial (3.06.01.008)
- Moraine ridge: major end (3.06.01.010)
- Moraine ridge: major lateral ice-cored (3.06.01.007)
- Moraine ridge: major medial ice-cored (3.06.01.009)
- Moraine ridge: major end ice-cored (3.06.01.011)
- Ice-contact scarp (3.07.01.007)
- Ice-pushed ridge (3.07.01.008)
- Ice-thrust ridge (3.07.01.009)
- Kame (3.07.01.002)
- Esker ridge: buried, paleocurrent direction unknown (3.07.01.004)
- Esker ridge: buried, paleocurrent direction known (3.07.01.003)
- Esker ridge: paleocurrent direction unknown (3.07.01.006)
- Esker ridge: paleocurrent direction known or inferred (3.07.01.005)
- Esker ridge: with beach ridge/strandlines, paleocurrent direction unknown (3.07.01.011)
- Esker ridge: with beach ridge/strandlines, paleocurrent direction known or inferred (3.07.01.010)
- Crevasse ridge (3.06.01.005)
  Special marker symbol exists for legend
- Buried drumlinoid ridge: large (3.08.01.015)
- Buried drumlinoid ridge: small (3.08.01.002)
  Marker symbol should be oriented
- Druminloid ridge: large(3.08.01.018)
- Drumlinoid ridge: small (3.08.01.005)
  Marker symbol should be oriented
- Buried drumlin ridge: large (3.08.01.014)
- Buried drumlin ridge: small (3.08.01.001)
  Marker symbol should be oriented
- Drumlin ridge: large (3.08.01.017)
- Drumlin ridge: small (3.08.01.004)
- Buried crag-and-tail ridge: large (3.08.01.046)
- Buried crag-and-tail ridge: small (3.08.01.045)
- Crag-and-tail ridge: large (3.08.01.016)
- Crag-and-tail ridge: small (3.08.01.003)
  Marker symbol should be oriented
- Pre-crag ridge: large (3.08.01.040)
- Pre-crag ridge: small (3.08.01.039)
  Marker symbol should be oriented
- Large groove: ice flow direction unknown (3.08.01.022)
- Large groove: ice flow direction known (3.08.01.021)
- Fluted bedrock or drift: poorly defined, central long axis - ice flow direction unknown large (3.08.01.034)
- Fluted bedrock or drift: poorly defined, central long axis - ice flow direction unknown small (3.08.01.030)
  Marker symbol should be oriented
- Fluted bedrock or drift: poorly defined, central long axis - ice flow direction known large (3.08.01.033)
- Fluted bedrock or drift: poorly defined, central long axis - ice flow direction known small (3.08.01.029)
  Marker symbol should be oriented
- Fluted bedrock or drift: central long axis - ice flow direction unknown large (3.08.01.020)
- Fluted bedrock or drift: central long axis - ice flow direction unknown small (3.08.01.007)
  Marker symbol should be oriented
- Fluted bedrock or drift: central long axis - ice flow direction known large (3.08.01.019)
- Fluted bedrock or drift: central long axis - ice flow direction known small (3.08.01.006)
- Ice-flow direction: unknown (3.08.01.025)
- Ice-flow direction: known (3.08.01.024)
- Sediment transport direction: paleoflow unknown (3.14.01.022)
- Sediment transport direction: paleoflow known (3.14.01.021)
- Erratic observation (3.14.01.002)
- Dispersal train margin: approximate (3.08.01.043)
  Left side
  Special marker symbol exists for legend
- Dispersal train margin: approximate (3.08.01.044)
  Right side
  Special marker symbol exists for legend
- Dispersal train margin: defined (3.08.01.041)
  Left side
  Special marker symbol exists for legend
- Dispersal train margin: defined (3.08.01.042)
  Right side
  Special marker symbol exists for legend
- Ice stream margin: approximate (3.11.01.004)
  Opposite side must be digitized backwards
- Ice stream margin: defined (3.11.01.003)
  Opposite side must be digitized backwards
- Ice divide: approximate (3.11.01.002)
- Ice divide: defined (3.11.01.001)
- Limit of glaciation: approximate (3.11.01.006)
- Limit of glaciation: defined (3.11.01.005)
- Till fabric measurement location: ice flow direction unknown (3.08.01.026)
  Marker symbol should be oriented
- Till fabric measurement location: ice flow direction known (3.08.01.012)
  Marker symbol should be oriented
- Paleocurrent measurement: bedrock [p, s-forms] (3.10.01.004)
  Marker symbol should be oriented
- Striation: poorly defined - ice flow direction unknown (3.08.01.009)
  Marker symbol should be oriented
- Striation: poorly defined - ice flow direction known (3.08.01.008)
  Marker symbol should be oriented
- Striation: well defined - ice flow direction unknown (3.08.01.011)
  Marker symbol should be oriented
- Striation: well defined - ice flow direction known (3.08.01.010)
  Marker symbol should be oriented
- Striation: legacy data, poorly defined - ice flow direction unknown (3.08.01.036)
  Marker symbol should be oriented
- Striation: legacy data, poorly defined - ice flow direction known (3.08.01.035)
  Marker symbol should be oriented
- Striation: legacy data, well defined - ice flow direction unknown (3.08.01.038)
  Marker symbol should be oriented
- Striation: legacy data, well defined - ice flow direction known (3.08.01.037)
  Marker symbol should be oriented
- Crossed Striations (3.15.01.001)
  Relative Age - annotation (2.03.01.005) must be added manually
- Tor (3.04.01.003)
- Sinkhole: large (3.04.01.007)
  Centroid must be added with CartoRepresentation
- Sinkhole: small (3.04.01.001)
- Cirque headwall (3.06.01.004)
- Arête (3.06.01.003)
- Bedrock scarp (3.04.01.005)
- Lineament / lineation in bedrock (3.04.01.006)

- Pit: large inactive (3.03.01.009)
  Centroid must be added with CartoRepresentation
- Pit: large active (3.03.01.009)
  Centroid must be added with CartoRepresentation
- Pit: small inactive (3.03.01.003)
- Pit: small active (3.03.01.002)
- Mine tailing (3.03.01.007)
- Made ground [fill] (3.03.01.006)
- Quarry: large inactive (3.03.01.010)
  Centroid must be added with CartoRepresentation
- Quarry: large active (3.03.01.010)
  Centroid must be added with CartoRepresentation
- Quarry: small inactive (3.03.01.005)
- Quarry: small active (3.03.01.004)
- Peat bog mining (3.03.01.008)
- Mn Mineral occurrence (3.04.01.008)
  Mineral identification - annotation (2.03.01.003) must be added manually
- Gossan observation (3.14.01.004)
- Outcrop, small (3.04.01.002)
- Drillhole location (3.03.01.001)
- Fossil observation (3.14.01.003)
- Station location: remote observation (3.14.01.008)
- Station location: ground observation (3.14.01.007)
- 142 Dated sample location (3.14.01.018)
  Dated sample location - annotation (2.03.01.010) must be added manually
- 1400 Sample location (3.14.01.006)
  Sample location - annotation (2.03.01.007) must be added manually

SYMBOLOGY NOT SHOWN ON MAP

- Map unit polygon - to be defined (2.01.01.010)
- no colour / no outline — Unmapped area (2.01.01.008)
- Geomorphological polygon - to be defined (2.01.01.009)
- Geological contact coincident with other feature: defined (2.01.01.002)
- Geological contact coincident with other feature: approximate (2.01.01.003)
- Geological contact coincident with other feature: inferred (2.01.01.004)
- Geological contact coincident with other feature: concealed (2.01.01.005)
- Limit of mapping - neatline (3.02.01.006)
- Geomorphological line - to be defined (2.01.01.001)
- ? Geomorphological point - to be defined (2.01.01.006)
- Field observation point - to be defined (2.01.01.007)

SPECIAL LEGEND ONLY SYMBOLS

- Dune crest (3.15.01.002)
- Landslide: escarpment inactive (3.15.01.005)
- Landslide: escarpment active (3.15.01.004)
- Ravine scarp (3.15.01.006)
- Beach crest (3.15.01.009)
- Meltwater channel scarp: major, paleocurrent unknown (3.15.01.007)
- Meltwater channel scarp: major, paleocurrent known (3.15.01.014)
- Subglacial meltwater corridor margin: approximate (3.15.01.013)
- Subglacial meltwater corridor margin: defined (3.15.01.012)
- Partly buried channel scarp (3.15.01.008)
- Moraine ridge: minor large (3.15.01.003)
- Dispersal train margin: approximate (3.15.01.011)
- Dispersal train margin: defined (3.15.01.010)
- Crevasse fill ridge (3.15.01.015)

ANNOTATION

Tvg	Reference letters - surficial (2.03.01.001)
¡Kmg	Reference letters - bedrock (2.03.01.002)
Pb, Mn	Mineral identification (2.03.01.003)
45	Dip, strike, plunge values (2.03.01.004)
1	Relative age (2.03.01.005)
27819	Catalogue number (2.03.01.006)
1400	Sample location, locality where age has been determined (2.03.01.007)
BH DDH	Borehole, diamond drill hole (2.03.01.008)
sh ss hs	Sinkhole, salt spring, hot spring (2.03.01.009)
10 620 ± 150 shells GSC-65 64 m	Dated sample location, radiocarbon date (2.03.01.010)
LAMPERS	Lineament showing name (2.03.01.011)
LEWIS FAULT	Fault names (2.03.01.012)
LISGAR ANTICLINE	Fold name (2.03.01.013)
LYNN SHEAR ZONE	Area feature names [e.g. shear zone] (2.03.01.014)
Sullivan	Mining property names (2.03.01.015)
40	Isograd lines, value (2.03.01.016)
BIOTITE	Isograd descriptive text (2.03.01.017)
C0148672 6400±3	Fossil locality (2.03.01.018)
Unmapped	Unmapped area (2.03.01.019)
8	Photo numbers (2.03.01.020)
A A' or **A B**	Cross-section indicators (2.03.01.021)
INSET A	Figure numbers, insets (2.03.01.022)