GSC Geologic Symbol Standard Style File - Surficial Symbols

These symbols accompany the GSC Surficial Geodatabase model version 2.3 and is up to date as of February 1st, 2017

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)
- Wb — Weathered bedrock or regolith: blanket (3.01.11.169)
- W — Weathered bedrock or regolith: undifferentiated (3.01.11.177)
- 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)

- 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
- 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)
- 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)
- 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)
- Kettle: large (3.06.01.013) — Centroid must be added with CartoRepresentation
- Kettle: small (3.06.01.001)
- Sinkhole: large (3.04.01.007) — Centroid must be added with CartoRepresentation
- Sinkhole: small (3.04.01.001)
- 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)
- 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)
- Tension fracture (3.09.01.010)
- 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
- 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)
- Sediment transport direction: paleoflow unknown (3.14.01.022)
- Sediment transport direction: paleoflow known (3.14.01.021)
- Pre-existing coastline (3.13.01.011)
- Alluvial bar or levee ridge (3.14.01.009)
- 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
- 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: glaciomarine approximate (3.11.01.010)
- Limit of submergence: glaciomarine defined (3.11.01.009)
- Limit of submergence: glaciolacustrine approximate (3.11.01.008)
- Limit of submergence: glaciolacustrine defined (3.11.01.007)
- 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)
- 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
- 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)
- 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)
- Drumlinoid ridge: buried large (3.08.01.015)
- Drumlinoid ridge: buried 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
- Drumlin ridge: buried large (3.08.01.014)
- Drumlin ridge: buried small (3.08.01.001) — Marker symbol should be oriented
- Drumlin ridge: large (3.08.01.017)
- Drumlin ridge: small (3.08.01.004)
- 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)
- Cirque headwall (3.06.01.004)
- Arête (3.06.01.003)
- Ice-flow direction: unknown (3.08.01.025)
- Ice-flow direction: known (3.08.01.024)
- Limit of glaciation: approximate (3.11.01.006)
- Limit of glaciation: defined (3.11.01.005)
- 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)
- Bedrock scarp (3.04.01.005)
- Lineament / lineation in bedrock (3.04.01.006)
- 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)
- 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
- Spring, hotspring, cold water spring observation location (3.14.01.012)
- Piping depression (3.10.01.002)
- Alluvial fan: paleocurrent direction unknown (3.10.01.001)
- Alluvial fan: paleocurrent direction known (3.10.01.001) — Marker symbol should be oriented
- 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
- Paleocurrent measurement: sediments (3.10.01.003) — Marker symbol should be oriented
- Paleocurrent measurement: bedrock [p, s-forms] (3.10.01.004) — Marker symbol should be oriented
- Ground ice observation (3.12.01.019)
- Erratic observation (3.14.01.002)

- Kame (3.07.01.002)
- 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
- 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)
- 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: arbitrary (2.01.01.011)
- 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: major, paleocurrent unknown (3.15.01.007)
- Meltwater channel: major, paleocurrent known (3.15.01.007)
- 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)

ANNOTATION

- Tvg — Reference letters - surficial (2.03.01.001)
- Ⱥĸmg — 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)