

# 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 April, 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)
EI	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)
Al	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 (3.01.04.287)
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)
GFI	Glaciofluvial sediments: terraced (3.01.07.237)
GFF	Glaciofluvial sediments: outwash fan (3.01.07.225) GFI - subaerial, GFI2 - subaqueous
GFl	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) Tn1 - carbonaceous
Tm	Glacial sediments: moraine complex (3.01.10.377) Tn1 - carbonaceous/calcareous
Tr	Glacial sediments: ridged till, moraine (3.01.10.385) Tn1 - carbonaceous/calcareous
Ts	Glacial sediments: streamlined till (3.01.10.387) Tn1 - carbonaceous/calcareous
Tp	Glacial sediments: till plain (3.01.10.439) Tn1 - carbonaceous/calcareous
Tx	Glacial sediments: weathered till (3.01.10.057) Tn1 - carbonaceous/calcareous
Tv	Glacial sediments: veneer (3.01.10.355) Tn1 - carbonaceous/calcareous
Tb	Glacial sediments: blanket (3.01.10.359) Tn1 - carbonaceous/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)
	Evaporites (3.14.01.017)
	Recently deglaciated area (3.06.01.014)
	Thermokarst depression: large (3.12.01.017) Central axis must be added with Cartographic Assistant
	Thermokarst depression: small (3.12.01.008)
	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) Sector marker symbol needs to be added
	Dune: small, paleowind direction unknown (3.05.01.009)
	Dune: small, paleowind direction known (3.05.01.008) Sector marker symbol needs to be added
	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 field] (3.14.01.015)
	Kettle: large (3.06.01.013) Sector marker symbol needs to be added
	Kettle: small (3.06.01.001)
	Sinkhole: large (3.04.01.007) Sector marker symbol needs to be added
	Sinkhole: small (3.04.01.001)
	Pit: large inactive (3.03.01.009) Sector marker symbol needs to be added
	Pit: large active (3.03.01.009) Sector marker symbol needs to be added
	Pit: small inactive (3.03.01.003)
	Pit: small active (3.03.01.002)
	Mine tailing (3.03.01.007)
	Made ground [fill] (3.03.01.008)
	Quarry: large inactive (3.03.01.010) Sector marker symbol needs to be added
	Quarry: large active (3.03.01.010) Sector marker symbol needs to be added
	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)
	Debris flow track: large (3.09.01.009)
	Debris flow track: small (3.09.01.002) Sector marker symbol needs to be added
	Landslide: escarpment inactive (3.09.01.007) Sector marker symbol needs to be added
	Landslide: escarpment active (3.09.01.006) Sector marker symbol needs to be added
	Landslide: scar direction unknown (3.09.01.003)
	Landslide: scar direction known (3.09.01.003) Sector marker symbol needs to be added
	Retrogressive thaw flow: direction unknown (3.09.01.004)
	Retrogressive thaw flow: direction known (3.09.01.004) Sector marker symbol needs to be added
	Unspecified slope movement (3.09.01.005) Sector marker symbol needs to be added
	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) Sector marker symbol needs to be added
	Erosional crest (3.14.01.020)
	Beach crest (3.13.01.002) Major axis must be defined by 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) Sector marker symbol needs to be added
	Meltwater channel: minor lateral (3.10.01.007) Sector marker symbol needs to be added
	Meltwater channel: major paleocurrent direction unknown (3.10.01.005) Sector marker symbol needs to be added
	Meltwater channel: major paleocurrent direction known (3.10.01.005) Sector marker symbol needs to be added
	Subglacial meltwater corridor margin: approximate (3.10.01.016) Sector marker symbol needs to be added
	Subglacial meltwater corridor margin: defined (3.10.01.015) Sector marker symbol needs to be added
	Partly buried channel scarp (3.10.01.011) Sector marker symbol needs to be added
	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) Sector marker symbol needs to be added
	Moraine ridge: minor small, orientation unknown (3.06.01.017)
	Moraine ridge: minor small, orientation known (3.06.01.015) Sector marker symbol needs to be added
	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 ridges/strandlines, paleocurrent direction unknown (3.07.01.011)
	Esker ridge: with beach ridges/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) Sector marker symbol needs to be added
	Drumlinoid ridge: large (3.08.01.018)
	Drumlinoid ridge: small (3.08.01.005) Sector marker symbol needs to be added
	Drumlin ridge: buried large (3.08.01.014)
	Drumlin ridge: buried small (3.08.01.001) Sector marker symbol needs to be added
	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) Sector marker symbol needs to be added
	Pre-crag ridge: large (3.08.01.040)
	Pre-crag ridge: small (3.08.01.039) Sector marker symbol needs to be added
	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) Sector marker symbol needs to be added
	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) Sector marker symbol needs to be added
	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) Sector marker symbol needs to be added
	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) Sector marker symbol needs to be added
	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) Sector marker symbol needs to be added
	Dispersal train margin: approximate (3.08.01.044) Sector marker symbol needs to be added
	Dispersal train margin: defined (3.08.01.041) Sector marker symbol needs to be added
	Dispersal train margin: defined (3.08.01.042) Sector marker symbol needs to be added
	Ice stream margin: approximate (3.11.01.004) Sector marker symbol needs to be added
	Ice stream margin: defined (3.11.01.003) Sector marker symbol needs to be added
	Ice divide: approximate (3.11.01.002)
	Ice divide: defined (3.11.01.001)
	Bedrock scarp (3.04.01.005)
	Lineament / Inclusion in bedrock (3.04.01.006)
	Palsa or lithalsa (3.12.01.001)
	Hummock (3.14.01.019)
	Pingo (3.12.01.003)
	Gaullification or soilification 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) Sector marker symbol needs to be added
	Deflation landform: paleowind direction unknown (3.05.01.007) Sector marker symbol needs to be added
	Deflation landform: paleowind direction known (3.05.01.001) Sector marker symbol needs to be added
	Spring, hot spring, 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) Sector marker symbol needs to be added
	Delta: paleocurrent direction unknown (3.13.01.010)
	Delta: paleocurrent direction known (3.13.01.001) Sector marker symbol needs to be added
	Ice-contact delta: paleocurrent direction unknown (3.07.01.001)
	Ice-contact delta: paleocurrent direction known (3.07.01.001) Sector marker symbol needs to be added
	Paleocurrent measurement: sediments (3.10.01.003) Sector marker symbol needs to be added
	Paleocurrent measurement: bedrock [p, s-forms] (3.10.01.004) Sector marker symbol needs to be added
	Ground ice observation (3.12.01.019)
	Erratic observation (3.14.01.002)

	Kame (3.07.01.002)
	Tilt fabric measurement location: ice flow direction unknown (3.08.01.026) Sector marker symbol needs to be added
	Tilt fabric measurement location: ice flow direction known (3.08.01.012) Sector marker symbol needs to be added
	Striation: poorly defined - ice flow direction unknown (3.08.01.009) Sector marker symbol needs to be added
	Striation: poorly defined - ice flow direction known (3.08.01.008) Sector marker symbol needs to be added
	Striation: well defined - ice flow direction unknown (3.08.01.011) Sector marker symbol needs to be added
	Striation: well defined - ice flow direction known (3.08.01.010) Sector marker symbol needs to be added
	Striation: legacy data, poorly defined - ice flow direction unknown (3.08.01.036) Sector marker symbol needs to be added
	Striation: legacy data, poorly defined - ice flow direction known (3.08.01.035) Sector marker symbol needs to be added
	Striation: legacy data, well defined - ice flow direction unknown (3.08.01.038) Sector marker symbol needs to be added
	Striation: legacy data, well defined - ice flow direction known (3.08.01.037) Sector marker symbol needs to be added
	Crossed Striations (3.15.01.001) Sector marker symbol needs to be added
	Tor (3.04.01.003)
	Mineral occurrence (3.04.01.008) Sector marker symbol needs to be added
	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)
	Dated sample location (3.14.01.018) Sector marker symbol needs to be added
	Sample location (3.14.01.006) Sector marker symbol needs to be added

	Map unit polygon - to be defined (2.01.01.010)
	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)