

# GSC Geologic Symbol Standard Style File - Surficial Symbols

These symbols accompany the GSC Surficial Geodatabase model version 2.3.14 and is up to date as of April 2018

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 - seawards, Cz2 - mid flow, Cz3 - retrogressive flow, Cz4 - rotational landslide, Cz5 - rotational 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)
Mb	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)
M	Marine sediments: undifferentiated (3.01.06.503)
GMr	Gliomarine sediments: beach (3.01.09.487)
GMd	Gliomarine sediments: deltaic (3.01.09.525)
GMI	Gliomarine sediments: intertidal (3.01.09.512)
GMin	Gliomarine sediments: littoral and nearshore (3.01.09.513)
GMo	Gliomarine sediments: offshore (3.01.09.519)
GMr	Gliomarine sediments: submarine outwash fan (3.01.09.527)
GMr	Gliomarine sediments: submarine moraine (3.01.09.517)
GMr	Gliomarine sediments: veneer (3.01.09.483)
GMr	Gliomarine sediments: blanket (3.01.09.485)
GM	Gliomarine sediments: undifferentiated (3.01.09.515)
GLr	Gliolacustrine sediments: beach (3.01.08.645)
GLd	Gliolacustrine sediments: deltaic (3.01.08.613)
GLn	Gliolacustrine sediments: littoral and nearshore (3.01.08.612)
GLo	Gliolacustrine sediments: offshore (3.01.08.637)
GLf	Gliolacustrine sediments: subaqueous outwash fan (3.01.08.615)
GLm	Gliolacustrine sediments: subaqueous moraine (3.01.08.617)
GLh	Gliolacustrine sediments: hummocky (3.01.08.635)
GLv	Gliolacustrine sediments: veneer (3.01.08.642)
GLb	Gliolacustrine sediments: blanket (3.01.08.647)
GL	Gliolacustrine sediments: undifferentiated (3.01.08.643)
GFP	Gliofluvial sediments: outwash plain (3.01.07.249)
GFI	Gliofluvial sediments: terraced (3.01.07.237)
GFF	Gliofluvial sediments: outwash fan (3.01.07.225) GFI - subaerial, GFI - subaqueous
GFl	Gliofluvial sediments: hummocky (3.01.07.215)
GFC	Gliofluvial sediments: ice-contact (3.01.07.217)
GFK	Gliofluvial sediments: kame terrace (3.01.07.219)
GFR	Gliofluvial sediments: esker (3.01.07.229)
Gfv	Gliofluvial sediments: veneer (3.01.07.223)
Gfb	Gliofluvial sediments: blanket (3.01.07.247)
GF	Gliofluvial 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 - carbonates/calcareous
Tm	Glacial sediments: moraine complex (3.01.10.377) Tn1 - carbonates/calcareous
Tr	Glacial sediments: ridged till, moraine (3.01.10.385) Tn1 - carbonates/calcareous
Ts	Glacial sediments: streamlined till (3.01.10.387) Tn1 - carbonates/calcareous
Tp	Glacial sediments: till plain (3.01.10.439) Tn1 - carbonates/calcareous
Tx	Glacial sediments: weathered till (3.01.10.057) Tn1 - carbonates/calcareous
Tv	Glacial sediments: veneer (3.01.10.355) Tn1 - carbonates/calcareous
Tb	Glacial sediments: blanket (3.01.10.359) Tn1 - carbonates/calcareous
T	Glacial sediments: undifferentiated (3.01.10.373)
Wv	Weathered bedrock or regolith: veneer (3.01.11.175) Wn1 - carbonates/calcareous
Wb	Weathered bedrock or regolith: blanket (3.01.11.169) Wn1 - carbonates/calcareous
W	Weathered bedrock or regolith: undifferentiated (3.01.11.177) Wn1 - carbonates/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)

	Annular depression: large (3.14.01.023)
	Annular depression: small (3.14.01.024)
	Nivation hollow (3.12.01.020) Central must be added with Cartographic convention
	Evaporites (3.14.01.017)
	Recently deglaciated area (3.06.01.014) Special marker symbol needs to be added
	Thermokarst depression: large (3.12.01.017) Central must be added with Cartographic convention
	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) Special marker symbol needs to be added
	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) Central must be added with Cartographic convention
	Kettle: small (3.06.01.001)
	Sinkhole: large (3.04.01.007) Central must be added with Cartographic convention
	Sinkhole: small (3.04.01.001)
	Pit: large inactive (3.03.01.009) Central must be added with Cartographic convention
	Pit: large active (3.03.01.009) Central must be added with Cartographic convention
	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) Central must be added with Cartographic convention
	Quarry: large active (3.03.01.010) Central must be added with Cartographic convention
	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 needs to be added
	Landslide: escarpment active (3.09.01.006) Special marker symbol needs to be added
	Landslide: scar direction unknown (3.09.01.003)
	Landslide: scar direction known (3.09.01.003) Marker symbol should be oriented
	Retrospective thaw flow: direction unknown (3.09.01.004)
	Retrospective 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
	Cropland 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) Special marker symbol needs to be added Special marker symbol needs to be added
	Erosional crest (3.14.01.020)
	Beach crest (3.13.01.002) Marker must be added with Cartographic convention Special marker symbol needs to be added
	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: gliomarine approximate (3.11.01.010)
	Limit of submergence: gliomarine defined (3.11.01.009)
	Limit of submergence: gliolacustrine approximate (3.11.01.008)
	Limit of submergence: gliolacustrine 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) Special marker symbol needs to be added
	Meltwater channel: minor lateral (3.10.01.007) Special marker symbol needs to be added
	Meltwater channel: major paleocurrent direction unknown (3.10.01.005)
	Meltwater channel: major paleocurrent direction known (3.10.01.005) Special marker symbol needs to be added Special marker symbol needs to be added Special marker symbol needs to be added
	Subglacial meltwater corridor margin: approximate (3.10.01.016) Special marker symbol needs to be added
	Subglacial meltwater corridor margin: defined (3.10.01.015) Special marker symbol needs to be added
	Partly buried channel scarp (3.10.01.011) Special marker symbol needs to be added Special 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) Special 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) 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 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)
	Buried drumlinoid ridge: large (3.08.01.015)
	Buried drumlinoid ridge: small (3.08.01.002) Marker symbol should be oriented
	Drumlinoid 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)
	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) Special marker symbol needs to be added
	Dispersal train margin: approximate (3.08.01.044) Special marker symbol needs to be added
	Dispersal train margin: defined (3.08.01.041) Special marker symbol needs to be added
	Dispersal train margin: defined (3.08.01.042) Special marker symbol needs to be added
	Ice stream margin: approximate (3.11.01.004) Special marker symbol needs to be added
	Ice stream margin: defined (3.11.01.003) Special 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 / 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, 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) 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
	Stratification: poorly defined - ice flow direction unknown (3.08.01.009) Marker symbol should be oriented
	Stratification: poorly defined - ice flow direction known (3.08.01.008) Marker symbol should be oriented
	Stratification: well defined - ice flow direction unknown (3.08.01.011) Marker symbol should be oriented
	Stratification: well defined - ice flow direction known (3.08.01.010) Marker symbol should be oriented
	Stratification: legacy data, poorly defined - ice flow direction unknown (3.08.01.036) Marker symbol should be oriented
	Stratification: legacy data, poorly defined - ice flow direction known (3.08.01.035) Marker symbol should be oriented
	Stratification: legacy data, well defined - ice flow direction unknown (3.08.01.038) Marker symbol should be oriented
	Stratification: legacy data, well defined - ice flow direction known (3.08.01.037) Marker symbol should be oriented
	Crossed Stratifications (3.15.01.001) Marker symbol should be oriented
	Tor (3.04.01.003)
	Mineral occurrence (3.04.01.008) Marker symbol should be oriented
	Gossan observation (3.14.01.004)
	Outcrop, small (3.04.01.002)
	Drillhole location (3.03.01.001)
	Fossil observation (3.14.01.003)