Science language for an integrated Geological Survey of Canada data model for surficial geology maps, version 2.0

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Appendix A. Science Language Primer

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Table 1. Feature summary

Group	Feature type (divisor)	Feature class
General (or in groupless groupless divisors)	General (or in groupless) – Groupless (All)	Map - unit polygons
	General (or in groupless) – Glacier or icefield (or coscal (AK)	Map - unit polygons
	General (or in groupless) – Water (AK)	Map - unit polygons
Organic deposits	Organic deposits – Bog deposits (AK)	Map - unit polygons
	Organic deposits – Fen deposits (AK)	Map - unit polygons
	Organic deposits – Peat deposits (AK)	Map - unit polygons
	Organic deposits – Undifferentiated deposits (AK)	Map - unit polygons
Eolian sediments	Eolian sediments – Veneer (AK)	Map - unit polygons
	Eolian sediments – Blanket (AK)	Map - unit polygons
	Eolian sediments – Dune (AK)	Map - unit polygons
	Eolian sediments – Undifferentiated sediments (AK)	Map - unit polygons
Colluvial and mass wasting deposits	Colluvial and mass wasting deposits – Apron or talus scree deposits (Stratified)	Map - unit polygons
	Colluvial and mass wasting deposits – Apron or talus scree deposits (Unstratified)	Map - unit polygons
	Colluvial and mass wasting deposits – Fan deposits (Stratified)	Map - unit polygons
	Colluvial and mass wasting deposits – Fan deposits (Unstratified)	Map - unit polygons
	Colluvial and mass wasting deposits – Blanket (AK)	Map - unit polygons
	Colluvial and mass wasting deposits – Rock glacier (AK)	Map - unit polygons
	Colluvial and mass wasting deposits – Landslide deposits (Undifferentiated)	Map - unit polygons
	Colluvial and mass wasting deposits – Landslide deposits (Rock slide-debris avalanche)	Map - unit polygons
	Colluvial and mass wasting deposits – Landslide deposits (Rotational landslide)	Map - unit polygons
	Colluvial and mass wasting deposits – Landslide deposits (Translational landslide)	Map - unit polygons
	Colluvial and mass wasting deposits – Landslide deposits (Unspecified)	Map - unit polygons
	Colluvial and mass wasting deposits – Undifferentiated sediments (AK)	Map - unit polygons
Alluvial sediments	Alluvial sediments – Fan sediments (AK)	Map - unit polygons
	Alluvial sediments – Floodplain sediments (AK)	Map - unit polygons
	Alluvial sediments – Terraced sediments (AK)	Map - unit polygons
	Alluvial sediments – Veneer (AK)	Map - unit polygons
	Alluvial sediments – Blanket (AK)	Map - unit polygons
	Alluvial sediments – Channel or estuarine sediments (AK)	Map - unit polygons
	Alluvial sediments – Undifferentiated sediments (AK)	Map - unit polygons
Marine sediments	Marine sediments – Inter-tidal sediments (AK)	Map - unit polygons
	Marine sediments – Nearshore sediments (AK)	Map - unit polygons
	Marine sediments – Terraced sediments (AK)	Map - unit polygons
	Marine sediments – Veneer (AK)	Map - unit polygons
	Marine sediments – Glacial and nearshore sediments (AK)	Map - unit polygons
	Marine sediments – Veneer (AK)	Map - unit polygons
	Marine sediments – Blanket (AK)	Map - unit polygons
	Marine sediments – Undifferentiated sediments (AK)	Map - unit polygons
Lacustrine sediments	Lacustrine sediments – Delta sediments (AK)	Map - unit polygons
	Lacustrine sediments – Nearshore sediments (AK)	Map - unit polygons
	Lacustrine sediments – Veneer (AK)	Map - unit polygons
	Lacustrine sediments – Blanket (AK)	Map - unit polygons
	Lacustrine sediments – Offshore sediments (AK)	Map - unit polygons
	Lacustrine sediments – Undifferentiated sediments (AK)	Map - unit polygons
Glaciomarine sediments	Glaciomarine sediments – Delta sediments (AK)	Map - unit polygons
	Glaciomarine sediments – Nearshore sediments (AK)	Map - unit polygons
	Glaciomarine sediments – Submarine outwash fan sediments (AK)	Map - unit polygons
	Glaciomarine sediments – Glacial and nearshore sediments (AK)	Map - unit polygons
	Glaciomarine sediments – Veneer (AK)	Map - unit polygons
	Glaciomarine sediments – Blanket (AK)	Map - unit polygons
	Glaciomarine sediments – Submarine moraine complex (AK)	Map - unit polygons
	Glaciomarine sediments – Undifferentiated sediments (AK)	Map - unit polygons
Glaciolacustrine sediments	Glaciolacustrine sediments – Delta sediments (AK)	Map - unit polygons
	Glaciolacustrine sediments – Offshore and nearshore sediments (AK)	Map - unit polygons
	Glaciolacustrine sediments – Veneer (AK)	Map - unit polygons
	Glaciolacustrine sediments – Blanket (AK)	Map - unit polygons
	Glaciolacustrine sediments – Offshore sediments (AK)	Map - unit polygons
	Glaciolacustrine sediments – Undifferentiated sediments (AK)	Map - unit polygons
Glaciofluvial sediments	Glaciofluvial sediments – Delta sediments (AK)	Map - unit polygons
	Glaciofluvial sediments – Terraced sediments (AK)	Map - unit polygons
	Glaciofluvial sediments – Veneer (AK)	Map - unit polygons
	Glaciofluvial sediments – Blanket (AK)	Map - unit polygons
	Glaciofluvial sediments – Esker (AK)	Map - unit polygons
	Glaciofluvial sediments – Undifferentiated sediments (Subaerial)	Map - unit polygons
	Glaciofluvial sediments – Outwash fan sediments (Unspecified)	Map - unit polygons
	Glaciofluvial sediments – Undifferentiated sediments (AK)	Map - unit polygons
Glacial sediments	Glacial sediments – Undifferentiated sediments (AK)	Map - unit polygons
	Glacial sediments – Veneer (AK)	Map - unit polygons
	Glacial sediments – Veneer (Unspecified)	Map - unit polygons
	Glacial sediments – Blanket (Unspecified)	Map - unit polygons
	Glacial sediments – Hummocky terrain (Unspecified)	Map - unit polygons
	Glacial sediments – Hummocky ice (Unspecified)	Map - unit polygons
	Glacial sediments – Till (Unspecified)	Map - unit polygons
	Glacial sediments – Till (Carbonate/calcareous)	Map - unit polygons
	Glacial sediments – Till (Non-carbonate/siliceous)	Map - unit polygons
	Glacial sediments – Till (Carbonate/calcareous)	Map - unit polygons
	Glacial sediments – Till (Non-carbonate/siliceous)	Map - unit polygons
	Glacial sediments – Undifferentiated sediments (AK)	Map - unit polygons
Weathered bedrock or regolith	Weathered bedrock or regolith – Blanket (AK)	Map - unit polygons
	Weathered bedrock or regolith – Undifferentiated deposits (AK)	Map - unit polygons
Undifferentiated deposits	Undifferentiated deposits – Undifferentiated deposits (AK)	Map - unit polygons
Bedrock	Bedrock – Sedimentary (AK)	Map - unit polygons
	Bedrock – Igneous (AK)	Map - unit polygons
	Bedrock – Metamorphic (AK)	Map - unit polygons
	Bedrock – Undifferentiated (AK)	Map - unit polygons
To be defined	Unmapped Area (AK)	Map - unit polygons
Map - unit boundaries	Geological boundary (Confidence approximate)	Geomorphological lines
	Geological boundary (Confidence approximate)	Geomorphological lines
	Geological boundary (Confidence approximate)	Geomorphological lines
	Geological boundary (Confidence inferred)	Geomorphological lines
	Geological boundary (Confidence inferred)	Geomorphological lines
	Geological boundary coincident with other line feature (Confidence approximate)	Geomorphological lines
	Geological boundary coincident with other line feature (Confidence inferred)	Geomorphological lines
	Unit of geology (Unit of mapping)	Geomorphological lines
	Unit of mapping (Neither)	Geomorphological lines
Anthropogenic features	Anthropogenic features – Quarry (AK)	Geomorphological points
Mineral occurrences	Mineral occurrence – Quarry (AK)	Geomorphological points
	Mineral occurrence – Prospect (AK)	Geomorphological points
	Pit (Status unknown)	Geomorphological points
	Pit (Status inactive or unspecified)	Geomorphological points
	Pit (Status active)	Geomorphological points
	Quarry (Status unknown)	Geomorphological points
	Quarry (Status inactive or unspecified)	Geomorphological points
	Quarry (Status active)	Geomorphological points
Bedrock features	Area of exposure (AK)	Geomorphological points
	Area of exposure (Bedrock type unknown)	Geomorphological points
	Lineament or fracture in bedrock (AK)	Geomorphological points
	Outcrop (AK)	Geomorphological points
	Quarry (AK)	Geomorphological points
	Quarry (Status unknown)	Geomorphological points
	Quarry (Status inactive or unspecified)	Geomorphological points
	Quarry (Status active)	Geomorphological points
Eolian features	Yardang (Size unknown)	Geomorphological points
	Yardang (Size unknown or unspecified)	Geomorphological points
	Yardang (Size inferred)	Geomorphological points
	Yardang (Size unknown or unspecified)	Geomorphological points
	Sand dune (Size unknown)	Geomorphological points
	Sand dune (Size unknown or unspecified)	Geomorphological points
	Sand dune (Size inferred)	Geomorphological points
	Sand dune (Size unknown or unspecified)	Geomorphological points
	Sand dune (Size unknown)	Geomorphological points
	Sand dune (Size unknown or unspecified)	Geomorphological points
	Sand dune (Size unknown)	Geomorphological points
	Sand dune (Size unknown or unspecified)	Geomorphological points
	Field observations and measurements	Field observations and measurements
	Field observations and measurements	Field observations and measurements
	Field observations and measurements	Field observations and measurements
Glacial and ice-contact features	Kame (AK)	Geomorphological points
	Kame field (Size known or inferred)	Geomorphological points
	Kame field (Size unknown or unspecified)	Geomorphological points
	Crater headwall (AK)	Geomorphological points
	Esker (Size known or inferred)	Geomorphological points
	Esker (Size unknown or unspecified)	Geomorphological points
	Esker ridge (Bedrock topography unknown)	Geomorphological points
	Esker ridge (Bedrock topography unknown, sense known or inferred)	Geomorphological points
	Esker ridge (Bedrock topography unknown, sense unknown or unspecified)	Geomorphological points
	Ice contact terrace (Size known or inferred)	Geomorphological points
	Ice contact terrace (Size unknown or unspecified)	Geomorphological points
	Drumlin (AK)	Geomorphological points
	Kettle (AK)	Geomorphological points
	Kettle chain (AK)	Geomorphological points
	Kettle complex (AK)	Geomorphological points
	Kettle complex ridge (End ice-cored, intermittent ice cored, or unspecified ice-contact)	Geomorphological points
	Kettle complex ridge (End, intermittent, or unspecified)	Geomorphological points
	Major moraine ridge (Lateral or ice-contact)	Geomorphological points
	Major moraine ridge (Lateral or terrestrial)	Geomorphological points
	Major moraine ridge (Medial)	Geomorphological points
	Major moraine ridge (Medial or unspecified)	Geomorphological points
	Major moraine ridge (Recessional or unspecified)	Geomorphological points
	Major moraine ridge (Recessional moraine ice cored)	Geomorphological points
	Major moraine ridge (Recessional moraine ice cored, or unspecified ice cored)	Geomorphological points
	Major moraine ridge (Lateral or terrestrial)	Geomorphological points
	Major moraine ridge (Medial)	Geomorphological points
	Major moraine ridge (Medial or unspecified)	Geomorphological points
	Major moraine ridge (Recessional or unspecified)	Geomorphological points
	Major moraine ridge (Recessional moraine ice cored)	Geomorphological points
	Major moraine ridge (Recessional moraine ice cored, or unspecified ice cored)	Geomorphological points
	Field observations and measurements	Field observations and measurements
	Field observations and measurements	Field observations and measurements
Ice movement indicators	Burial drumlin (AK)	Geomorphological points
	Burial drumlin (Unspecified)	Geomorphological points
	Burial drumlinoid (AK)	Geomorphological points
	Crag and tail (AK)	Geomorphological points
	Crag and tail (Unspecified)	Geomorphological points
	Drumlin (AK)	Geomorphological points
	Drumlin (Unspecified)	Geomorphological points
	Drumlinoid (AK)	Geomorphological points
	Drumlinoid (Unspecified)	Geomorphological points
	Flute (AK)	Geomorphological points
	Flute (Unspecified)	Geomorphological points
	Mega-scale glacial lineation (AK)	Geomorphological points
	Mega-scale glacial lineation (Unspecified)	Geomorphological points
	Rock drumlin (AK)	Geomorphological points
	Rock drumlin (Unspecified)	Geomorphological points
	Rock drumlinoid (AK)	Geomorphological points
	Rock drumlinoid (Unspecified)	Geomorphological points
	Streamlined feature (AK)	Geomorphological points
	Streamlined feature (Unspecified)	Geomorphological points
Miscellaneous features	Erratic (Size known)	Geomorphological points
	Erratic (Size unknown or unspecified)	Geomorphological points
	Erratic (Size inferred)	Geomorphological points
	Erratic (Size unknown or unspecified)	Geomorphological points
	Erratic (Size unknown)	Geomorphological points
	Erratic (Size unknown or unspecified)	Geomorphological points
	Erratic (Size unknown)	Geomorphological points
	Erratic (Size unknown or unspecified)	Geomorphological points
	Field observations and measurements	Field observations and measurements
	Field observations and measurements	Field observations and measurements
	Field observations and measurements	Field observations and measurements