					Surficial Data	Model version e 8236 Appendix 5 - GEO	× ×											
Group Feature Modifier Feature Class **Control **Feature Type	**Subset **Status **Sense or Orientation **Depositional or Erosional **Location **True Ground	**Symbol Symbol Representation Symbol	d ol Short Legend Description Notes	Group	Feature Modifier Feature Class **Control **Feature Type **Subset **Status **Sense or Open File	positional or rosional	**True Ground Length	ind **Symbol	Symbol Representation Legend Symbol Short Legend Description	Group	Feature Modifier	Feature Class **Control **Feature Type	**Subset	**Status **Sense or Orientation Erosional or Confidence	**True Ground Length	**Symbol Symbol Representation Symbol	Short Legend Description Notes	
Anthropogenic featuresPitAllGEM_POLYS4541002 Pit (all)454 * Pit	InterpretationEnvironmentConfidenceLength117 Granular aggregate291 Active291 Active3.03.01.009 *245 Gravel292 Inactive292 Inactive297 * Unspecified4.1111281 Till291 Active297 * Unspecified4.11114.1111	Pit (all) Representa	ation Centroid marker 3.03.01.002 (active) or 3.03.01.003 (inactive) must be added with CartoRep.	Ice-movement E indicators r	Index	Interference Iot applicable 287 * Defined	315 * Accurate		Representation Drumlinoid ridge / large, buried	Paleodrainage S features a	Spillway central Direction unknown or unspecified axis	GEM_LINES 5061055 Spillway central axis (direction unknown or unspecified) 506 * Spillway central axis 114 Ic 111 O 113 Su 283 *	ve-marginal 2 verflow ubglacial	ContractionEnvironmentContraction293 * Not applicable302 Unknown 304 * Unspecified310 * Not applicable 287 * Defined287 * Defined	315 * Accurate		llway / central axis, eocurrent direction unknown	
	281 Till 283 * Unspecified			Ice-movement indicators	Image: second	lot applicable		3.08.01.002 * Buried drumlinoid (all)	Drumlinoid ridge / small, buried Feature too small to draw to scale. Point of observation and rotation (0 = North) are based at midpoint of symbol. Label optional: use generation field with text symbol 2.03.01.005.	Paleodrainage S features a	Spillway central Direction known axis	GEM_LINES 5061053 Spillway central axis (direction known) 506 * Spillway central axis 114 Ic 111 O 113 Su	Unspecified 2 e-marginal 2 lverflow ubglacial	293 * Not applicable 299 * Known 310 * Not applicable 287 * Defined	315 * Accurate	3.10.01.012 * Spillway central axis direction known) pa	Ilway / central axis, Line digitized using right-side rule. Arrow points in eocurrent direction known direction of flow.	
Anthropogenic featuresPitStatus inactive or unspecifiedGEM_POINTS4261057 Pit (status inactive or unspecified)426 * Pit	Introduction </td <td>Pit (status inactive or</td> <td>Pit / small, inactive Feature too small to draw to scale. Point of observation is based at midpoint of symbol.</td> <td>Ice-movement I Ice-movement I</td> <td>umlinoid ridgeAllGEM_LINES5631002 Drumlinoid ridge (all)563 * Drumlinoid ridge260 * Not applicable293 * Not applicable302 * Unknown310 * NumlinoidAllGEM POINTS5461002 Drumlinoid (all)546 * Drumlinoid260 * Not applicable293 * Not applicable302 * Unknown310 * N</td> <td>Tot applicable</td> <td>315 * Accurate</td> <td>3.08.01.018 * Drumlinoid ridge (all) - 3.08.01.005 * Drumlinoid (all)</td> <td>Drumlinoid ridge / large Drumlinoid ridge / small Feature too small to draw to scale. Point of observation and rotation (0 = North) are</td> <td>Paleodrainage I features c</td> <td>Paleodrainage All direction</td> <td>GEM_LINES 5751002 Paleodrainage direction (all) 575 * Paleodrainage direction 260 *</td> <td>Unspecified Not applicable 2</td> <td>293 * Not applicable112 Inferred 299 * Known310 * Not applicable288 * Not applicable</td> <td>316 * Not applicable</td> <td>B.10.01.010 * Paleodrainage direction all)</td> <td>eodrainage direction Line digitized using right-side rule. Arrow points in direction of flow.</td>	Pit (status inactive or	Pit / small, inactive Feature too small to draw to scale. Point of observation is based at midpoint of symbol.	Ice-movement I Ice-movement I	umlinoid ridgeAllGEM_LINES5631002 Drumlinoid ridge (all)563 * Drumlinoid ridge260 * Not applicable293 * Not applicable302 * Unknown310 * NumlinoidAllGEM POINTS5461002 Drumlinoid (all)546 * Drumlinoid260 * Not applicable293 * Not applicable302 * Unknown310 * N	Tot applicable	315 * Accurate	3.08.01.018 * Drumlinoid ridge (all) - 3.08.01.005 * Drumlinoid (all)	Drumlinoid ridge / large Drumlinoid ridge / small Feature too small to draw to scale. Point of observation and rotation (0 = North) are	Paleodrainage I features c	Paleodrainage All direction	GEM_LINES 5751002 Paleodrainage direction (all) 575 * Paleodrainage direction 260 *	Unspecified Not applicable 2	293 * Not applicable112 Inferred 299 * Known310 * Not applicable288 * Not applicable	316 * Not applicable	B.10.01.010 * Paleodrainage direction all)	eodrainage direction Line digitized using right-side rule. Arrow points in direction of flow.	
Anthropogenic featuresPitStatus activeGEM_POINTS4261056 Pit (status active)426 * Pit	281 Till 283 * Unspecified281 Till 283 * Unspecified281 Till 283 * Unspecified281 Till 281 Till281 Till 	Pit (status active)	Pit / small, active Feature too small to draw to scale. Point of observation is based at midpoint of symbol.	indicators		Tot applicable 287 * Defined	315 * Accurate	3.08.01.014 * Buried drumlin ridge	based at midpoint of symbol. Label optional: use generation field with text symbol 2.03.01.005. Drumlin ridge / small, buried Line digitized using right-side rule. Arc points in direction of flow.	Paleodrainage I 	Minor meltwater Marginal, overflow, subglacial, channel central axis supraglacial or unspecified; direction unknown or unspecified	GEM_LINES4971064 Minor meltwater channel central axis (marginal, overflow, subglacial, supraglacial or unspecified; direction unknown or unspecified)497 * Minor meltwater channel central axis255 M 	Iarginal2verflow2ubglacial2upraglacial2	291 Active 292 Inactive 297 * Unspecified302 Unknown 304 * Unspecified312 Proglacial 314 * Unspecified287 * Defined	315 * Accurate	B.10.01.009 * Minor meltwater channel central axis (marginal, overflow, subglacial, supraglacial or unspecified; direction unknown or unspecified)	ltwater channel / minor, eocurrent direction unknown	
Anthropogenic features Mine tailing All GEM_POLYS 4451002 Mine tailing (all) 445 * Mine tailing	551 Sand 281 Till 281 Till 283 * Unspecified 260 * Not applicable 291 Active 292 Inactive 3.03.01.007 *	Mine tailing (all)	Mine tailing	Ice-movement E indicators	Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of spectrum Image: set of	lot applicable		(all) 3.08.01.001 * Buried drumlin (all)	Image: Constraint of the second se	Paleodrainage I features c	Minor meltwater Marginal, overflow, subglacial, channel central axis supraglacial or unspecified; direction known	GEM_LINES 4971081 Minor meltwater channel central axis (marginal, overflow, subglacial, supraglacial or unspecified; direction known) 497 * Minor meltwater channel central axis 255 M	Unspecified 2 Iarginal 2 vverflow 2 ubglacial 2	291 Active 292 Inactive 297 * Unspecified299 * Known312 Proglacial 314 * Unspecified287 * Defined	315 * Accurate	3.10.01.008 * Minor meltwater channel Mo	Itwater channel / minor, eocurrent direction known Line digitized using right-side rule. Arrow points in direction of flow.	
Anthropogenic features Made ground (fill) All GEM_POLYS 4441002 Made ground (fill) (all) 444 * Made ground (fill)	260 * Not applicable 291 Active 292 Inactive 3.03.01.006 *	Made ground (fill) (all)	Made ground (fill)	Ice-movement I indicators	Image: Not applicable Image: Not applic	Tot applicable 287 * Defined	315 * Accurate	3.08.01.017 * Drumlin ridge (all)	• Drumlin ridge / large Line digitized using right-side rule. Arc points in direction of flow.	Paleodrainage I features c	Minor meltwater Lateral uphill left channel central axis	GEM_LINES 4971041 Minor meltwater channel central axis 497 * Minor meltwater 577 * 100 meltwater GEM_LINES 4971041 Minor meltwater channel central axis 497 * Minor meltwater 577 * 100 meltwater	upraglacial Unspecified Lateral up hill left 2 2	291 Active 299 * Known 312 Proglacial 287 * Defined 292 Inactive 314 * Unspecified		lirection known)	Itwater channel / minor, eral Drnamentations point uphill.	
Anthropogenic Quarry All GEM_POLYS 4561002 Quarry (all) 456 * Quarry	269 * Rock 291 Active 292 Inactive 3.03.01.010 *	Quarry (all)	Quarry / large, active; inactive Centroid marker 3.03.01.004 (active) or 3.03.01.005 (inactive) must be added with CartoRep.	Ice-movement I indicators		lot applicable		3.08.01.004 * Drumlin (all)	Drumlin ridge / small Feature too small to draw to scale. Point of observation and rotation (0 = North) are based at midpoint of symbol. The arrow points in direction of flow.	Paleodrainage I features c	Minor meltwater Lateral uphill right channel central axis	GEM_LINES 4971042 Minor meltwater channel central axis 497 * Minor meltwater 576 * 100 meltwater GEM_LINES (lateral uphill right) channel central axis 576 * 100 meltwater	2 Lateral up hill right 2 2	297 * Unspecified1291 Active299 * Known312 Proglacial 314 * Unspecified287 * Defined292 Inactive314 * Unspecified287 * Defined	315 * Accurate		ltwater channel / minor, eral bin	
	292 matrice 297 * Unspecified		(mactive) must be added with Cartokep.	Ice-movement indicators	ag-and-tail ridgeAllGEM_LINES 4721002 Crag-and-tail ridge (all) 472 * Crag-and-tail ridge 260 * Not applicable 293 * Not applicable 299 * Known 310 * Nag-and-tailAllGEM_POINTS1191002 Crag-and-tail (all) 119 * Crag-and-tail 260 * Not applicable 293 * Not applicable 299 * Known 310 * N				Crag-and-tail ridge / large Line digitized using right-side rule. Arrow points in direction of flow. Crag-and-tail ridge Feature too small to draw to scale; see striations for field observations. Point of	Paleodrainage I features c	Major meltwater All channel scarp	GEM_LINES 4961002 Major meltwater channel scarp (all) 496 * Major meltwater channel scarp 253 La GEM_LINES 4961002 Major meltwater channel scarp (all) 496 * Major meltwater channel scarp 255 M	ateral 2 Iarginal 2	297 * Unspecified299 * Known312 Proglacial 314 * Unspecified287 * Defined292 Inactive314 * Unspecified287 * Defined	315 * Accurate	3.10.01.005 * Major meltwater channel scarp (all) Major meltwater channel	Itwater channel / major, Paleoflow direction can be indicated with an additional Poleodrainage direction line. Line digitized using right-	
Anthropogenic Quarry Status inactive or unspecified GEM_POINTS 4281057 Quarry (status inactive or unspecified) 428 * Quarry	269 * Rock 292 Inactive 297 * Unspecified 300 * Not applicable 310 * Not applicable 310 * Not applicable 310 * Not applicable 3.03.01.005 * unspecified)	Quarry (status inactive or	Quarry / small, inactive Feature too small to draw to scale. Point of observation is based at midpoint of symbol	Ice-movement indicators C 1 Ice-movement icelianters					observation and rotation (0 = North) are based at midpoint of symbol. The arrow points in direction of flow.			679 M 113 Su 283 *	Ieltwater corridor 2 ubglacial 0 Unspecified 0				known; paleocurrentside rule. Opposite sides of channel must be digitized in other direction using same symbol. The legend symbol 3.15.01.007 shows the 2 sides of the channel. Ornamentations point into channel.	
Interview Inter	269 * Rock291 * Active300 * Not applicable310 * Not applicable3.03.01.004 *	Quarry (status active)	Quarry / small, active Feature too small to draw to scale. Point of observation is based at midpoint of symbol.	Ice-movement F		lot applicable		3.08.01.039 * Pre-crag (all)	Feature too small to draw to scale and/or field observation. Point of observation and rotation (0 = North) are based at midpoint of symbol. The arrow points in direction of	Paleodrainage S features 1	Subglacial Confidence approximate meltwater corridor margin	GEM_LINES 1861006 Subglacial meltwater corridor margin 186 * Subglacial meltwater 113 * (confidence approximate) corridor margin 186 * Subglacial meltwater 113 *	Subglacial 2	293 * Not applicable 299 * Known 310 * Not applicable 285 * Approximate	315 * Accurate	$\frac{3.10.01.016 * \text{Subglacial meltwater}}{\text{conridor margin (confidence approximate)}} \qquad $	oglacial meltwater corridor rgin / approximatePaleoflow direction can be indicated with an additional Paelodrainage direction line. Line digitized using right- side rule. Opposite sides of channel must be digitized in other direction using same symbol. The legend symbol	
Anthropogenic featuresPeat-bog miningAllGEM_POLYS4531002 Peat-bog mining (all)453 * Peat-bog mining	260 * Not applicable291 Active 292 Inactive 297 * Unspecified291 Active 292 Inactive 297 * Unspecified3.03.01.008 *	Peat-bog mining (all)	Peat bog mining	Ice-movement I indicators c	rge groove ntral long axis Direction unknown or unspecified Wet Mathematical Control and Control axis and Co	lot applicable 287 * Defined	315 * Accurate	3.08.01.039 Pre-crag observation location (all) 3.08.01.022 * Large groove central long axis (direction unknown or unspecified)	Groove / large, ice-flow direction unknown	Paleodrainage S features 1	Subglacial Confidence defined meltwater corridor Image: Confidence defined	GEM_LINES 1861014 Subglacial meltwater corridor margin 186 * Subglacial meltwater corridor margin 113 *	Subglacial 2	293 * Not applicable 299 * Known 310 * Not applicable 287 * Defined	315 * Accurate	3.10.01.015 * Subglacial meltwater corridor margin (confidence defined)	3.15.01.013 shows the 2 sides of the channel. Ornamentations point into channel. oglacial meltwater corridor rgin /defined Paleoflow direction can be indicated with an additional Paelodrainage direction line. Line digitized using right-	
Anthropogenic features Drillhole location All GEM_POINTS 4131002 Drillhole location (all) 413 * Drillhole location Image: Comparison of the state o	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 300 * Not applicable 3.03.01.001 *	Drillhole location (all)	Drillhole location Point of observation is at the midpoint of symbol. d	Ice-movement I indicators c	rge groove ntral long axis Direction known GEM_LINES 4841053 Large groove central long axis 484 * Large groove central long axis 260 * Not applicable 293 * Not applicable 299 * Known 310 * Not applicable 310 * Not appli	Tot applicable 287 * Defined	315 * Accurate	unspectified) 3.08.01.021 * Large groove central long axis (direction known)	Groove / large, ice-flow Line digitized using right-side rule. Arc points in direction of flow.	I	margin						other direction using same symbol. The legend symbol 3.15.01.012 shows the 2 sides of the channel. Ornamentations point into channel.	
Group Feature Modifier Feature Class **Control **Feature Type Bedrock features Area of sinkholes All GEM_POLYS 4591002 Area of sinkholes (all) 459 * Area of sinkholes	**Subset **Status **Sense or Orientation Dependence **Location Confidence **True Ground Length 260 * Not applicable 293 * Not applicable Image: Confidence Image: Confidence 3.04.01.007 *	**Symbol Symbol Representation Symbol Representation Area of sinkholes (all) Image: Comparison of the symbol representation of the symbol representation	Short Legend Description Notes ation Sinkhole / large Can be used to represent areas of sinkholes or large sinkholes. Polygon outline digitized with right-side rule	e.	Index bedrock or ftPoorly defined; direction unknown or unspecifiedGEM_POINTS; birection unknown or unspecified)5441070 Fluted bedrock or drift (poorly defined; direction unknown or unspecified)544 * Fluted bedrock or drift birection unknown or unspecified)317 Bedrock birection unknown or unspecified)302 Unknown 304 * Unspecified310 * N and	lot applicable		3.08.01.030 * Fluted bedrock or drift (poorly defined; direction unknown or unspecified)	Fluted bedrock or drift / small, poorly defined, ice-flow direction unknown Feature too small to draw to scale and/or field observation. Point of observation and rotation (0 = North) are based at midpoint of symbol. Label optional: use generation field with text symbol 2.03.01.005.	Paleodrainage I features c	Partly buried All channel scarp	GEM_LINES 4661002 Partly buried channel scarp (all) 466 * Partly buried channel 260 * scarp	Not applicable 2	293 * Not applicable 299 * Known 310 * Not applicable 287 * Defined	315 * Accurate	B.10.01.011 * Partly buried channel scarp (all) $$ $-$	tly buried channel scarpPaleoflow direction can be indicated with an additional Paelodrainage direction line. Line digitized using right- side rule. Opposite sides of channel must be digitized in other direction using same symbol. The legend symbol2.15 01 008 shores the 2 sides of the shores line	
Bedrock features Sinkhole All GEM_POINTS 4331002 Sinkhole (all) 433 * Sinkhole	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 3.04.01.001 *	Sinkhole (all)	Centroid marker 3.04.01.004 must be added with CartoRep. Ornamentations point into depression. Sinkhole / small Feature too small to draw to scale. Point of observation is based at midpoint of symbol. This symbol is not	n Ice-movement F	Inted bedrock or Poorly defined; direction GEM_LINES 5431070 Fluted bedrock or drift, central long axis 543 * Fluted bedrock or drift, 317 Bedrock 295 * Poorly defined 302 Unknown 310 * N	Not applicable 287 * Defined	315 * Accurate	3.08.01.030 Fluted bedrock or drift, measurement location (poorly defined; direction unknown or unspecified)3.08.01.034 * Fluted bedrock or drift,	Fluted bedrock or drift / central	Paleodrainage I features c	Buried valley Direction unknown or unspecified central axis	GEM_LINES 6431055 Buried valley central axis (direction unknown or unspecified) 643 * Buried valley central axis 260 * 1	Not applicable 2	293 * Not applicable302 Unknown 304 * Unspecified310 * Not applicable 287 Defined 287 Defined		B.10.01.014 * Buried valley central axis direction unknown or unspecified)	3.15.01.008 shows the 2 sides of the channel. Ornamentations point into channel. ried valley / central axis, eodrainage direction not the width.	
Bedrock features Bedrock scarp All GEM_LINES 4801002 Bedrock scarp (all) 480 * Bedrock scarp	I25 Edge of caldera 678 Edge of glacial trough 677 Lithologically controlled293 * Not applicable 299 * Known310 * Not applicable 299 * Known287 * Defined315 * Accurate3.04.01.005 *	Bedrock scarp (all)	Bedrock scarp Line digitized using right-side rule. Ornamentations on downslope.	indicators da	ft, central long unknown or unspecified (poorly defined; direction unknown or unspecified) central long axis 552 Unconsolidated schiments 304 * Unspecified long axis 283 * Unspecified long axis 304 * Unspecified long axis 104 * Unspecified long axis long axis 104 * Unspecified long axis 104 * Fluted bedrock or drift long axis	lot applicable		central long axis (poorly defined; direction unknown or unspecified) - 3.08.01.029 * Fluted bedrock or drift	Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly defined, ice-flow direction unknown Image: margin long axis, poorly direction unknown Image: margin long axis, poorly direction unknown Image: margin long axis, poorly direction unknown Image: margin long axis, poorly di	Paleodrainage I features c	Buried valley Direction known central axis	GEM_LINES 6431053 Buried valley central axis (direction known) 643 * Buried valley central axis 260 * 1	Not applicable 2	293 * Not applicable 299 * Known 310 * Not applicable 285 Approximate 293 * Onspecified 287 Defined 290 * Unspecified	315 * Accurate	un un	ried valley / central axis, eodrainage direction known Arrows point in direction of flow	
Bedrock features Lineament or lineation in bedrock All GEM_LINES 4941002 Lineament or lineation in bedrock (all) 494 * Lineament or lineation in bedrock	676 Structurally controlled 283 * Unspecified 293 * Not applicable 300 * Not applicable 310 * Not applicable 287 * Defined 315 * Accurate 3.04.01.006 * bedrock (all)	Lineament or lineation in	Lineament/lineation in bedrock Linear features that have been determined from aerial photographs or remotely sensed imagery, but not	indicators d	ft known F_PFLOW direction known) 588 Stoss and lee 552 Unconsolidated sediments 283 * Unspecified 283 * Unspecified 100 mm mm			(poorly defined; direction known) 3.08.01.029 Fluted bedrock or drift, measurement location (poorly defined; direction known)	poorly defined, ice-flow direction known rotation (0 = North) are based at midpoint of symbol. The arrow points in direction of flow. Label optional: use generation field with text symbol 2.03.01.005.	Paleodrainage I features	Piping depression All	GEM_POINTS 4251002 Piping depression (all) 425 * Piping depression 260 * 1	Not applicable 2	293 * Not applicable 300 * Not applicable 310 * Not applicable		B.10.01.002 * Piping depression (all)	ing depression Feature too small to draw to scale. Point of observation is based at midpoint of symbol. This symbol is not orientated.	
Bedrock features Tor All GEM_POINTS 4371002 Tor (all) 437 * Tor	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 3.04.01.003 *	Tor (all) +	Tor Feature too small to draw to scale. Point of observation is based at midpoint of symbol.	Ice-movement F indicators d	Integration	Iot applicable 287 * Defined	315 * Accurate	3.08.01.033 * Fluted bedrock or drift, central long axis (poorly defined; direction known)		• Paleodrainage A features	Alluvial fan All	GEM_POINTS 4091002 Alluvial fan (all) 409 * Alluvial fan 260 * 1	Not applicable 2	293 * Not applicable299 Known 302 Unknown 304 * Unspecified305 * Fluvial		din 🔰	uvial fan / paleocurrent ection unknown;Feature too small to draw to scale. Point of observation and rotation $(0 = North)$ are based at midpoint of symbol. Triangle opens in direction of progradation. For unknown direction the symbol is pointing up.	
Bedrock features Mineral occurrence All GEM_POINTS 1901002 Mineral occurrence (all) 190 * Mineral occurrence	613 Deposit 612 Developed prospect 615 Past production293 * Not applicable300 * Not applicable310 * Not applicable3.04.01.008 *	Mineral occurrence (all)	Mineral occurrence Point of observation is based at midpoint of symbol.	Ice-movement F	Intel bedrock or Well defined or GEM_POINTS; 5441072 Fluted bedrock or drift (well defined or bedrock or drift (well defined or bedroc	lot applicable		3.08.01.007 * Fluted bedrock or drift	Fluted bedrock or drift / small, Feature too small to draw to scale and/or field observation. Point of observation and	Paleodrainage I features 1	Paleocurrent Sediments measurement	F_PFLOW 5151052 Paleocurrent measurement location (sediments) 515 * Paleocurrent measurement location 590 Cl 243 Cl	last imbrications 2 rossbeds	293 * Not applicable 299 * Known 116 Glaciofluvial 313 Subglacial		3.10.01.003 Paleocurrent measurement ocation (sediments)	eocurrent measurement / Field observation. Point of observation and rotation (0 = North) are based at midpoint of symbol. The arrow	
	614 Production 611 Prospect 610 Showing 616 Unknown			indicators d	ft unspecified; direction unknown or unspecified; direction unknown or unspecified) unknown or unspecified \$52 Unconsolidated sediments 283 * Unspecified \$298 Well defined \$04 * Unspecified			(well defined or unspecified; direction unknown or unspecified) 3.08.01.007 Fluted bedrock or drift, measurement location (well defined or	ice-flow direction unknown rotation (0 = North) are based at midpoint of symbol. Label optional: use generation field with text symbol 2.03.01.005.	1	location	158 * 1 unspec 593 Fl 584 Gi	Depositional cified lute cast rooves	314 * Unspecified			points down paleocurrent.	
Bedrock features Small outcrop All GEM_POINTS 4211002 Small outcrop (all) 421 * Small outcrop	283 * Unspecified 28	Small outcrop (all) ×	Outcrop, small Feature too small to draw to scale. Point of observation is based at midpoint of symbol.	n Ice-movement F indicators d	Intel bedrock or ft, central longWell defined or unspecified; direction (well defined or unspecified; direction unknown543 * Fluted bedrock or drift, 317 Bedrock central long axis297 * Unspecified 302 Unknown 304 * Unspecified310 * N 304 * Unspecified	lot applicable 287 * Defined	315 * Accurate	unspecified; direction unknown or unspecified) 3.08.01.020 * Fluted bedrock or drift, central long axis (well defined or	Image: Point of the second			162 Lo 591 Pl 594 Ri 595 Ri 139 Ri	anar crossbedding ipple azimuth ipple crest ipple laminations					
Group Feature Modifier Feature Class **Control **Feature Type Eolian features Active dune field All GEM_POLYS 4421002 Active dune field (all) 442 * Active dune field	**Subset **Status **Sense or Orientation **Depositional or Erosional Environment **Location Confidence **True Ground Length 260 * Not applicable 291 * Active Image: Confidence Solution 3.05.01.005 *	**Symbol Symbol Representation Legend Symbol Representation Active dune field (all) Image: Constraint of the symbol representation Image: Constraint of the symbol representation	d Short Legend Description Notes ation Dune / active dune field May include blowout zones.	Ice-movement F indicators d	is unknown or unspecified or unspecified or unspecified bedrock or drift (well defined or unspecified; direction known) 544 * Fluted bedrock or drift 587 Roche moutonnée 588 Stoss and lee 588 Stoss and lee 588 Well defined or 588 Stoss and lee 588 Stoss and lee 588 Stoss and lee 588 Well defined or 588 Stoss and lee 588 Well defined or 588 Stoss and lee 58	lot applicable		unspecified; direction unknown or unspecified) 3.08.01.006 * Fluted bedrock or drift (well defined or unspecified; direction	unknown Image: Second seco	Paleodrainage I features 1	Paleocurrent Bedrock erosional forms measurement location	F_PFLOW 5151004 Paleocurrent measurement location (bedrock erosional forms) 515 * Paleocurrent 156 Ca (bedrock erosional forms) 515 * Paleocurrent 156 Ca measurement location 153 Co 157 *	avettos 2 omma forms Frosional unspecified	293 * Not applicable 299 * Known 310 * Not applicable		3.10.01.004 Paleocurrent measurement ocation (bedrock erosional forms)	eocurrent measurement / Field observation. Point of observation and rotation (0 = lrock (p, s-forms) North) are based at midpoint of symbol. The arrow points down paleocurrent.	
Eolian features Dune crest All GEM_LINES 4781002 Dune crest (all) 478 * Dune crest	254 Longitudinal 291 Active 300 * Not applicable 310 * Not applicable 287 * Defined 315 * Accurate 3.05.01.003 *	Dune crest (all)	Dune / large Paleowind direction can be indicated with an additional		known 552 Unconsolidated sediments 283 * Unspecified 209 Whaleback 665 Constraints 155 Consolidated sediments 283 * Unspecified 209 Whaleback 655 Constraints 155 Consolidated sediments 283 * Unspecified 209 Whaleback 655 Constraints 155 Constraints 155 Consolidated sediments 285 * Consolidated sediments 2			known) 3.08.01.006 Fluted bedrock or drift, measurement location (well defined or unspecified; direction known)	flow. Label optional: use generation field with text symbol 2.03.01.005.			159 Fe 159 Fe 155 Fu 151 M 152 Si	oresets urrows Iuschelbruchen ichelwannen				points down parcocurrent.	
Eolian features Dune Direction unknown or GEM_POINTS; 4141055 Dune (direction 414 * Dune	262 Parabolic 283 * Unspecified292 Inactive 297 * Unspecified11 mm11 mm11 mm254 Longitudinal 254 Depictive291 Active 202 Value302 Unknown 202 Value310 * Not applicable3.05.01.009 *	Dune (direction	Sediment transport direction line. Multiple lines must be digitized individually. The legend symbol 3.15.01.002 a set of 3 curved dune lines. Dune / small. paleowind Feature too small to draw to scale and/or field	be Ice-movement F is indicators d	uted bedrock or ft, central long isWell defined or unspecified; direction knownGEM_LINES5431071 Fluted bedrock or drift, central long axis543 * Fluted bedrock or drift, 587 Roche moutonnée central long axis297 * Unspecified 298 Well defined299 * Known310 * N310 * NWell defined or unspecified; direction known)S43 * Fluted bedrock or drift, central long axis543 * Fluted bedrock or drift, 587 Roche moutonnée 588 Stoss and lee sediments 283 * Unspecified297 * Unspecified 298 Well defined299 * Known310 * N	287 * Defined		3.08.01.019 * Fluted bedrock or drift, central long axis (well defined or unspecified; direction known)	Fluted bedrock or drift / central long axis, ice-flow direction known	Group	Feature Modifier	Feature Class **Control **Feature Type	pindle flutes **Subset	**Status **Sense or Orientation **Depositional or Erosional **Location Confidence	**True Ground Length	**Symbol Symbol Representation Symbol Representation	Short Legend Description Notes	
Eolian features Dune Direction unknown of unspecified GEM_POINTS, 4141053 Dune (direction known) 414 * Dune Eolian features Dune Direction known GEM_POINTS; 4141053 Dune (direction known) 414 * Dune	262 Parabolic 283 * Unspecified292 Inactive 297 * Unspecified304 * Unspecifiedunknown or un 3.05.01.009 D (direction unknown or 3.05.01.009 D (direction unknown or 0.05.01.009 D (direction unknown or 0.05.01.008 *254 Longitudinal291 Active299 * Known310 * Not applicable3.05.01.008 *	nspecified) Pune observation location nown or unspecified) Dune (direction known)	Dune / small, paleowind Feature too small to draw to scale and/or field Ourse / small, paleowind Feature too small to draw to scale and/or field	of Ice-movement I indicators	Image: series of the series	Not applicable 287 * Defined 104 Inferred	10 not application	cable 3.08.01.025 * Ice-flow direction (direction unknown or unspecified) -	Image: Constraint of the second sec	Paleogeography I features s	Limit of Confidence approximate; submergence environment lacustrine	approximate; environment lacustrine)		293 * Not applicable299 * Known308 * Lacustrine285 * Approximate		confidence approximate; environment acustrine)	nit of submergence / Line digitized using right-side rule. Ornamentations point basinward or downslope.	
Eolian features Eolian lag deposit Deflation surface GEM_POLYS 1501022 Eolian lag deposit 150 * Eolian lag deposit	262 Parabolic292 Inactive3.05.01.008 D283 * Unspecified297 * Unspecified(direction known)	Eolian lag deposit	Dune / small, paleowind Feature too small to draw to scale and/or field direction known observation. Point of observation and rotation (0 = North) are based at midpoint of symbol. The symbol points downslope. Eolian lag deposit (deflation Deflation surface.	Ice-movement I indicators	Image: set of the set of	Tot applicable 287 * Defined 104 Inferred	316 * Not applicabl	cable 3.08.01.024 * Ice-flow direction (direction known)	Ice-flow direction / known Line digitized using right-side rule. Arrow points in direction of flow.		submergence lacustrine	GEM_LINES 4931017 Limit of submergence (confidence defined; environment lacustrine) 493 * Limit of submergence 260 * 100 × 10				acustrine)	nit of submergence / Line digitized using right-side rule. Ornamentations point basinward or downslope.	
Eolian features Paleowind All F_PFLOW 5161002 Paleowind measurements 516 * Paleowind	129 Dune foresets 293 * Not applicable 299 * Known 310 * Not applicable 3.05.01.002 Paper	Face)	surface) Paleowind measurement Field observation, measurement from dune foresets or		Image: spersal train rrginConfidence approximate;GEM_LINES approximate; left side)1491093 Dispersal train margin (confidence approximate; left side)149* Dispersal train margin187* Left side293* Not applicable299* Known310* Not approximate;	Tot applicable 285 * Approximate	ate 315 * Accurate	3.08.01.043 * Dispersal train margin (confidence approximate; left side)	approximate of the dispersal dum englished dispersal dum axis, seep side of		submergence environment marine					approximate; environment approximate; environm	point basinward or downslope.	
Eolian features Paleowind measurements location All F_PFLOW 5161002 Paleowind measurements location (all) 516 * Paleowind measurements location Eolian features Deflation landform Direction unknown or GEM_POINTS 4111055 Deflation landform 411 * Deflation landform	574 * Dune orientation location (all)	Deflation landform	location dune orientation. Point of observation and rotation (0 =	Ice-movement	spersal train confidence approximate; GEM_LINES 1491094 Dispersal train margin (confidence instruction) 149 * Dispersal train margin 188 * Right side 293 * Not applicable 299 * Known 310 * Not applicable 30 * Not applicable	Tot applicable 285 * Approximate		3.08.01.044 * Dispersal train margin (confidence approximate; right side)	Dispersal train margin / approximate Line digitized using right-side rule. The legend symbol 3.15.01.011 shows the 2 sides of the dispersal train. Ornamentations point toward dispersal train axis, steep side of	Paleogeography I features	submergence marine	GEM_LINES 4931018 Limit of submergence (confidence defined; environment marine) 493 * Limit of submergence 260 * 1 GEM_LINES 4931009 Limit of submergence (confidence defined; environment marine) 493 * Limit of submergence defined; environment marine) 260 * 1				confidence defined; environment de narine)		
Eolian features Deflation landform Direction unknown or unspecified GEM_POINTS 4111055 Deflation landform (direction unknown or unspecified) 411 * Deflation landform Eolian features Deflation landform Direction known GEM_POINTS 4111055 Deflation landform (direction unknown or unspecified) 411 * Deflation landform Eolian features Deflation landform Direction known GEM_POINTS 4111053 Deflation landform (direction known) 411 * Deflation landform	208 Deflation hollow292 Inactive304 * Unspecified(direction unknown)283 * Unspecified297 * Unspecified297 * Unspecified(direction unknown)	Deflation landform nown or unspecified) Deflation landform wn) O		I Ice-movement I n indicators n	spersal train Confidence defined; left GEM_LINES 1491095 Dispersal train margin (confidence 149 * Dispersal train margin 187 * Left side 293 * Not applicable 299 * Known 310 * N	Tot applicable 287 * Defined	315 * Accurate	3.08.01.041 * Dispersal train margin	Dispersal train margin / defined Line digitized using right-side rule. The legend symbol 3.15.01.010 shows the 2 sides of the dispersal train. Ornamentations point toward dispersal train axis, steep side of	features s	submergence environment glaciomarine	approximate; environment glaciomarine)		293 * Not applicable299 * Known307 * Glaciomarine285 * Approximate293 * Not applicable299 * Known307 * Glaciomarine287 * Defined		glaciomarine)	ciomarine, approximate point basinward or downslope.	
Group Feature Modifier Feature Class **Control **Feature Type	283 * Unspecified 297 * Unspecified (direction known) **Subset **Status **Sense or Orientation **Depositional or Erosional **Location Confidence **True Ground Length	**Symbol Symbol Representation Symbol		Ice-movement I	spersal train urginConfidence defined; rightGEM_LINES defined; right side)1491096 Dispersal train margin (confidence defined; right side)149 * Dispersal train margin188 * Right side293 * Not applicable299 * Known310 * Not	lot applicable 287 * Defined	315 * Accurate	3.08.01.042 * Dispersal train margin	Dispersal train margin / defined Dispersal train margin / defined Line digitized using right-side rule. The legend symbol 3.15.01.010 shows the 2 sides of the dispersal train. Ornamentations point toward dispersal train axis, steep side of teeth face down ice.	Paleogeography I features s	submergence glaciomarine	defined; environment glaciomarine)				glaciomarine) glaciomarine glac		
Glacial and ice- contact features Recently deglaciated area All GEM_POLYS 1631002 Recently deglaciated area (all) 163 * Recently deglaciated area	164 Lichen-free 166 Oxidation zone 283 * Unspecified 165 Vegetation-free293 * Not applicable applicableEnvironmentConnectice Environment3.06.01.014 * area (all)	Representa	ation Recently deglaciated area This symbol is a white pattern over colour of geologica unit.	al Ice-movement 7 indicators n	In fabric easurement eationDirection unknown or unspecifiedF_PFLOW6001055 Till fabric measurement location (direction unknown or unspecified)600 * Till fabric measurement location131 * Till fabric293 * Not applicable 304 * Unspecified302 Unknown 304 * Unspecified310 * N 304 * Unspecified			3.08.01.026 Till fabric measurement location (direction unknown or unspecified)	Image: Till fabric measurement Field observation. Point of observation and rotation (0 = North) are based at midpoint	Paleogeography I features	submergence environment glaciolacustrine	approximate; environment glaciolacustrine)		Glaciolacustrine		confidence approximate; environment gla glaciolacustrine) glaciolacustrine	ciolacustrine, approximate point basinward or downslope.	
Glacial and ice- contact features Kettle All GEM_POLYS 4431002 Kettle (all) 443 * Kettle	165 Vegetation-free 165 Vegetation-free 165 Vegetation-free 165 Vegetation-free 260 * Not applicable 293 * Not applicable 165 Vegetation-free 165 Vegetation-free	Kettle (all)	Kettle / large Polygon outline digitized with right-side rule. Centroid marker 3.06.01.002 must be added with CartoRep. Ornamentations point into depression.	1	AutonControl			3.08.01.012 Till fabric measurement location (direction known) 3.08.01.009 Striation measurement	known Field observation. Point of observation (0 = North) are based at midpoint	Paleogeography I		GEM_LINES 4911006 Limit of glaciation (confidence 491 * Limit of glaciation 260 * 1			316 * Not applicable	B.11.01.006 * Limit of glaciation Li	nit of submergence / Line digitized using right-side rule. Ornamentations ciolacustrine, defined point basinward or downslope. nit of glaciation / Line digitized using right-side rule. The fine dotted line	
contact features	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 3.06.01.001 *	ß	Kettle / small Feature too small to draw to scale. Point of observation is based at midpoint of symbol. This symbol is not orientated.	indicators r	easurement unknown or unspecified defined; direction unknown or unspecified) location striations 584 Grooves 277 * Striations 277 * Striations			location (poorly defined; direction unknown or unspecified) 3.08.01.008 Striation measurement	Striation / poorly defined, ice- Field observation. Point of observation and rotation (0 - North) are based at midpoint of symbol. Label optional: use generation field with text symbol 2.03.01.005. If crossing features present the symbol 3.15.01.011 Crossed striations will be added once to the legend to show the relative age. Numbers indicate relative age, 1 being the oldest. Striation / poorly defined, ice- Field observation. Point of observation and rotation (0 = North) are based at midpoint	features		approximate) approximate) generalization GEM_LINES 4911014 Limit of glaciation (confidence defined) 491 * Limit of glaciation 260 * 100				confidence approximate)	or glacier side. nit of glaciation / defined Line digitized using right-side rule. The fine dotted line	
Glacial and ice- contact featuresOther moraine ridgeMinorGEM_LINES4991092 Other moraine ridge (minor)499 * Other moraine ridge	239 De Geer293 * Not applicable300 * Not applicable310 * Not applicable285 Approximate315 * Accurate3.06.01.012 *177 Minor lateral681 Minor moraine ridge176 Other transverse176 Other transverse177 Minor lateral177 Minor moraine ridge177 Minor lateral177 Min	Other moraine ridge	Moraine ridge / large, minor Multiple lines must be digitized individually. The legen symbol 3.15.01.003 is a set of moraine ridges.	nd indicators r	riation easurement cation how			location (poorly defined; direction known)	flow direction known of symbol. The arrow points down ice flow. Label optional: use generation field with text symbol 2.03.01.005. If crossing features present the symbol 3.15.01.011 Crossed			GEM_LINES 4861006 Ice-stream margin (confidence 486 * Ice-stream margin 260 * 1	Not applicable 2	293 * Not applicable 300 * Not applicable 310 * Not applicable 285 * Approximate	316 * Not applicable	Confidence defined) Image: Confidence defined 3.11.01.004 * Ice-stream margin Ice	stream margin / approximate Line digitized using right-side rule. Opposite sides of	
	683 Push moraine 267 Recessional 271 Rogen 283 * Unspecified				Image: second	lot applicable		3.08.01.011 Striation measurement location (well defined or unspecified;	Image: Striction / well defined, ice-flow direction unknown Field observation. Point of observation and rotation (0 = North) are based at midpoint of symbol. Label optional: use generation field with text symbol 2.03.01.005. If	Paleogeography I	Ice-stream margin Confidence defined	approximate) generation GEM_LINES 4861014 Ice-stream margin (confidence defined) 486 * Ice-stream margin 260 * 1	Not applicable 2	293 * Not applicable 300 * Not applicable 310 * Not applicable 287 * Defined		Confidence approximate) Image: Confidence approximate 3.11.01.003 * Ice-stream margin Ice	channel must be digitized in other direction using same symbol. The fine dotted line on the ice-stream side. stream margin / defined Line digitized using right-side rule. Opposite sides of channel must be digitized in other direction using same	
Glacial and ice- contact featuresMinor moraine unspecifiedOrientation unknown or unspecifiedGEM_POINTS GEM_POINTS unspecified6021074 Minor moraine (orientation unknown or unspecified)602 * Minor moraine (orientation unknown or unspecified)	304 * Unspecified (orientation un		Moraine ridge / small, minor, orientation unknown Feature too small to draw to scale. Point of observation is based at midpoint of symbol. This symbol is not orientated.	Ice-movement S indicators	cationunknown or unspecifiedunspecified)unspecified)unspecified)584 Grooves 277 * StriationsunspecifiedciationWell defined or unspecified; directionF_PFLOW5991071 Striation measurement location (well defined or unspecified; direction known)599 * Striation measurement location171 Boulder-pavement striations297 * Unspecified 298 Well defined299 * Known 298 Well defined310 * N 298 Well defined	lot applicable		direction unknown or unspecified) 3.08.01.010 Striation measurement location (well defined or unspecified;	 A striation / well defined, ice-flow direction known 	Paleogeography I	Ice divide Confidence approximate	GEM_LINES 4851006 Ice divide (confidence approximate) 485 * Ice divide 260 * 1	Not applicable 2	293 * Not applicable 300 * Not applicable 310 * Not applicable 285 * Approximate	316 * Not applicable	3.11.01.002 * Ice divide (confidence	divide / approximate	
Glacial and ice- contact featuresMinor moraineOrientation knownGEM_POINTS; F_PFLOW6021073 Minor moraine (orientation known)602 * Minor moraine	(orientation kr 3.06.01.015 M	Minor moraine nown) S finor moraine location (orientation	Moraine ridge / small, minor, orientation knownFeature too small to draw to scale and/or field observation. Point of observation and rotation (0 = North) are based at midpoint of symbol.		cation known categorie and the second and the secon			direction known)	text symbol 2.03.01.005. If crossing features present the symbol 3.15.01.011 Crossed striations will be added once to the legend to show the relative age. Numbers indicate		Ice divide Confidence defined	GEM_LINES 4851014 Ice divide (confidence defined) 485 * Ice divide 260 * 1	Not applicable 2	293 * Not applicable 300 * Not applicable 310 * Not applicable 287 * Defined	316 * Not applicable	B.11.01.001 * Ice divide (confidence lefined)	divide / defined	
Glacial and ice- contact featuresMajor moraine ridgeLateral or laterofrontalGEM_LINES4981040 Major moraine ridge (lateral or laterofrontal)498 * Major moraine ridge	Z53 * Lateral 533 Laterofrontal293 * Not applicable299 * Known310 * Not applicable287 * Defined315 * Accurate3.06.01.006 * (lateral or later		Moraine ridge / large, major, lateral Line digitized using right-side rule. Ornamentations on glacier side.	Ice-movement S indicators n	Image: station from seasurement cation from teasurement from teasor from t	lot applicable		3.08.01.036 Striation measurement location from legacy data (poorly defined; direction unknown or	Image: Constraint of the symbol 2.03.01.005. If crossing features present the symbol 3.15.01.011 Crossed	Group	Feature Modifier	Feature Class **Control **Feature Type	**Subset	**Status **Sense or Orientation **Depositional or Erosional **Location Confidence	**True Ground	**Symbol Symbol Representation Symbol	Short Legend Description Notes	
Glacial and ice- contact features Major moraine ridge Medial GEM_LINES 4981047 Major moraine ridge (medial) 498 * Major moraine ridge	Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner Zowner	Major moraine ridge	Moraine ridge / large, major, medial		gacy dataPoorly defined; direction knownF_PFLOW6091069 Striation measurement location from legacy data (poorly defined; direction known)609 * Striation measurement location from legacy data171 Boulder-pavement striations295 * Poorly defined299 * Known310 * N	lot applicable	_	unspecified) 3.08.01.035 Striation measurement location from legacy data (poorly	striations will be added once to the legend to show the relative age. Numbers indicate	Permafrost and		GEM_POLYS 1681002 Nivation hollow (all) 168 * Nivation hollow 260 * 1		293 * Not applicable		Representation 3.12.01.020 * Nivation hollow (all)	vation hollow Polygon outline digitized with right-side rule. Centroid marker 3.12.01.021 must be added with CartoRep. Ornamentations point into depression.	
Glacial and ice- contact featuresMajor moraine ridgeEnd, interlobate, or unspecifiedGEM_LINES4981027 Major moraine ridge (end, interlobate, or unspecified)498 * Major moraine ridge	249 Interlobate (end, interlobate 283 * Unspecified (end, interlobate)	ate, or unspecified)	Moraine ridge / large, major, end		sation from gacy data 581 Chattermarks 584 Grooves 210 Mini crag-and-tail 585 Nail-heads			defined; direction known)	known optional: use generation field with text symbol 2.03.01.005. If crossing features present the symbol 3.15.01.011 Crossed striations will be added once to the legend to show the relative age. Numbers indicate relative age, 1 being the oldest.	Permafrost and	Thermokarst All depression	GEM_POLYS 4621002 Thermokarst depression (all) 462 * Thermokarst depression 260 * 100 ×	Not applicable 2 2 2	291 Active 292 Inactive 297 * Unspecified		3.12.01.017 * Thermokarst depression Thermokarst depression	ermokarst depression / large Polygon outline digitized with right-side rule. Centroid marker 3.12.01.006 must be added with CartoRep. Ornamentations point into depression.	
contact features ridge laterofrontal ice-cored (lateral ice-cored or laterofrontal ice-cored)	cored)	red or laterofrontal ice-	Moraine ridge / large, major, lateral ice-cored Line digitized using right-side rule. Ornamentations on glacier side.	11 1	Image: series of the series	lot applicable		3.08.01.038 Striation measurement location from legacy data (well defined or unspecified; direction unknown or	Image: Constraint of the symbol Striation / legacy data, well defined, ice-flow direction unknown Field observation compiled from legacy data. Point of observation and rotation (0 = North) are based at midpoint of symbol. Label optional: use generation field with text symbol 2.03.01.005. If crossing features present the symbol 3.15.01.011 Crossed	periglacial features	Thermokarst All depression	GEM_POINTS; 4361002 Thermokarst depression (all) 436 * Thermokarst depression 260 * 100	Not applicable 2 2 2	291 Active 300 * Not applicable 310 * Not applicable 292 Inactive 297 * Unspecified 310 * Not applicable		3.12.01.006 * Thermokarst depression all) 3.12.01.006 Thermokarst-depression	ermokarst depression /small Feature too small to draw to scale and/or field observation. Point of observation is based at midpoint of symbol.	
contact features ridge (medial ice-cored)	573 * Medial ice-cored 293 * Not applicable 300 * Not applicable 310 * Not applicable 287 * Defined 315 * Accurate 3.06.01.009 * (medial ice-column)	pred)	Moraine ridge / large, major, medial ice-cored		acy data well defined or unspecified; direction by the function of the legacy data (well defined or unspecified; direction by the legacy data (well defined or	lot applicable		unspecified) 3.08.01.037 Striation measurement location from legacy data (well defined	striations will be added once to the legend to show the relative age. Numbers indicate relative age, 1 being the oldest. relative age, 1 being the oldest. Striation / legacy data, well Field observation compiled from legacy data. Point of observation and rotation (0 =	Dormofrost and	Patterned ground All		2 ce-wedge polygons 2 fon sorted circles 2 fon sorted nets 2			observation location (all)	terned ground / large	
contact features ridge interlobate ice-cored, or unspecified ice-cored (end ice-cored, interlobate ice- cored, or unspecified ice-cored)	570 * Unspecified ice-cored unspecified ice	l, interlobate ice-cored, or e-cored)		le le	teation from known direction known) 581 Chattermarks 584 Grooves 210 Mini crag-and-tail 585 Nail-heads			or unspecified; direction known)	known optional: use generation field with text symbol 2.03.01.005. If crossing features present the symbol 3.15.01.011 Crossed striations will be added once to the legend to show the relative age. Numbers indicate relative age, 1 being the oldest.				on sorted polygons on sorted stripes and-wedge polygons orted circles			A A A A A A A A A A A A A A A A A A A		
contact features	260 * Not applicable293 * Not applicable299 * Known310 * Not applicable287 * Defined315 * Accurate3.07.01.007 *260 * Not applicable291 Active299 * Known305 Fluvial287 * Defined315 * Accurate3.07.01.008 *		Ice-contact scarp Line digitized using right-side rule. Ornamentations point downscarp. Ice-medical sides Second on drift ice Line digitized using right-side rule.	Group	FeatureModifierFeature Class**Control**Feature Type**Subset**Subset**Status**Sense or Orientation**De B B E	positional or rosional vironment **Location Confidence	**True Ground Length	ind **Symbol	Image: symbol Representation Legend Symbol Short Legend Description Representation Short Legend Description Notes	Permafrost and	Patterned ground All	GEM_POINTS; 4231002 Patterned ground (all) 423 * Patterned ground 246 Ic	orted nets orted polygons orted stripesecified e-wedge polygons 2	291 Active 300 * Not applicable 310 * Not applicable		3.12.01.002 * Patterned ground (all)	terned ground / small Feature too small to draw to scale and/or field	
contact features	292 Inactive 308 Lacustrine 297 * Unspecified 309 Marine 314 * Unspecified 314 * Unspecified	•••••	Ornamentations point basinward.	features	292 Inactive 297 * Unspecified			3.09.01.010 * Tension fracture (all)	Tension fracture	periglacial features		234 N 258 N	fon sorted circles2fon sorted nets2fon sorted polygons2fon sorted stripes2			3.12.01.002 Patterned-ground #	observation. Point of observation is based at midpoint of symbol.	
contact features	260 * Not applicable293 * Not applicable299 * Known310 * Not applicable287 * Defined315 * Accurate3.07.01.009 *260 * Not applicable293 * Not applicable302 Unknown310 * Not applicable287 * Defined315 * Accurate3.07.01.004 *		up-ice side.	features	value All GEM_LINES 1791002 Avalanche track (all) 179 * Avalanche track 260 * Not applicable 291 Active 299 * Known 310 * N value							606 Sa 235 So 259 So 265 So	and-wedge polygons orted circles orted nets orted polygons					
contact features unspecified (direction unknown or unspecified)	260 * Not applicable 293 * Not applicable 302 * Not applicable 310 * Not applicable 287 * Defined 313 * Accurate 3.07.01.004 * (direction unknown) 260 * Not applicable 293 * Not applicable 112 Inferred 310 * Not applicable 287 * Defined 315 * Accurate 3.07.01.003 *	nown or unspecified)	Esker ridge / buried, Esker ridge / buried, Esker ridge / buried, Line digitized using right-side rule. Chevrons point in	features	valanche trackAllGEM_POINTS1811002 Avalanche track (all)181 * Avalanche track260 * Not applicable291 Active 292 Inactive 297 * Unspecified299 * Known 302 Unknown 304 Unspecified310 * Nebris-flow trackAllGEM_LINES1801002 Debris-flow track (all)180 * Debris-flow track260 * Not applicable291 Active 297 * Unspecified299 * Known 304 Unspecified310 * N			3.09.01.001 * Avalanche track (all) 3.09.01.009 * Debris-flow track (all)	Avalanche track / small Feature too small to draw to scale. Point of observation and rotation (0 = North) are based at midpoint of symbol. The arrow points downhill. For unknown direction the symbol is pointing up. Debris flow track / large Line digitized using right-side rule.	Permafrost and I periglacial features	Felsenmeer All	GEM_POLYS 4391002 Felsenmeer (all) 439 * Felsenmeer 260 *	Not applicable 2	293 * Not applicable		3.12.01.023 * Felsenmeer (all) 4 4 4 4 4 4 4 4 4 4	senmeer / large	
contact features inferred (direction known or inferred)	260 * Not applicable 293 * Not applicable 302 Unknown 310 * Not applicable 287 * Defined 315 * Accurate 3.07.01.006 *	wn or inferred)	paleocurrent direction known direction of flow.		bris-flow track All GEM_POINTS 1821002 Debris-flow track (all) 182 * Debris-flow track 260 * Not applicable 291 Active 299 * Known 310 * N	lot applicable			Debris flow track / small Eeature too small to draw to scale. Point of observation and rotation (0 = North) are	Permafrost and I periglacial features		GEM_POINTS; 5351002 Felsenmeer (all) 535 * Felsenmeer 260 * 555 * Felsenmeer	Not applicable 2	293 * Not applicable 300 * Not applicable 310 * Not applicable		3.12.01.024 * Felsenmeer (all) 3.12.01.024 Felsenmeer observation ocation (all)	senmeer / small Feature too small to draw to scale and/or field observation. Point of observation is based at midpoint of symbol. This symbol is not orientated.	
contact features unspecified unknown or unspecified) Glacial and ice- Esker ridge Direction known or GEM_LINES 4811054 Esker ridge (direction 481 * Esker ridge	260 * Not applicable 293 * Not applicable 112 Inferred 310 * Not applicable 287 * Defined 315 * Accurate 3.07.01.005 *	nspecified)	direction unknown Esker ridge / paleocurrent Line digitized using right-side rule. Chevrons point in	Mass-wasting I features e	Image: And Status inactive or unspecified GEM_LINES 4901057 Landslide escarpment (status inactive or unspecified) 490 * Landslide escarpment 260 * Not applicable 292 Inactive as 302 Unknown and 304 Unspecified 10 * Mathematication of the status inactive or unspecified GEM_LINES 4901057 Landslide escarpment (status inactive or unspecified) 490 * Landslide escarpment 260 * Not applicable 292 Inactive as 299 * Known and 299 * Known and 297 * Unspecified 310 * Mathematication and 297 * Unspecified	lot applicable 287 * Defined	315 * Accurate	3.09.01.007 * Landslide escarpment (status inactive or unspecified)	Image: Constraint of the intervention of the interventi	neriglacial features t	Cryoplanation All terrace scarp	GEM_LINES 4741002 Cryoplanation terrace scarp (all) 474 * Cryoplanation terrace scarp 260 * 1 Scarp scarp scarp scarp 260 * 1	2 1 2	291 Active299 * Known310 * Not applicable287 * Defined292 Inactive15 Relict297 * Unspecified	315 * Accurate	$\begin{array}{c c} 3.12.01.014 * Cryoplanation terrace \\ \hline \mathbf{r} & $	Voplanation terrace scarp Includes ice-cast pseudomorph. Line digitized using right-side rule. Ornamentations on downslope.	
contact features inferred known or inferred) Glacial and ice- Esker ridge With beach Glacial and ice- Esker ridge	675 * With beach 293 * Not applicable 302 Unknown 310 * Not applicable 287 * Defined 315 * Accurate 3.07.01.011 *		direction known or inferred direction of flow. Esker ridge / with beach ibe / (r)	Mass-wasting I features e	Image: Status active carpment GEM_LINES 4901056 Landslide escarpment (status active) 490 * Landslide escarpment 260 * Not applicable 291 * Active 299 * Known 310 * Not applicable	lot applicable 287 * Defined	315 * Accurate	3.09.01.006 * Landslide escarpment (status active)	Landslide / escarpment, active Line digitized using right-side rule. The legend symbol 3.15.01.004 shows a curved line. Downslope to the right.	Permafrost and I periglacial features	Limit of permafrost All		Not applicable 2	293 * Not applicable 300 * Not applicable 310 * Not applicable 285 Approximate 287 Defined 290 * Unspecified	316 * Not applicable		nit of permafrost	
Image: Second state of the second s	675 * With beach 293 * Not applicable 112 Inferred 310 * Not applicable 287 * Defined 315 * Accurate 3.07.01.010 *		ridge/strandlines, paleocurrent direction unknown Esker ridge / with beach Line digitized using right-side rule. Chevrons point in ridge/strandlines, paleocurrent direction of flow		Image: scaleImage: scale </td <td>lot applicable</td> <td></td> <td>3.09.01.003 * Landslide scar (all)</td> <td>Image: Constraint of the sector of the se</td> <td>Permafrost and I periglacial features Permafrost and I</td> <td>Palsa or lithalsa All Pingo All</td> <td>GEM_POINTS4221002 Palsa or lithalsa (all)422 * Palsa or lithalsa170 Li 169 Pa 283 *GEM_POINTS;4241002 Pingo (all)424 * Pingo236 Cl</td> <td>ithalsa2alsa2Unspecified2losed system2</td> <td>291 Active 300 * Not applicable 310 * Not applicable 292 Inactive 297 * Unspecified 300 * Not applicable 291 Active 300 * Not applicable 310 * Not applicable</td> <td></td> <td>B.12.01.001 * Palsa or lithalsa (all) A Pa B.12.01.003 * Pingo (all) Pingo (all) Pingo (all)</td> <td>sa or lithalsa Feature too small to draw to scale. Point of observation is based at midpoint of symbol. go Feature too small to draw to scale and/or field</td>	lot applicable		3.09.01.003 * Landslide scar (all)	Image: Constraint of the sector of the se	Permafrost and I periglacial features Permafrost and I	Palsa or lithalsa All Pingo All	GEM_POINTS4221002 Palsa or lithalsa (all)422 * Palsa or lithalsa170 Li 169 Pa 283 *GEM_POINTS;4241002 Pingo (all)424 * Pingo236 Cl	ithalsa2alsa2Unspecified2losed system2	291 Active 300 * Not applicable 310 * Not applicable 292 Inactive 297 * Unspecified 300 * Not applicable 291 Active 300 * Not applicable 310 * Not applicable		B.12.01.001 * Palsa or lithalsa (all) A Pa B.12.01.003 * Pingo (all) Pingo (all) Pingo (all)	sa or lithalsa Feature too small to draw to scale. Point of observation is based at midpoint of symbol. go Feature too small to draw to scale and/or field	
direction known or inferred known or inferred)	ridges/strandlines299 * Knownridges/strandli inferred)113 Subglacial CO2 5 and a biology293 * Not applicable300 * Not applicable319 Glacial 220 Junctant287 * Defined315 * Accurate3.06.01.005 *	ines; direction known or >>> Crevasse-fill ridge (all) >>	ridge/strandlines, paleocurrent direction known or inferred direction of flow. Crevasse ridge Crevasse ridge	Mass-wasting F	trogressive thaw All GEM_POINTS 1841002 Retrogressive thaw flow (all) 184 * Retrogressive thaw 260 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 299 * Known 310 * Not applicable 291 Active 291 Active 299 * Known 310 * Not applicable 291 Active 291 Active 299 * Known 310 * Not applicable 291 Active 291 Active 299 * Known 310 * Not applicable 291 Active 291 A	lot applicable	_	3.09.01.004 * Retrogressive thaw flow	Image: Sector of the sector	Permafrost and periglacial features	Gelifluction-lobe or All solifluction-lobe	F_ENVIRON 261 O GEM_POINTS; 1261002 Gelifluction-lobe or solifluction-lobe (all) 126 * Gelifluction-lobe or solifluction-lobe or solifluction-lobe F_ENVIRON 1261002 Gelifluction-lobe or solifluction-lobe 128 Gelifluction-lobe	pen system5Unspecified2elifluction lobe2olifluction lobe2	532 Collapsed 297 * Unspecified 297 * Unspecified 310 * Not applicable 291 Active 299 * Known 292 Inactive 302 Unknown		3.12.01.003 Pingo observation location Image: Constraint of the second	observation. Point of observation is based at midpoint of symbol.lifluction or solifluction lobeFeature too small to draw to scale and/or field observation. Point of observation and rotation (0 =	
contact features Cirque headwall All GEM_LINES 4691002 Cirque headwall (all) 469 * Cirque headwall contact features Cirque headwall All GEM_LINES 4691002 Cirque headwall (all) 469 * Cirque headwall	682 Supragracial 283 * Unspecified320 Ice-contact 314 * Unspecified320 Ice-contact 314 * Unspecified260 * Not applicable293 * Not applicable299 * Known310 * Not applicable287 * Defined315 * Accurate3.06.01.004 *	Cirque headwall (all)	Cirque headwall Line digitized using right-side rule. Ornamentations point into circue	features f	flow 292 Inactive 302 Unknown 297 * Unspecified 304 Unspecified			(all)	 direction unknown; direction known direction unknown; direction known based at midpoint of symbol. The arrow points downhill. For unknown direction the symbol is pointing up. 	Permafrost and I	Rock glacier All	GEM_POINTS; 4311002 Rock glacier (all) 431 * Rock glacier 260 *	Unspecified 2 Not applicable 2	297 * Unspecified 304 Unspecified 291 Active 299 * Known 310 * Not applicable		3.12.01.022 Gelifluction-lobe or solifluction-lobe observation location all) 3.12.01.004 * Rock glacier (all)	North) are based at midpoint of symbol. The symbol points downslope. For unknown direction the symbol is pointing up. ck glacier Feature too small to draw to scale and/or field	
contact features contact features Glacial and ice- contact features Arête All GEM_LINES 4641002 Arête (all) 464 * Arête	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 287 * Defined 315 * Accurate 3.06.01.003 *	Arête (all)	Arête	Mass-wasting U features r	All Sem_POINTS 1851002 Unspecified slope-movement (all) 185 * Unspecified slope- novement (all) 185 * Unspecified slope- movement (all) 185 * Unspecified slope- u 195 * Unspecified 195 * Unspecified slope- u	lot applicable		3.09.01.005 * Unspecified slope- movement (all)	Image: Constraint of the second se	Perigiacial features	Rock pings	⁷ _ENVIRON	2 2	292 Inactive 302 Unknown 297 * Unspecified 304 Unspecified		3.12.01.004 Rock-glacier observation ocation (all)	observation. Point of observation and rotation (0 = North) are based at midpoint of symbol. The symbol points downhill. For unknown direction the symbol is pointing up.	
Glacial and ice- contact features Ice-contact delta All GEM_POINTS 4161002 Ice-contact delta (all) 416 * Ice-contact delta	302 Unknown 307 Glaciomarine	Ice-contact delta (all)	Ice-contact delta /paleocurrent direction unknown; Feature too small to draw to scale. Point of observation and rotation (0 = North) are based at midpoint of symb Triangle opens in direction of progradation. For		FeatureModifierFeature Class**Control**Feature Type**Subset**Status**Sense or Orientation**De B	positional or rosional vironment	**True Ground Length	ınd **Symbol	M Legend Symbol Representation Short Legend Description Notes	Permafrost and periglacial features Permafrost and I		F_ENVIRON		293 * Not applicable 300 * Not applicable 310 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable		3.12.01.005 * Rock pingo (all) A Ro 3.12.01.005 Rock-pingo observation ocation (all) A Ro 3.12.01.012 Rock-blister observation ocation (all) Ro Ro	ck pingoFeature too small to draw to scale and/or field observation. Point of observation is based at midpoint of symbol. This symbol is not orientated.ck blisterField observation. Point of observation is based at midpoint of symbol. This symbol is not orientated.	
Glacial and ice- Kame All GEM_POINTS 4171002 Kame (all) 417 * Kame	304 Unspecified 314 * Unspecified	Kame (all)	paleocurrent direction known Triangle opens in direction of progradation. For unknown direction the symbol is pointing up.	Miscellaneous A features	Innular depression All GEM_POLYS 1011002 Annular depression (all) 101 * Annular depression 260 * Not applicable 293 * Not applicable Image: Contraction of the contraction	aronment commence		3.14.01.023 * Annular depression (all)	Representation Annular depression / large	periglacial features d Permafrost and periglacial features d	observation location	- observation location S_ENVIRON 1451002 Rock-burst observation location (all) 145 * Rock-burst observation location (all) 145 * Rock-burst observation location	Not applicable 2	293 * Not applicable 300 * Not applicable 310 * Not applicable		ocation (all) Image: Constraint of the second sec	midpoint of symbol. This symbol is not orientated.ck burstField observation. Point of observation is based at midpoint of symbol. This symbol is not orientated.	
Glacial and ice- contact features Kame All GEM_POINTS 4171002 Kame (all) 417 * Kame	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 3.07.01.002 *	*	Kame Feature too small to draw to scale. Point of observation is based at midpoint of symbol.	Miscellaneous A features	Image: Inclusion of the pression of the pressio	lot applicable		3.14.01.024 * Annular depression (all)	Image: Constraint of the second state of the second sta	Permafrost and periglacial features	Ground ice All	GEM_POINTS; F_ENVIRON1891002 Ground ice (all)189 * Ground ice142 Ground ice141 Second283 *	lacier Ice 2 egregated ice Unspecified	293 * Not applicable 300 * Not applicable 310 * Not applicable		3.12.01.019 * Ground ice (all) Image: Ground-ice observation ocation (all) Image: Ground-ice observation ocation (all) Image: Ground-ice observation ocation (all)	ound ice observation Ground ice. Point of observation is based at midpoint of symbol. This symbol is not orientated.	
Group Feature Modifier Feature Class **Control **Feature Type Man-unit Conformation Conformation Conformation Conformation	**Subset **Sense or Orientation **Depositional or Erosional Environment **Location Confidence **True Ground Length 260 * Not applicable 202 * Not applicable 202 * Not applicable 200 * Not applicable 200 * Not applicable	**Symbol Symbol Representation Legend Symbol Representation Representation	d bl ation Short Legend Description Notes	Miscellaneous E features	PaporitesAllGEM_POLYS6421002 Evaporites (all)642 * Evaporites660 Salt flats 283 * Unspecified293 * Not applicableImage: Comparison of the compari			3.14.01.017 * Evaporites (all)	Evaporites Use to identify salt precipitates (evaporite sensu lato) from groundwater flow at the surface of a variety of sediments, but dominantly in lacustrine sediments.	Group Shoreline features	Feature Modifier Pre-existing All	Feature Class **Control **Feature Type GEM_LINES 5371002 Pre-existing coastline (all) 537 * Pre-existing coastline 232 Back	**Subset	**Status **Sense or Orientation **Depositional or Erosional Environment **Location Confidence 293 * Not applicable 300 * Not applicable 308 Lacustrine 287 * Defined	**True Ground Length 315 * Accurate	**Symbol Symbol Representation Legend Symbol Representation 8.13.01.011 * Pre-existing coastline Pre-existing coastline	Short Legend Description Notes e-existing coastline The nature of the pre-existing coastline (pre-	
boundaries boundary (confidence defined)	260 * Not applicable293 * Not applicable300 * Not applicable310 * Not applicable287 * Defined316 * Not applicable3.02.01.001 * (confidence de260 * Not applicable293 * Not applicable300 * Not applicable310 * Not applicable285 * Approximate316 * Not applicable3.02.01.002 *	efined)	Geological contact / defined Geological contact /	Miscellaneous E features to	tensive gullied rainAllGEM_POLYS6041002 Extensive gullied terrain (all)604 * Extensive gullied terrain260 * Not applicable291 Active 292 Inactive 297 * UnspecifiedComparisonCo			3.14.01.005 * Extensive gullied terrain (all)	Extensive gullied terrain		coastline	233 BG 233 BG 274 SH 276 St 282 TG	erm ² horeline trandline ombolo	309 Marine 314 * Unspecified		all)	development, natural coastal migration, or other) will appear in the remark field and will be shown in the map legend.	
boundaries boundary (confidence approximate)	260 * Not applicable 293 * Not applicable 500 * Not applicable 510 * Not applicable 285 * Approximate 516 * Not applicable 5.02.01.002 * (confidence applicable 260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 104 * Inferred 316 * Not applicable 3.02.01.003 * (confidence applicable	pproximate)	approximate Geological contact / inferred	Miscellaneous I features	672 Gravel lag 283 * Unspecified			3.14.01.013 * Lag deposits (all)		Shoreline features	Terrace scarp All	GEM_LINES 5081002 Terrace scarp (all) 508 * Terrace scarp 260 *	Unspecified 2 Not applicable 2	293 * Not applicable 299 * Known 305 Fluvial 287 * Defined 116 Glaciofluvial 306 Glaciolacustrine 307 Glaciomarine	315 * Accurate	3.13.01.004 * Terrace scarp (all)	race scarp Line digitized using right-side rule. Ornamentations point offshore or downslope.	
boundaries boundary (confidence inferred) Map-unit Geological Confidence concealed GEO_BOUND 5091012 Geological boundary boundaries Instrument	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 286 * Concealed 316 * Not applicable 3.02.01.004 * (confidence or confidence	nferred)	Geological contact / concealed	Miscellaneous F features s	worked limentsAllGEM_POLYS6081002 Reworked sediments (all)608 * Reworked sediments674 Reworked by meltwater 673 Reworked by waves and current 283 * Unspecified293 * Not applicableImage: Comparison of the c			3.14.01.014 * Reworked sediments (all)	Reworked sediments (by waves, Features reworked by waves, currents, or meltwater.	CL- "	Ranch cost	NEM LINES 4651000 D. J. C. C. T.		307 Glaciomarine 308 Lacustrine 309 Marine 314 * Unspecified	215 * '	R 13 01 002 * Deach and 4 19	ach great	
boundaries boundary confidence arbitrary (confidence concealed) Map-unit Geological Confidence arbitrary GEO_BOUND 5091091 Geological boundary boundaries Geological Confidence arbitrary GEO_BOUND 5091091 Geological boundary	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 191 * Arbitrary 316 * Not applicable 2.01.01.011 * (confidence or confidence		Geological contact / arbitrary	Miscellaneous S features c	rface-boulder ncentration All GEM_POLYS 4401002 Surface-boulder concentration (all) 440 * Surface-boulder concentration (all) 440 * Surface-boulder concentration (all) 669 Deposited by ice 670 Deposited by meltwater 671 Deposited by slope processes 282 * Unreceived			3.14.01.015 * Surface-boulder concentration (all)	Surface boulder concentration (boulder lag) Deposited by ice, meltwater or slope processes.	Shoreline features	All	GEM_LINES 4651002 Beach crest (all) 465 * Beach crest 232 Ba 233 Bo 274 SH 276 St 282 To	ar 2 erm horeline trandline ombolo	293 * Not applicable 300 * Not applicable 306 Glaciolacustrine 287 * Defined 307 Glaciomarine 308 Lacustrine 309 Marine 314 * Unspecified 309 Marine	515 * Accurate	B.13.01.002 * Beach crest (all)	Ach crest Multiple lines must be digitized individually. The legend symbol 3.15.01.009 is a set of 3 beach crests.	
boundaries boundary (confidence arbitrary) Map-unit boundaries Limit of mapping Limit of mapping GEO_BOUND 5101045 Limit of mapping (limit of mapping) 510 * Limit of mapping	Indext in the second		Limit of mapping Use when extent of mapping does not correspond to boundary of map (e.g. watershed area).	11 1	Image: sectionImage: section <th image:<="" td=""><td></td><td>1 11</td><td>cable 3.14.01.022 * Sediment transport direction (direction unknown or unspecified)</td><td>Image: second second</td><td>Shoreline features I</td><td>Delta Direction unknown or unspecified</td><td>283 *</td><td>ombolo Unspecified Not applicable 2</td><td>293 * Not applicable 302 Unknown 306 Glaciolacustrine 304 * Unspecified 307 Glaciomarine 308 Lacustrine</td><td></td><td></td><td>Ita / paleocurrent direction Feature too small to draw to scale. Point of observation known is based at midpoint of symbol. This symbol is not orientated.</td></th>	<td></td> <td>1 11</td> <td>cable 3.14.01.022 * Sediment transport direction (direction unknown or unspecified)</td> <td>Image: second second</td> <td>Shoreline features I</td> <td>Delta Direction unknown or unspecified</td> <td>283 *</td> <td>ombolo Unspecified Not applicable 2</td> <td>293 * Not applicable 302 Unknown 306 Glaciolacustrine 304 * Unspecified 307 Glaciomarine 308 Lacustrine</td> <td></td> <td></td> <td>Ita / paleocurrent direction Feature too small to draw to scale. Point of observation known is based at midpoint of symbol. This symbol is not orientated.</td>		1 11	cable 3.14.01.022 * Sediment transport direction (direction unknown or unspecified)	Image: second	Shoreline features I	Delta Direction unknown or unspecified	283 *	ombolo Unspecified Not applicable 2	293 * Not applicable 302 Unknown 306 Glaciolacustrine 304 * Unspecified 307 Glaciomarine 308 Lacustrine			Ita / paleocurrent direction Feature too small to draw to scale. Point of observation known is based at midpoint of symbol. This symbol is not orientated.
Map-unit boundaries Geological boundary All GEO_BOUND 5341002 Geological boundary coincident with other line feature 534 * Geological boundary coincident with other line	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 287 * Defined 316 * Not applicable 2.01.01.002 * coincident with	th other line feature	Not included in the map legend Use when geological boundary coincides with another linear feature. This symbol will not be shown on the map legend		Image: section of the sectionImage: section of the sectionImage: section of the sectionImage: section of the section of the section of the sectionImage: section of the section of	Inspecified Unspecified lian 288 * Not application		cable 3.14.01.021 * Sediment transport	Image: Weight of the second	Shoreline features I	Delta Direction known	GEM_POINTS 4121053 Delta (direction known) 412 * Delta 260 * 1	Not applicable 2	293 * Not applicable 299 * Known 306 Glaciolacustrine 307 Glaciomarine 307 Glaciomarine		3.13.01.001 * Delta (direction known)	orientated. Ita / paleocurrent direction own Feature too small to draw to scale. Point of observation and rotation (0 = North) are based at midpoint of symbol.	
coincident with other line featurecoincident with other line feature(all)featureMap-unit boundariesGeologicalAllGEO_BOUND5341002 Geological boundary coincident with other line feature534 * Geological boundary coincident with other line feature	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 285 Approximate 316 * Not applicable 2.01.01.003 G coincident with	efined) Geological boundary th other line feature	Not included in the map legend Use when geological boundary coincides with another linear feature. This symbol will not be shown on the magnet.		Invisible of the second state Main and the second state Invisible of the second state	Inciofluvial Inspecified Invial 287 * Defined	315 * Accurate	3.14.01.009 * Alluvial bar or levee	Alluvial bar or levee ridge					307 Glaciomarine 308 Lacustrine 309 Marine 314 * Unspecified			and rotation (0 = North) are based at midpoint of symbol. Triangle opens in direction of progradation.	
Image: space of the state	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 286 Concealed 316 * Not applicable 2.01.01.005 G coincident with	pproximate) Beological boundary th other line feature	Not included in the map legend Use when geological boundary coincides with another linear feature. This symbol will not be shown on the map legend	features le	vee ridgeImage: Second sec			ridge (all)	-x x x x x x x x <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
coincident with other line feature (all) feature	260 * Not applicable 293 * Not applicable 300 * Not applicable 310 * Not applicable 104 Inferred 316 * Not applicable 2.01.01.004 G coincident with	boncealed) ieological boundary th other line feature	Not included in the map legend Use when geological boundary coincides with another linear feature. This symbol will not be shown on the map legend		sediments 283 * Unspecified	ciolacustrine 287 * Defined	315 * Accurate	3.14.01.020 * Erosional crest (all)										
Map-unit boundaries Limit of mapping Neatline GEO_BOUND 5101049 Limit of mapping (neatline) 510 * Limit of mapping	(confidence in	nferred)	Not included in the map legend NTS neatline. This symbol should not be shown if coincides with map border.		308 La 309 Ma 314 * U	Inspecified	215 * ^	3 14 01 010 * Look -										
					berg scour ntral axisAllGEM_LINES4871002 Iceberg scour central axis (all)487 * Iceberg scour central axis260 * Not applicable293 * Not applicable300 * Not applicable310 * Not applicableberg scourAllGEM_POINTS2061002 Iceberg scour (all)206 * Iceberg scour260 * Not applicable293 * Not applicable300 * Not applicable310 * Not			3.14.01.010 * Iceberg scour central axis (all) 3.14.01.001 * Iceberg scour (all)	Image: Image interview Image: Image interview Image: Image interview T Image: Image interview Feature too small to draw to scale. Point of observation and rotation (0 = North) are									
				features I Miscellaneous F features	$\frac{1}{200 \times 1000} = \frac{1}{200 \times $	icial -contact		3.14.01.001 * Iceberg scour (all) 3.14.01.019 * Hummock (all) 3.14.01.019 Hummock observation	Image: Incohored sector / small Incohored sector / small Feature too small to draw to scale. Point of observation and rotation (0 = North) are based at midpoint of symbol. Image: Incohored sector / small Hummock Feature too small to draw to scale and/or field observation. Point of observation is based at midpoint of symbol. This symbol is not orientated.									
				Miscellaneous S features h	Image: second			3.14.01.019 Fullimock observation location (all) 3.14.01.012 Spring observation location (all)	Image: Spring observation (spring, hotspring, cold water spring) Field observation. Point of observation is based at midpoint of symbol. This symbol is not orientated.									
				Miscellaneous Features Miscellaneous C	and			3.14.01.002 Erratic observation location (all) 3.14.01.004 Gossan observation	Image: Constraint of the servation Field observation. Point of observation is based at midpoint of symbol. Image: Constraint of the servation of the servation. Point of observation is based at midpoint of symbol. Image: Constraint of the servation of the servation. Point of observation is based at midpoint of symbol.									
					eation location location location location location location all between the set of the	vial custrine		3.14.01.003 Fossil observation location (all)	Image: Cost and the cost of the cost									
				Miscellaneous S	ation location Remote observation, F_STATION 5191050 Station location (remote observation, 519 * Station location) 133 * Remote observation 293 * Not applicable 300 * Not applicable 310 * Not applicable	restrial Inspecified		3.14.01.008 Station location (remote	Station location / remote Field observation. Point of observation is at the midpoint of symbol. Optional station									
				features S Miscellaneous S features	and notationRemote observation r_{s} ration location (remote observation) r_{s} ration location (remote observation) r_{s} ration location (remote observation) r_{s} ration location <t< td=""><td></td><td></td><td>3.14.01.007 Station location (remote observation, waypoint, or unspecified) 3.14.01.007 Station location (ground observation or stratigraphic section)</td><td>• Station location / renote Fred observation. Four of observation is at the indpoint of symbol. Optional station • ID annotation is added using station name field with text symbol 2.03.01.007. • Station location / ground observation. Point of observation is at the midpoint of symbol. Optional station • Station location / ground observation. Point of observation is at the midpoint of symbol. Optional station • ID annotation is added using station name field with text symbol 2.03.01.007.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			3.14.01.007 Station location (remote observation, waypoint, or unspecified) 3.14.01.007 Station location (ground observation or stratigraphic section)	• Station location / renote Fred observation. Four of observation is at the indpoint of symbol. Optional station • ID annotation is added using station name field with text symbol 2.03.01.007. • Station location / ground observation. Point of observation is at the midpoint of symbol. Optional station • Station location / ground observation. Point of observation is at the midpoint of symbol. Optional station • ID annotation is added using station name field with text symbol 2.03.01.007.									
				Miscellaneous S features r	Imple analysis sultsDatingF_SAMPLE6071075 Sample analysis results (dating)607 * Sample analysis results 667 Dating: Fission track 664 Dating: Optically293 * Not applicable300 * Not applicable310 * Not 800 * Not applicable	lot applicable		3.14.01.018 Sample analysis results (dating)	142 Dated sample location Lab results / dating. Point of observation is at the midpoint of symbol. The dating information can appear in a table in the map margin. Sample ID annotation is added using sample name field with text symbol 2.03.01.010.									
					stimulated luminescence 666 Dating: Paleomagnetic 662 Dating: Radiocarbon 663 Dating:													
				Miscellaneous S	Thermoluminescence 680 * Dating: Unspecified 668 Dating: Uraniu 668 Dating: Uraniu	lot applicable		3.14.01.006 Sample location (all)	1400 Sample location Point of observation is at the midpoint of symbol. Optional sample ID is added using the sample name field with text symbol 2 03 01 007									
				features Miscellaneous features f	Yerlay polygon nuture to be fined All GEM_POLYS 5541002 Overlay polygon feature to be defined (all) 554 * Overlay polygon feature to be defined 260 * Not applicable 293 * Not applicable			2.01.01.009 * Overlay polygon feature to be defined (all)	1400 the sample name field with text symbol 2.03.01.007. Not included in the map legend Use when importing data or when the nature of the feature is not clear. This symbol will not be shown on the map legend.									
				d Miscellaneous I features d	fined Image: Second	Tot applicable 288 * Not applicab	able 316 * Not applicabl	cable 2.01.01.001 * Line feature to be defined (all)	Not included in the map legend Use when importing data or when the nature of the feature is not clear. This symbol will not be shown on the map legend.									
				Miscellaneous F features d	Int feature to be finedAllGEM_POINTS5561002 Point feature to be defined (all)556 * Point feature to be defined260 * Not applicable293 * Not applicable300 * Not applicable310 * Not applicable	lot applicable		2.01.01.006 * Point feature to be defined (all)	? Not included in the map legend Use when importing data or when the nature of the feature is not clear. This symbol will not be shown on the legend.									
				Miscellaneous F features f d	Image: series of the series	lot applicable		2.01.01.007 Field observation feature to be defined (all)	⑦ Not included in the map legend Use when importing data or when the nature of the feature is not clear. This symbol will not be shown on the legend.]								
** Data recorded in the geodatabase (e.g. "297 * Unspecified": 297 = code value; * = default value; Unspecified = code description)																		

Surficial Data Model version 2.3.14 (2018-04-24)