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Preliminary solid geology interpretation of the southern Arunta Region

TITLE
Preliminary solid geology interpretation of the southern Arunta Region

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CUSTODIAN
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JURISDICTION
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ABSTRACT
This dataset represents a preliminary basement solid geology interpretation undertaken for the purpose of producing an iron oxide-copper-gold mineral system assessment in the southern Arunta Region. The area covered includes parts of the Warumpi and Aileron provinces which occur in Western Australia and the Northern Territory. The interpretation was developed from existing published solid geology datasets, 1:1 000 000 and 1:250 000 maps of surface geology, and new interpretation of magnetic and gravity data. The solid geology map is intended to represent basement lithology, which in most cases consists of units older than the Neoproterozoic. This dataset is a preliminary interpretation and is *solely intended* to be used as a supporting dataset for the assessment of the potential for iron oxide-copper-gold systems in the southern Arunta Region.

SEARCH WORDS
GEOSCIENCES Geology

GEOGRAPHIC BOUNDING BOX
N_LAT: -22
S_LAT: -24
E_LONG: 138
W_LONG: 126

DATA CREATION DATE
11 FEBRUARY 2013

LAST REVISION DATE
14 JUNE 2013

PROGRESS
Complete

MAINTENANCE AND UPDATE FREQUENCY
As needed

STORED FORMATS

Digital/Non-Digital   Description
DIGITAL   ArcGIS file geodatabase Geographic GDA94

AVAILABLE FORMATS

Digital/Non-Digital   Description
DIGITAL   ArcGIS file geodatabase Geographic GDA94
DIGITAL   ArcView shape file Geographic GDA94

ACCESS CONSTRAINT

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LINEAGE

Where available, this dataset closely follows interpretations from existing published solid geology datasets. These were sourced from the Northern Territory Geological Survey and the Geological Survey of Western Australia. Interpretations from existing datasets were compared with Geoscience Australia's 1:1 000 000 surface geology of Australia dataset and published 1:250 000 geological maps. Where it was deemed necessary, existing coverages were modified using a combination of surface geology and geophysical (magnetic and gravity) imagery. In some areas, new solid geology interpretations were made using surface geology and geophysical (magnetic and gravity) imagery. The interpretation was undertaken at a scale of 1:500 000, and is intended to represent the geology at 1:1 000 000 scale. Unit attribute information has been populated from the Australian stratigraphic units database (http://www.ga.gov.au/products-services/data-applications/reference-databases/stratigraphic-units.html).

POSITIONAL ACCURACY

Typically 1000 metres or less, although may be greater depending on the quality and scale of the original source data. Positional accuracy is attributed in the data at a feature level.

ATTRIBUTE ACCURACY

Attribute data is the best available at the time of publication. All geological units are fully attributed with geological unit name, hierarchy, age, and lithological composition according to the Australian Stratigraphic Units Database (http://www.ga.gov.au/products-services/data-applications/reference-databases/stratigraphic-units.html), which is the authoritative lexicon of Australian lithostratigraphic units.

LOGICAL CONSISTENCY

This ESRI Geodatabase dataset has been constructed using ESRI's polygon and line topology verification, ensuring all geological unit (polygon) boundaries are overlain by corresponding geological contacts (lines). The data structure conforms to the Geoscience Australia standard for a digital geological map dataset, which is in turn compatible with the GeoSciML data transfer standard published by the IUGS Commission for the management and Application of Geoscience Information (www.geosciml.org). Systematic checks have been made of both unit and line information throughout the entire dataset.

COMPLETENESS

The data are complete within the bounding polygon.

CONTACT ORGANISATION

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METADATA DATE
20 JUNE 2013

BIBLIOGRAPHIC REFERENCE
It is recommended that these data be referred to as:

Schofield, A., Fraser, G.L., Goodwin, J., Huston, D.L., Jones, T., Neumann, N.L., Zhang, W. and Gallagher, R. 2013. *Preliminary solid geology interpretation of the southern Arunta Region, 1:1 000 000 scale*. Geoscience Australia: Canberra.

DATA SOURCES

Solid geology

1:500 000 interpreted bedrock geology of Western Australia, 2008 update. Accessed at: http://geodownloads.dmp.wa.gov.au/Downloads/Metadata_Statements/XML/500K_IBG_WA_2008.xml.

Ahmad, M. and Scrimgeour, I.R. 2006. *Geological map of the Northern Territory, 1:2 500 000 scale*. Northern Territory Geological Survey: Darwin.

Edgoose, C.J., Close, D.F. and Scrimgeour, I.R. 2008. *Lake Mackay, Northern Territory (first edition). 1:250 000 scale interpreted geological series, SF 52-11*. Northern Territory Geological Survey: Darwin.

Goldberg, A., Meixner, A.J. and Edgoose, C.J. 2005. *Mount Doreen, Northern Territory (first edition). 1:250 000 interpreted geological map series, SF 52-12*. Northern Territory Geological Survey: Darwin and Alice Springs.

Meixner, T., Close, D.F., Scrimgeour, I.R. and Edgoose, C.J. 2004. *Mount Rennie, Northern Territory (first edition). 1:250 000 interpreted geological map series, SF 52-15*. Northern Territory Geological Survey: Darwin and Alice Springs.

Meixner, T., Scrimgeour, I.R., Close, D.F. and Edgoose, C.J. 2004. *Mount Liebig, Northern Territory (second edition). 1:250 000 interpreted geological map series, SF 52-16*. Northern Territory Geological Survey: Darwin and Alice Springs.

Surface geology

Liu, S., Raymond, O. L., Gallagher, R., Zhang, W. and Highet, L. M. 2012. *Surface geology of Australia, 1:1 000 000 scale, 2012 edition*. Geoscience Australia: Canberra.

1:250 000 geological maps (numerous). Accessed at: http://www.geoscience.gov.au/cgi-bin/mapserv?map=/nas/web/ops/prod/apps/mapserver/geoportal-geologicalmaps/index.map&mode=browse&layer=map250&queryon=true

Geophysical data

Bacchin, M., Milligan, P.R., Wynne, P. and Tracey, R. 2008. *Gravity anomaly map of the Australian region. Fourth edition*. Geoscience Australia: Canberra.

Milligan, P.R., Franklin, R., Minty, B.R.S., Richardson L.M. and Percival, P.J. 2010. *Magnetic anomaly map of Australia. Fifth edition*. Geoscience Australia: Canberra.

DATA STANDARDS

This dataset conforms to the design principles and attribute definitions of the GeoSciML (version 3) international geoscience data standard. The core data tables (GeologicUnitPolygons1M, GeologicUnitLines1M, ShearDisplacementLines1M, and Contacts1M) and their attribute definitions also conform to the GeoSciML-Portrayal (version 2) data standard for simple features and web map services. The dataset includes the use of URI's to link to standard vocabulary concepts and feature identifiers. The dataset also contains some additional feature-level metadata, such as capture scale and date, that are not covered by the GeoSciML data standard.

TABLE DESCRIPTIONS

FEATURE CLASS:	**Sol_GeologicUnitPolygons1M**				
ALIAS:	**Solid Geology Geological Units 1M - Polygons**				
DESCRIPTION:	Spatial extents of geological units represented by polygons. Attributes include summary geological information for each unit polygon, and metadata about the capture and recommended portrayal of the polygons.				

FIELD NAME	ALIAS	TYPE	LENGTH	Allow NULL	Description
MAPSYMBOL	mapSymbol	Text	20	No	Letter symbol or code representing of the geologic unit
PLOTSYMBOL	plotSymbol	Text	8	Yes	Letter symbol or code for display on a map. May be a simplified version of mapSymbol
STRATNO	stratno	Long	8,0	No	Unique unit number from the Australian Stratigraphic Units Database
NAME	name	Text	254	No	Name of the geologic unit
DESCR	description	Text	254	No	Text description of the geologic unit
TYPENAME	geologicUnitType	Text	50	No	The type of geologic unit. (e.g., lithostratigraphic, chronostratigraphic, etc.) Term from a controlled vocabulary.
TYPE_URI	geologicUnitType_uri	Text (URI)	254	No	URI link to a controlled vocabulary term for geologic unit type
GEOLHIST	geologicHistory	Text	254	Yes	Text summary description of the geologic history of the geologic unit
REPAGE_URI	representativeAge_uri	Text (URI)	254	No	URI link to a controlled vocabulary term for the representative summary age for the geologic unit
YNGAGE_URI	representativeYoungerAge_uri	Text (URI)	254	No	URI link to a controlled vocabulary term for the younger named age for the geologic unit
OLDAGE_URI	representativeOlderAge_uri	Text (URI)	254	No	URI link to a controlled vocabulary term for the older named age for the geologic unit
LITHOLOGY	lithology	Text	254	No	A summary description of the primary lithological composition of the geologic unit
REPLTH_URI	representativeLithology_uri	Text (URI)	254	No	URI link to a controlled vocabulary term for the primary lithological composition of the geologic unit
MORPHOLOGY	bodyMorphology	Text	50	Yes	Description of the type of occurrence of the geologic unit (e.g., Pluton, Dyke, Sill, Markerbed, Vein, etc.)
OBSMETHOD	observationMethod	Text	50	Yes	Description of the observation method or compilation method used compile the mapped geologic unit
CONFIDENCE	identityConfidence	Text	50	Yes	Description of the confidence in the interpretation of the geologic unit
SOURCE	source	Text	254	No	Text describing feature-specific details and citations to source materials, and if available providing URLs to reference material and publications describing the geologic feature. This could be a short text synopsis of key information that would also be in the metadata record referenced by metadata_uri.
METADATA	metadata_uri	Text (URI)	254	No	URI referring to a metadata record describing the provenance of data.
FRAME	mappingFrame	Text	254	No	Description of the frame of reference of the mapped data (e.g., earth surface, top of bedrock, top of Neoproterozoic basement)
RESSCALE	resolutionScale	Long	10,0	No	The denominator of the scale at which the mapped data is designed to be represented
CAPTSCALE	captureScale	Long	10,0	No	The denominator of the scale of data from which the mapped feature has been compiled
CAPTDATE	captureDate	Date	--	No	The date of original data capture for this mapped feature
MODDATE	modifiedDate	Date	--	Yes	The date of modification of this mapped feature, if applicable
PLOTRANK	plotRank	Short	1,0	No	A numeric indicator of the intention for how this mapped feature is to be plotted on a map. (1 = normal plotting feature; 2 = non-plotting feature; 3 = artificial feature)
FEATUREID	mappedFeatureID	Text	254	No	Unique identifier (URI) for the mapped polygon feature
GEOLUNITID	geologicUnitID	Text	254	No	Unique identifier (URI) for the geologic unit

TABLE NAME:	**Sol_GeologicUnit1M**
ALIAS:	**Solid Geology GeologicUnit 1M**
DESCRIPTION:	Stratigraphic information about a geologic unit, including its stratigraphic and/or chemical hierarchy, and a link to an authoritative lexicon description if the unit. Links to the Sol_GeologicUnitPolygons1M feature classe, and the Lithologies1M table, via the geologicUnitID field.

FIELD NAME	ALIAS	TYPE	LENGTH	Allow NULL	Description
MAPSYMBOL	mapSymbol	Text	20	No	Letter symbol or code representing of the geologic unit
PLOTSYMBOL	plotSymbol	Text	8	Yes	Letter symbol or code for display on a map. May be a simplified version of mapSymbol
STRATNO	stratno	Long	8,0	No	Unique unit number from the Australian Stratigraphic Units Database
NAME	name	Text	254	No	Name of the geologic unit
TYPE	geologicUnitType	Text	50	No	The type of geologic unit. (e.g., lithostratigraphic, chronostratigraphic, etc.)
TYPE_URI	geologicUnitType_uri	Text (URI)	254	No	URI link to the controlled vocabulary term for geologic unit type
DESCR	description	Text	254	No	Text description of the geologic unit
RANK	rank	Text	50	No	Stratigraphic rank of the geologic unit
LEXICON	lexiconClassifier	Text(URI)	254	Yes	URI link to an authoritative lexicon description for the geologic unit.
SUPERGROUP	supergroup	Text	254	Yes	Name of the supergroup rank unit in the stratigraphic hierarchy for the geologic unit, if applicable
GROUPNAME	group	Text	254	Yes	Name of the group rank unit in the stratigraphic hierarchy for the geologic unit, if applicable
SUBGROUP	subgroup	Text	254	Yes	Name of the subgroup rank unit in the stratigraphic hierarchy for the geologic unit, if applicable
FORMATION	formation	Text	254	Yes	Name of the formation rank unit in the stratigraphic hierarchy for the geologic unit, if applicable
MEMBER	member	Text	254	Yes	Name of the member rank unit in the stratigraphic hierarchy for the geologic unit, if applicable
BED	bed	Text	254	Yes	Name of the bed rank unit in the stratigraphic hierarchy for the geologic unit, if applicable
SUPERSUITE	supersuite	Text	254	Yes	Name of the supersuite rank unit in the chemical hierarchy for the geologic unit, if applicable
SUITE	suite	Text	254	Yes	Name of the suite rank unit in the chemical hierarchy for the geologic unit, if applicable
STATUS	status	Text	50	Yes	Status of the stratigraphic name (e.g., formal, informal, etc.)
USAGE	usage	Text	50	Yes	An indication of the quality of description of the geologic unit (e.g., defined, briefly described, mentioned)
GEOLUNITID	geologicUnitID	Text	254	No	Unique identifier (URI) for the geologic unit

TABLE NAME:	**Sol_Event1M**				
ALIAS:	**Solid Geology Event1M**				
DESCRIPTION:	A table containing geologic events related to geologic units and structures. Event types may include ages such as depositional, intrusive, or metamorphic ages. This table joins to the Sol_GeologicUnit1M table .				

FIELD NAME	ALIAS	TYPE	LENGTH	Allow NULL	Description
YNGNAMEAGE	youngerNamedAge	Text	254	No	Name of the geolgical time period that corresponds to the younger age of the geologic event
YNGAGE_URI	youngerNamedAge_uri	Text (URI)	254	No	URI link to a controlled vocabulary term for the younger named age for the geologic event
YNGNUMAGE	youngerNumericAge	Float	6,2	Yes	The younger numerical age of the geologic event, if known, in Ma
YNGAGEERR	youngerNumericAgeError	Float	6,2	Yes	The uncertainty associated with the younger numerical age of the geologic event, if known, in Ma
YNGAGEMETH	youngerNumericAgeMethod	Text	50	Yes	The method used to derive the younger age of the geologic event
OLDNAMEAGE	olderNamedAge	Text	254	No	Name of the geolgical time period that corresponds to the older age of the geologic event
OLDAGE_URI	olderNamedAge_uri	Text (URI)	254	No	URI link to a controlled vocabulary term for the older named age for the geologic event
OLDNUMAGE	olderNumericAge	Float	6,2	Yes	The older numerical age of the geologic event, if known, in Ma
OLDAGEERR	olderNumericAgeError	Float	6,2	Yes	The uncertainty associated with the older numerical age of the geologic event, if known, in Ma
OLDAGEMETH	olderNumericAgeMethod	Text	50	Yes	The method used to derive the older age of the geologic event
EVENTNAME	eventName	Text	254	Yes	Name of the geologic event (e.g., Kanimblan Orogeny, Mt Isa Orogeny D3)
DESCR	description	Text	254	Yes	Text description of the geologic event
EVENTPROC	eventProcess	Text	50	No	The type of geologic process of the event (e.g., deposition, intrusion, deformation, metamorphism, etc., or unknown)
EVENTENV	eventEnvironment	Text	50	Yes	The type of geologic environment in which the event occurred (e.g., subaerial, marine, deep crust)
TIMESCALE	timescale	Text	254	Yes	The name of the timescale used to relate the named and numeric ages of the geologic event
SOURCE	source	Text	254	Yes	Text describing feature-specific details and citations to source materials, and if available providing URLs to reference material and publications describing the geologic event
EVENTID	eventID	Text	254	No	Unique identifier (URI) for the geologic event
FEATUREID	featureID	Text	254	No	Unique identifier (URI) for the related geologic feature (e.g., geologic unit, geologic structure)

TABLE NAME:	**Sol_Lithologies1M**
ALIAS:	**Solid Geology Lithologies1M**
DESCRIPTION:	A table containing lithologies and their abundances for stratigraphic units. This table joins *..1 with the Sol_GeologicUnitPolygons1M table

FIELD NAME	ALIAS	TYPE	LENGTH	Allow NULL	Description
LITHNAME	lithology	Text	50	No	Name of the lithology
LITH_CGI	lithology_CGI	Text	50	No	Preferred label from the IUGS CGI SimpleLithology vocabulary
LITH_URI	lithology_uri	Text	254	No	URI link to a controlled vocabulary term for the lithology
DESCR	description	Text	254	Yes	Additional description of the occurrence of the lithology within the geologic unit
ROLE	role	Text	50	Yes	Term to denote the role played by the lithology within the geologic unit (e.g., only part, major part, subordinate part)
PERCENTHI	percentHigher	Short	3,0	Yes	Upper estimate of the proportion of the lithology in the geologic unit
PERCENTLO	percentLower	Short	3,0	Yes	Lower estimate of the proportion of the lithology in the geologic unit
PARTID	compositionPartID	Text	254	No	Unique identifier (URI) for this lithology-unit association
GEOLUNITID	geologicUnitID	Text	254	No	Unique identifier (URI) for the geologic unit
UNITNAME	geologicUnitName	Text	254	No	Name of the geologic unit

FEATURE CLASS:	Sol_Contacts1M					
ALIAS:	**Solid Geology Contacts 1M**					
DESCRIPTION:	All contacts between polygons of different stratigraphic units. Types include depositional, structural, igneous, metamorphic and compositional contacts.					

FIELD NAME	ALIAS	TYPE	LENGTH	Allow NULL	Description
TYPENAME	contactType	Text	50	No	The type of geologic contact. (e.g., faulted contact, lithogenetic contact, etc.) Term from a controlled vocabulary.
TYPE_URI	contactType_uri	Text	254	No	URI link to a controlled vocabulary term for contact type
CNTCTNAME	name	Text	254	Yes	Name of the geologic contact, if applicable (e.g., Mt Isa Fault)
DESCR	description	Text	254	Yes	Text description of the contact
EXPOSURE	exposure	Text	50	No	Indication of whether the mapped contact is exposed at the Earth surface.
OBSMETHOD	observationMethod	Text	50	Yes	Description of the observation method or compilation method used compile the mapped geological unit
CONFIDENCE	identityConfidence	Text	50	Yes	Description of the confidence in the interpretation of the geological unit
POSACC_M	positionalAccuracy_m	Long	10,0	No	Estimate of the accuracy of the mapped feature, in metres
SOURCE	source	Text	254	No	Text describing feature-specific details and citations to source materials, and if available providing URLs to reference material and publications describing the geologic feature. This could be a short text synopsis of key information that would also be in the metadata record referenced by metadata_uri.
METADATA	metadata_uri	Text	254	No	URI referring to a metadata record describing the provenance of data.
FRAME	mappingFrame	Text	254	No	Description of the frame of reference of the mapped data (e.g., earth surface, top of bedrock, top of Neoproterozoic basement)
RESSCALE	resolutionScale	Long	10,0	No	The denominator of the scale at which the mapped data is designed to be represented
CAPTSCALE	captureScale	Long	10,0	No	The denominator of the scale of data from which the mapped feature has been compiled
CAPTDATE	captureDate	Date	--	No	The date of original data capture for this mapped feature
MODDATE	modifiedDate	Date	--	Yes	The date of modification of this mapped feature, if applicable
PLOTRANK	plotRank	Short	1,0	No	A numeric indicator of the intention for how this mapped feature is to be plotted on a map. (1 = normal plotting feature; 2 = non-plotting feature)
FEATCODE	symbol	Text	12	Yes	Identifier for a symbol from symbolization scheme for portrayal
FEATUREID	mappedFeatureID	Text	254	No	Unique identifier (URI) for the mapped line segment
CONTACTID	contactID	Text	254	No	Unique identifier (URI) linking to a GeosciML geological feature instance which describes this mapped feature. Maps to 'SpecificationID' in GeoSciML-Portrayal

FEATURE CLASS:	Sol_ShearDisplacementLines1M				
ALIAS:	Solid Geology Faults and Shears 1M				
DESCRIPTION:	All brittle to ductile style structures, represented as lines, along which displacement has occurred, from a simple, single 'planar' brittle or ductile surface to a fault system comprised of many strands of both brittle and ductile nature.				

FIELD NAME	ALIAS	TYPE	LENGTH	Allow NULL	Description
TYPENAME	faultType	Text	50	No	URI referring to a controlled vocabulary term defining the fault/shear type
TYPE_URI	faultType_uri	Text(URI)	254	No	URI link to a controlled vocabulary term for fault/shear type
FLTNAME	name	Text	254	Yes	Display name for the fault or shear
DESCR	description	Text	254	Yes	Text description of the fault or shear
EXPOSURE	exposure	Text	50	No	Indication of whether the mapped contact is exposed at the Earth surface. (i.e., exposed, concealed)
FAULTFILL	faultFill	Text	50	Yes	Secondary or deformed material which may fill the structure. Term from a controlled vocabulary of earth material types
DEFRMSTYLE	deformationStyle	Text	50	Yes	Describes the style of deformation (e.g. brittle, ductile etc.) for the fault/shear
DEFRM_URI	deformationStyle_uri	Text(URI)	254	No	URI referring to a controlled concept from a vocabulary defining the fault/shear deformation style
MVTTYPE	movementType	Text	50	Yes	Summarises the type of movement (e.g. dip-slip, strike-slip) on the fault/shear
MVTTYP_URI	movementType_uri	Text(URI)	254	No	URI referring to a controlled concept from a vocabulary defining the fault/shear movement type
MVTSENSE	movementSense	Text	50	Yes	Term describing the sense of movement (e.g., dextral, sinistral) on the fault/shear
DSPLCMNT	displacement	Text	254	Yes	Summarises the displacement across the fault/shear
DIP	dip	Short	2	Yes	Dip of the fault surface. Range = 0-90
DIPDIRN	dipDirection	Short	2	Yes	Dip direction of the fault surface. Range = 0-360
WIDTH	width	Long	8	Yes	True width (in metres) of the structure. Must be a number > 0, or null.
GEOLHIST	geologicHistory	Text	254	Yes	Text summary of the geologic history of the fault/shear. May include geologic age periods and deformation phase notation (i.e., D1, D2, D3)
REPAGE_URI	representativeAge_uri	Text(URI)	254	No	URI link to a controlled vocabulary term for the representative summary age for the fault_shear
YNGAGE_URI	representativeYoungerAge_uri	Text(URI)	254	No	URI link to a controlled vocabulary term for the older named age for the fault/shear
OLDAGE_URI	representativeOlderAge_uri	Text(URI)	254	No	URI link to a controlled vocabulary term for the younger named age for the fault/shear
FLTSYS	faultSystemName	Text	254	Yes	The name of a larger fault system to which this structure may belong
FLTSYSID	faultSystemID	Text(URI)	254	Yes	Unique ID of a larger fault system to which this structure may belong
OBSMETHOD	observationMethod	Text	50	Yes	Description of the observation method or compilation method used compile the mapped geologic structure
CONFIDENCE	identityConfidence	Text	50	Yes	Description of the confidence in the interpretation of the geologic structure
POSACC_M	positionalAccuracy_m	Long	8	No	Estimate of the accuracy of the mapped feature, in metres
SOURCE	source	Text	254	No	Text describing feature-specific details and citations to source materials, and if available providing URLs to reference material and publications describing the geologic feature. This could be a short text synopsis of key information that would also be in the metadata record referenced by metadata_uri.
METADATA	metadata_uri	Text	254	No	URI referring to a metadata record describing the provenance of data
FRAME	mappingFrame	Text	254	No	Description of the frame of reference of the mapped data (e.g., earth surface, top of bedrock, top of Neoproterozoic basement)
RESSCALE	resolutionScale	Long	8	No	The denominator of the scale at which the mapped data is designed to be represented
CAPTSCALE	captureScale	Long	8	No	The denominator of the scale of data from which the mapped feature has been compiled
CAPTDATE	captureDate	Date	8	No	The date of original data capture for this mapped feature
MODDATE	modifiedDate	Date	8	Yes	The date of modification of this mapped feature, if applicable
PLOTRANK	plotRank	Short	2	No	A numeric indicator of the intention for how this mapped feature is to be plotted on a map. (1 = normal plotting feature; 2 = non-plotting feature)
FEATCODE	symbol	Text	12	Yes	Identifier for a symbol from symbolization scheme for portrayal
FEATUREID	mappedFeatureID	Text	254	No	Unique identifier (URI) for the mapped line segment
FAULTID	faultID	Text(URI)	254	No	Unique identifier (URI) linking to a GeoSciML geologic feature instance which describes this mapped feature. Maps to 'SpecificationID' in GeoSciML-Portrayal

FEATURE CLASS:	Sol_MiscLines1M				
ALIAS	**Solid Geology Miscellaneous Lines 1M**				
DESCRIPTION:	The MiscLines1M feature class contains lines that complement the geology data, but are not classified as geological features. (e.g., coastline and other water boundaries, limits of mapping or available data)				

FIELD NAME	ALIAS	TYPE	LENGTH	Allow NULL	Description
TYPENAME	featureType	Text	50	No	Term referring to a controlled vocabulary term defining the feature type (e.g., tile frame)
FEATNAME	name	Text	254	Yes	Display name or label for the feature, if applicable
POSACC_M	positionalAccuracy_m	Long	10,0	No	Estimate of the accuracy of the mapped feature
SOURCE	source	Text	254	No	Text describing feature-specific details and citations to source materials, and if available providing URLs to reference material and publications describing the feature. This could be a short text synopsis of key information that would also be in the metadata record referenced by metadata_uri.
METADATA	metadata_uri	Text	254	No	URI referring to a metadata record describing the provenance of data
RESSCALE	resolutionScale	Long	10,0	No	The denominator of the scale at which the mapped data is designed to be represented
CAPTSCALE	captureScale	Long	10,0	No	The denominator of the scale of data from which the mapped feature has been compiled
CAPTDATE	captureDate	Date	--	No	The date of original data capture for this mapped feature
MODDATE	modifiedDate	Date	--	Yes	The date of modification of this mapped feature, if applicable
PLOTRANK	plotRank	Short	1,0	No	A numeric indicator of the intention for how this mapped feature is to be plotted on a map. (1 = normal plotting feature; 2 = non-plotting feature)
FEATCODE	symbol	Text	12	Yes	Identifier for a symbol from symbolization scheme for portrayal
FEATUREID	mappedFeatureID	Text	254	No	Unique identifier (URI) for the mapped line segment

FEATURE CLASS:	Sol_Framework1M				
ALIAS:	**Solid Geology Framework 1M**				
DESCRIPTION:	The Framework1M feature class contains polygons that cover the full extent of the geological dataset, describing the nature of the map region (i.e., land, ocean, glacier, etc.)				
FIELD NAME	**ALIAS**	**TYPE**	**LENGTH**	**Allow NULL**	**Description**
MAPTYPE	mapType	Text	50	No	Term to describe whether the mapped area of the dataset constitutes a mapped rock unit or rock void (i.e., an area within the dataset that is not mapped as a geological unit. e.g., a water body or glacier)
FEATTYPE	featureType	Text	50	No	Term to describe whether the mapped feature is a land or water feature. Valid values are "land", "ocean", "water body" (i.e., non-marine water body), "glacier".

Description of MAPSYMBOL attribute field

MAPSYMBOL format = Zrxy

1. Z = summary unit age. Letter codes from two ages may be concatenated for units spanning more than one age period.

Cenozoic	Cz
Quaternary	Q
Mesozoic	Mz
Cretaceous	K
Jurassic	J
Triassic	R
Paleozoic	Pz
Permian	P
Carboniferous	C
Devonian	D
Silurian	S
Ordovician	O
Cambrian	E
Proterozoic	-P
Neoproterozoic	N
Mesoproterozoic	M
Paleoproterozoic	L
Archean	A

2. r = summary rock descriptor. A table of one letter codes to reflect the broad lithological composition *of pre-Cenozoic units only* is given below:

CODE	DESCRIPTION	EXAMPLES
IGNEOUS		
f	felsic extrusive / high level intrusive	rhyolite, dacite, ignimbrite, pyroclastic rocks
g	felsic to intermediate intrusive	granite, granodiorite, tonalite, monzonite, diorite, syenite
a	intermediate extrusive / high level intrusive	andesite, trachyte, latite, pyroclastic rocks
b	mafic extrusive / high level intrusive	basalt, scoria, shoshonite, pyroclastic rocks
d	mafic intrusive	gabbro, dolerite, norite
u	ultramafic rocks undivided (intrusive & extrusive)	komatiite, high Mg basalt, pyroxenite, dunite, wehrlite
v	felsic & mafic volcanics	
i	felsic & mafic intrusives	
k	alkaline ultrabasic rock	kimberlite, lamprophyre, carbonatite
SEDIMENTARY		
s	siliciclastic/undifferentiated sedimentary rock	shale, siltstone, sandstone, conglomerate, mudstone
j	volcanogenic sedimentary rock	epiclastic sediments and breccias, greywacke, arkose
l	carbonate sedimentary rock	limestone, marl, dolomite
c	non-carbonate chemical sedimentary rock	chert, evaporite, phosphorite, BIF
o	organic-rich sedimentary rock	coal, oil shale
MIXED SEDIMENTARY & IGNEOUS		
w	volcanics & sediments	
METAMORPHIC		
y	low-medium grade meta clastic sediment	slate, phyllite, schist, quartzite
t	low-medium grade metabasite	mafic schist, greenstone, amphibolite
r	low-medium grade metafelsite	rhyolitic schist, meta-andesite
m	calc-silicate and marble	meta carbonates and calcareous sediments

n	high grade metamorphic rock	gneiss, granulite, migmatite
p	high-P metamorphic rock	eclogite, blueschist
h	contact metamorphic rock	hornfels, spotted slate
e	metamorphosed ultramafic rocks	serpentinite, talc schist, chlorite schist (no feldspars), tremolite schist, ultramafic amphibolite
OTHER		
q	vein	quartz vein, carbonate vein
x	complex, undivided	melange, complexly mixed rock types such as metamorphic and intrusive rocks
z	fault / shear rock	mylonite, fault breccia, cataclasite, gouge

3.   xy = One or two letters to reflect the stratigraphic name of a unit, if applicable. Where practical, these letters reflect stratigraphic grouping or hierarchy. For instance, formations within a named group should have letter symbols reflecting their parent group.

> e.g.: Tomkinson Creek Group   - Lsk
>   - Bootu Formation   - Lskb

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