Earth Sciences Sector

Geological Map Flow Project

Data Model
Of
The Bedrock Mapping Geodatabase, Version 3.1
(Released June 2011)

For Publications

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INTRODUCTION

Purpose
The Bedrock Data Model was designed to manage data at the project level, to publish GIS enabled and hardcopy maps, and to facilitate the transfer of project data to a standardized national system (intended for web delivery, client querying, and archiving).

How the Model Organizes Geological Features
Features were organized based first on their geological feature type, then according to similarity of properties, and, finally, by geometry type. The resulting feature class groupings were then given a 'subfeature' property to further define the geological type of feature. An example of this is a faults feature class (feature = fault) where the faults are differentiated by subfeatures such as normal, reverse, thrust etc. Next a consensus was reached on the minimum required properties necessary to describe the features in each feature class and a list of subfeatures for each feature was created. Feature properties were given names consistent with Dbase restrictions on the field names of Shapefiles (10 characters, no spaces; the StudyArea feature class is an exception to this rule due to the fact that the information in this feature class will not be published in a Shapefile). Lists of geological terms (feature class domains) were also created for the remaining properties of each feature class. Finally, feature class naming conventions were designed for the working environment (16 characters) and for the publication Shapefiles and XML files.

Working Environment Feature Class Names
For quick recognition, feature class names were selected based on the terms used by mapping geologists and to reflect the geological feature type contained in the feature class. The folds feature class contains folds, the faults feature class contains faults etc.

Publication File Names
For publication, each file name consists of the publication series number and the feature class name, separated by an underscore.

Examples, final Canadian Geoscience Map:
cgm_xxxx_Stations (where xxxx represents the map number)
cgm_xxxx_MapUnits

Examples, preliminary Canadian Geoscience Map:
cgm_xxxx_px_Stations (where px represents the preliminary version number)
cgm_xxxx_px_MapUnits

Domain Names
Domains (commonly referred to as pick-lists) were created with items listed logically rather than sorted alphabetically. Domain names relate domains to the feature class and feature attribute to which they apply, using the publication file naming convention. For example, the domain stp_subfeature indicates that it belongs to the subfeature (type of station) attribute of the stp (stations) feature class. Domains common to more than one feature class were given the same name as the attribute common among the feature

classes. An example of this is the confidence domain which relates to the confidence attribute in the contacts, faults, and folds feature classes. Where a domain is associated with the same attribute in various geometric types a 'v' is included in the domain name. An example, of this is the domain name fav_subfeature which lists the subtypes of faults for both lines and polygons for use at various map scales.

Feature Attributes Common to Most Feature Classes
Three attributes common to most feature classes are map_theme, feature, and subfeature. The map_theme attribute exists to *differentiate between types of map features* when large volumes of data are integrated into regional or national enterprise systems.

Content of Bedrock Geology Maps
This document records all of the standard feature classes and attributes that may appear in a Canadian Geoscience Map publication, some feature classes or attributes may be omitted if relevant data is not available for a given map publication.

Point Data Feature Classes

Feature Class Name: Stations

Explanation of Contents: station observations (any point location where specific geological information is noted)

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=station). [Domain=stp_feature]

SUBFEATURE The type of station. [Domain=stp_subfeature]
Examples: visited outcrop, remote ground observation, aerial observation, photograph only, historical published observation

STATION_ID   The <u>unique</u> identification of each outcrop or point where observations were made. Format as follows: year, officer code, station#
Example: 05FNA025

PHYS_ENV   The physical environment/nature of the outcrop. [Domain=stp_phys_env]
Examples: cliff face, ridge, open ground, shoreline, stream cut, road cut, vegetated terrain, quarry

OC_QUALITY The exposure quality. [Domain=stp_oc_quality]
Examples: good outcrop, poor outcrop, subcrop, float/rubble, talus/scree, felsenmeer, vegetation covered, burrow debris

OC_SIZE   The size of the outcrop (as estimated by the geologist).
Examples: 10m x 25m, 60 square metres

MAP_UNIT   The predominant map unit at the station.
Examples: Beaver Mines Fm, Opal Mbr, green argillite, Nisutlin Batholith, n/a (for photograph only stations)

PARENTS   The upper level hierarchy names for predominant map unit, if applicable (formation, group or suite name).
Examples: Blairmore Group, Mount Head Formation, Cassiar Suite

ADDL_UNITS Additional units which are in contact with the predominant unit.

OBSERVER   The observing geologist or observing assistant.
Example: George M. Dawson

AIRPHOTO   The airphoto identifier for this station location. List as line # and photo #.
Example: A12212-123 (NAPL), AS4457-103 (Alberta)

OBS_DATE   The date on which the observation was made.

TRAVERS_ID The unique identifier for the traverse during which this station was observed.
Format as follows: officer code, year, sequential #
Example: FNA2008-01

REMARKS   Notes relating to this station.

SINCE_LAST   Notes on observations made between this station and the previous station.

EASTING   The UTM easting coordinate value of the station (as confirmed by the observer or publication author).

NORTHING   The UTM northing coordinate value of the station (as confirmed by the observer or publication author).

UTM_LON_ZN   The UTM longitudinal zone number. [Domain=UTM_lon_zn]
Examples: 9, 10, 11, 12

UTM_LAT_ZN   The UTM latitudinal zone letter. [Domain=UTM_lat_zn]
Examples: T, U, V, W, X

UTM_DATUM   The horizontal datum for UTM coordinates (as captured from field work or source). [Domain=hor_datum]
Examples: NAD27, NAD83, not applicable

LOC_METHOD The method used to capture coordinates for this station. [Domain=loc_method]
Examples: GPS, georeferenced image, scaled from 50k topo map

PDOP   The positional dilution of precision (positional error) captured from GPS.

SATS_USED   The number of satellites used for position calculation, captured from GPS.

LATITUDE   The latitude of the station in decimal degrees.

LONGITUDE   The longitude of the station in decimal degrees.

GEO_DATUM   The horizontal datum for geographic coordinates. [Domain=hor_datum]
Examples: NAD27, NAD83, WGS84

ELEVATION   The elevation of the station in metres.

VERT_DATUM The datum used to report elevation. [Domain=vert_datum]
Examples: WGS84, CGVD28, Mean Sea Level

ELEV_METH   The method used to capture elevation for this station. [Domain=elev_meth]
Examples: GPS, altimeter, 50k topo map, 50k DEM

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: Lithologies

Explanation of Contents: lithology observations at stations

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=lithology). [Domain=ltp_feature]

STATION_ID   The <u>unique</u> identification of each outcrop or point where observations were
            made. Format as follows: year, officer code, station#.
            Example: 05FNA025

LITH_ID   The <u>unique</u> identification of each lithology observed at a station. Format as
            follows: year, officer code, station#, lithology letter
            Examples: 05FNA025A , 05FNA025B

OCCURRENCE The nature of the occurrence within the station. [Domain=ltp_occurrence]
            Examples: pluton, dyke, bed, nodule, xenolith, clast, enclave

LITHGROUP   The general rock grouping (for GanFeld functionality). [Domain=ltp_lith_group]
            Examples: volcanic, metamorphic, sedimentary, metaplutonic

LITHDETAIL   The detailed rock name. This field stores the functional rock name and is the only
            required field for rock names. It may contain any legitimate rock name.
            Examples: monzonite, basalt, pelite, mafic schist, lime packstone, quartz arenite

MAP_UNIT   The map unit to which the lithology belongs.
            Examples: Beaver Mines Fm, Opal Mbr, Nisutlin Batholith, Mattson Assemblage

COMP_QUAL A list of qualifiers relating to the composition of the lithology.
            Example: calcareous, quartzose, feldspathic, aluminous, ferruginous,
            carbonaceous, graphitic, dolomitic

TEXT_QUAL   A list of qualifiers relating to textural properties of the lithology.
            Examples: equigranular, porphyritic, silty, clast-supported

STRUC_QUAL A list of qualifiers relating to primary structures within the lithology.
            Examples: parallel laminated, cross-bedded, flow laminated

IGN_MIN   A list of igneous minerals present in this lithology.
            Examples: biotite, hornblende, olivine, apatite.

MET_MIN   A list of metamorphic minerals present in this lithology.
            Examples: staurolite, kyanite, garnet, chlorite, talc

SED_MIN   A list of sedimentary minerals present in this lithology.
            Examples: chert, magnetite, glauconite, hematite, gypsum

MIN_NOTES   Notes on minerals present.

GRAIN_SIZE   A list of grain sizes found in this lithology.

GR_SIZE_MN The minimum grain or crystal size. [Domain=ltp_grain_size]
            Examples: coarse sand (0.5-1.0 mm), cryptocrystalline, ash

GR_SIZE_MX   The maximum grain or crystal size. [Domain=ltp_grain_size]
Examples: granules (2.0-4.0 mm), coarsely crystalline, lapilli

FR_COLOUR   The fresh colour of the lithology.

W_COLOUR   The weathered colour of the lithology.

COLOUR_IND   The colour index value from 0 to 100.

FABRICS   A list of deformational fabrics or structures within the lithology.
Examples: C-S fabric, cleavage, stylolites, mylonitic foliation

BED_THICK   A list of bedding thicknesses for this lithology.

BEDDING_MN   The minimum bedding thickness. [Domain=ltp_bedding_thickness]
Examples: thin bedded (3-10 cm), thick bedded (30-100 cm)

BEDDING_MX   The maximum bedding thickness. [Domain=ltp_bedding_thickness]
Examples: thin bedded (3-10 cm), thick bedded (30-100 cm)

FOSSILS   A list of fossils present in the lithology.

FOS_NOTES   Notes on the fossils present.

CONTACT_U   The nature of upper contact. [Domain=ltp_lith_contact]
Examples: gradational, sharp, sheared, intrusive, covered

CONTACT_L   The nature of lower contact. [Domain=ltp_lith_contact]
Examples: gradational, sharp, sheared, intrusive, covered

CONT_NOTES   Further notes or remarks about the contacts.

MAGNETIC_S   The magnetic susceptibility value of the lithology (in SI units).

INTERPRETN   An interpretation of the genetic origin or protolith of the lithology.
Examples: silty limestone protolith – now calc-silicate, cross-bedded quartz
arenite of aeolian origin

INT_CONFID   The level of confidence with the lithology interpretation. [Domain=ltp_int_confid]
Examples: confident, moderate, not confident

REMARKS   Comment field for notes relating to the lithology.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF   An abbreviated publication reference for source information or data, or the name
of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   Symbol code corresponding to the feature's symbol in the FGDC symbol set, if
the author chooses to symbolize.

Feature Class Name: LithologyMinerals
Explanation of Contents: details of lithology minerals (to support lithology descriptions)

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=lithology mineral). [Domain=lmp_feature]

STATION_ID   The unique identifier for the station at which the mineral occurs.
Example: 05FNA025

LITH_ID   The unique identifier for the lithology in which the mineral occurs.
Example: 05FNA025A

MINERAL_ID   The unique identifier for the lithology mineral occurrence. Format as follows:
year, officer code, station #, lithology letter, lithology mineral #
Examples: 05FNA025A01, 05FNA025A02

MINERAL   The mineral being described.
Examples: biotite, calcite, epidote

FORM   The form of the mineral. [Domain=lmp_form]
Examples: euhedral, anhedral, subhedral

HABIT   The habit of the mineral. [Domain=lmp_habit]
Examples: acicular, columnar, equant, fibrous

*OCCURRENCE*The nature of the occurrence of the mineral in the lithology.
[Domain=lmp_occurrence]
Examples: accessory, constituent, clot, phenocryst, porphyroblast

COLOUR   The colour of the mineral.

SIZEMINMM   The minimum size of the mineral in mm.

SIZEMAXMM   The maximum size of the mineral in mm.

MNRL_MODE   The proportion of rock unit comprised by the mineral (value range 0-100).

REMARKS   Further explanatory notes on the mineral.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   Symbol code corresponding to the feature's symbol in the FGDC symbol set, if
the author chooses to symbolize.

Feature Class Name: Planar

Explanation of Contents: planar orientation measurements

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=planar orientation measurement). [Domain=plp_feature]

PLANAR_ID   The <u>unique</u> identification for each planar measurement. Format as follows: year,
              officer code, station #, lithology letter, measurement #
              Examples: 05FNA025A01, 05FNA025A02, 05FNA025B03

SUBFEATURE The type of planar feature or fabric. [Domain=plp_subfeature]
              Examples: bedding, fault plane, fracture, joint, cleavage, schistosity

FAB_ELEM   The elements that define the planar fabric.
              Examples: muscovite (schistosity), flattened or stretched quartz (mylonitic
              foliation), crenulations (cleavage)

ATTITUDE   The attitude of planar feature. [Domain=plp_attitude]
              Examples: upright, overturned <180, vertical, not applicable

YOUNG_EVID The confidence in attitude of primary layering as assessed from evidence for
              younging direction. [Domain=plp_young_evid]
              Examples: known, sedimentary structure; inferred, stratigraphic order; assumed,
              no evidence, not applicable

GENERATION The phase of generation. [Domain=generation]
              Examples: primary, first, second, third, fourth, undefined

METHOD   The method of acquisition. [Domain=method]
              Examples: measured at station, estimated at station, calculated from data,
              calculated from imagery, acquired from historical data

DIP_DIR   The dip direction value of the planar feature in degrees. [Range= 0-360]

STRIKE   The right-hand rule strike value of planar feature. [Range= 0-360]

DIP   The dip value of the planar feature in degrees. [Range=0-90]

STRAIN   The strain intensity associated with this fabric measurement. [Domain=strain]
              Examples: no strain, weak, moderate, intense

FLATTENING   The relative intensity of planar (S) fabric over linear (L) fabric.
              [Domain=flattening]
              Examples: L tectonite, L>S, L=S, L<S, S tectonite

LITH_ID   The unique identifier for the lithology in which the measurement was taken.
              Example: 05FNA025A

STATION_ID   The unique identification of the station where the measurements were taken.
              Example: 05FNA025

LINEAR_ID   A list of unique identifiers for all related linear measurements.

Example: The unique identifier for a striae lineation on a fault plane

PLANAR_ID2   A list of unique identifiers for all related planar measurements.
Example: The unique identifier for a cleavage plane measured with bedding

REMARKS   Notes relating to the measurement.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: Linear

Explanation of Contents: linear orientation measurements

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=linear orientation measurement). [Domain=lip_feature]

LINEAR_ID   The <u>unique</u> identification for each linear measurement. Format as follows: year, officer code, station #, lithology letter, measurement #
Examples: 05FNA025B04, 05FNA025C05

SUBFEATURE   The type of linear feature. [Domain=lip_subfeature]
Examples: mineral lineation, fold hinge, fault striae

FAB_ELEM   The elements that define the linear fabric.
Examples: aligned hornblende (mineral lineation), stretched pebbles (stretching lineation), tool marks (sedimentary lineation)

TREND   The trend value of linear feature in degrees.

PLUNGE   The plunge value of linear feature in degrees.

SENSE   The sense of movement indicated by the feature.
Examples: sinistral, down to northeast

GENERATION   The defomational phase of generation. [Domain=generation]
Examples: primary, first, second, third, fourth, undefined

METHOD   The method of acquisition. [Domain=method]
Examples: measured at station, estimated at station, calculated from data, calculated from imagery, acquired from historical data

REMARKS   Notes relating to the measurement.

STRAIN   The strain intensity associated with this fabric measurement. [Domain=strain]
Examples: no strain, weak, moderate, intense

FLATTENING   The relative intensity of planar (S) fabric over linear (L) fabric.
[Domain=flattening]
Examples: L tectonite, L>S, L=S, L<S, S tectonite

LITH_ID   The unique identifier for the lithology in which this measurement was made.
Example: 05FNA025A

STATION_ID   The unique identification of the station where the measurements were taken.
Example: 05FNA025

PLANAR_ID   A list of the unique planar measurement identifiers which the linear measurement may refer to.
Examples: Uniqe identifiers for fault planes, bedding planes, cleavage planes

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: AltnMineraliztn
Explanation of Contents: alteration or mineralization found at stations

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature. [Domain=amp_feature]
Examples: alteration, mineralization

STATION_ID   The unique identifier for the station at which the alteration or mineralization
occurs.
Example: 05FNA025

ALTMIN_ID   The unique identifier for the occurrence of alteration or mineralization. Format as
follows: year, officer code, station #, X, sequential #
Examples: 05FNA025X01, 05FNA025X02

UNIT   The outcrop unit of rock in which the alteration or mineralization occurs.
[Domain=amp_unit]
Examples: host rock, intrusion, all

MINERAL   The alteration mineral or economic mineral.
Examples: sericite, smectite, bornite, galena

MNRL_MODE   The proportion (%) of the rock unit comprised by the mineral (range is 0-100).

DISTRIBUTN   The nature of distribution of alteration mineral or economic mineral.
[Domain=amp_distributn]
Examples: pervasive, fracture controlled, disseminated

REMARKS   Further explanatory notes on the alteration or mineralization.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
features and to auto-generate map legend symbols.

Feature Class Name: Photos
Explanation of Contents: photographs taken in the field

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=photograph). [Domain=php_feature]

STATION_ID   The unique identification of the station at which the photograph was taken.
        Example: 09SQB025

PHOTO_DATE   The date on which the photograph was taken (yyyy-mm-dd).

PHOTO_TIME   The time at which the photgraph was taken. (hh:mm:ss)

PHOTO_ID   The unique identification for the photograph. Format as follows: year, officer
        code, station #, P, sequential #
        Examples: 09SQB025P01, 09SQB025P02

SUBJECT   The general subject matter for the photograph. [Domain=php_subject]
        Examples: outcrop, structure, landscape, wildlife

FILENAME   The file name assigned by the camera.
        Example: DSC_087

PERM_NAME   The permanent file name for long term accessibility.
        Examples: 2009SQB025_DSC_087, 09SQB025P01

CATALOG_ID   The unique identifier for a photograph that has been catalogued by NRCan.

DIRECTION   The direction (value in degrees) in which the photograph was taken.

CAPTION   The caption of the photograph.

*PHOTOGRAPH*Field to store a raster image of the photograph.

LATITUDE   The latitude of the photograph location in decimal degrees.

LONGITUDE   The longitude of the photograph location in decimal degrees.

GEO_DATUM   The horizontal datum for geographic coordinates. [Domain=hor_datum]
        Examples: NAD27, NAD83, WGS84

REFERENCE   An abbreviated reference for the current publication.
        Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
        of the original data source.
        Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
        Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
        features and to auto-generate map legend symbols.

Feature Class Name: Fossils

Explanation of Contents: fossil localities

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=fossil locality). [Domain=fop_feature]

TYPE_ANAL   The laboratory analysis completed on the sample. [Domain=fop_type_anal]
              Examples: macropaleontology, conodonts, palynology

SAMPLE   The unique identifier assigned to sample when collected in the field. Format will
              vary with historical data.
              Example: AKX2002-18-7a, 05FNA025B02

LITHOLOGY   The lithology of the sample.

MAP_UNIT   The map unit from which the sample was collected.

FOSSILS   The list of fossils present in the sample (common names only, not genera or
              species).
              Examples: graptolites, trilobites, bryozoa, solitary coral

CATALOG_ID   The curation identifier of the sample. Catalogue number as assigned from the
              Sample Management System (SMS).
              Example: C-456789 (Calgary sample), V-123456 (Vancouver sample)

COLLECTION   The collection location where the sample is archived.
              Examples: Vancouver, Calgary, Ottawa, University of Manitoba

STATION_ID   The unique identification of the station, section, well, or drill-hole where the
              sample was collected.
              Examples: AKX2002-18-7 (station), 200/B-081-E/094-O-06/00 (well)

DISTANCE_M   The distance in metres from the reference point. Height in metres above base of
              section (if collected within a measured section), or depth in metres down hole (if
              collected from a well or drilled core).

YEAR_COLL   The year sample was collected.

REPORT   The paleontological report number(s).

REPORT_AGE   The age information provided in the report(s).

REMARKS   Notes relating to the fossil locality.

REFERENCE   An abbreviated reference for the current publication.
              Example: Author. Year. CGM #

SOURCE_REF   An abbreviated publication reference for source information or data, or the name
              of the original data source.
              Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).

Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: Geochronology

Explanation of Contents: localities with geochronology results

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=geochronology result locality). [Domain=gcp_feature]

TYPE_ANAL   The laboratory analysis completed on the sample. [Domain=gcp_type_anal]
Examples: U-Pb, 40Ar-39Ar, fission track.

TECHNIQUE   Laboratory technique employed.
Examples: TIMS, SHRIMP, Laser Step Heating, ICPMSMC

MATERIAL   The material analysed.
Examples: zircon, muscovite, baddeleyite, whole rock

SAMPLE   The unique identifier assigned to the sample when collected in the field. Format will be variable with historical data.
Examples: AKX2002-18-7b, 05FNA025B02

CATALOG_ID GSC catalogue number of the sample.
Examples: V-12345, C-678901, O-234567

LITHOLOGY   The lithology of the sample.

MAP_UNIT   The map unit from which the sample was collected.

GEOL_PROV   Geological suite, assemblage, terrane, or province the sample belongs to.
Examples: Flin Flon Domain, Omineca Belt, Cache Creek Terrane

STATION_ID   The unique identification of the station, section or well where the sample was collected.
Examples: AKX2002-18-7 (station), 200/B-081-E/094-O-06/00 (well)

REPORT_AGE The absolute reported age value from the analysis.

AGE_UNITS   The time units for the reported age.
Example: Ma (million years)

AGE_PLUS   The absolute upper margin of error value on the reported age.

AGE_MINUS   The absolute lower margin of error value on the reported age.

AGE_TYPE   The nature of the event being dated.
Examples: igneous crystallization age, metamorphic age, depositional age

AGE_QUAL   Qualifier indicating whether the age is an estimate or direct calculation. [Domain=gcp_age_qual]

YEAR_COLL   The year the sample was collected.

REMARKS   Notes relating to the geochronology result.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: Wells

Explanation of Contents: petroleum wells and water wells

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=well). [Domain=wep_feature]

SUBFEATURE The type of well. [Domain=wep_subfeature]
                Examples: dry, gas, oil, water

UWI   The Unique Well Identifier.

NAME   The short-form well name.

SPUD_DATE   The start date of drilling operations.

ACTIVITY   The status of production following given spud date. [Domain=wep_activity]
                Examples: producing, abandoned

TD   The total depth of drilling.

TD_UNITS   The unit of measurement for the total depth. [Domain=wep_td_units]
                Example: metres, feet

LATITUDE   The latitude (in decimal degrees) of the kelly bushing.

LONGITUDE   The longitude (in decimal degrees) of the kelly bushing.

GEO_DATUM   The horizontal datum for geographic coordinates. [Domain=hor_datum]
                Examples: NAD27, NAD83, WGS84

REFERENCE   An abbreviated reference for the current publication.
                Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
                of the original data source.
                Example: National Energy Board; extracted October 2008

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
                Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
                features and to auto-generate map legend symbols.

Feature Class Name: MineralLocalities

Explanation of Contents: mineral localities on record with provincial and territorial governments

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=mineral locality). [Domain=mlp_feature]

LOCALITY   The mineral file number, or other unique identification of the locality.
Examples: 094F-015, 095C-023

NAME   The name(s) of the mineral locality.

MAP_UNIT   The geological unit or units at the mineral locality.

STATUS   The deposit status. [Domain=mlp_status]
Examples: anomaly, showing, prospect, production

DEPOSIT   The type of deposit.
Example: sedimentary exhalative, skarn, quartz veins, fault breccia

COMMODITY The economic elements or minerals present.
Examples: lead, zinc

COMM_ABBV The abbreviations of the economic elements or minerals present.
Examples: Pb, Zn

LABEL   Text for an appropriate map label.

LATITUDE   The latitude of the locality in decimal degrees.

LONGITUDE   The longitude of the locality in decimal degrees.

GEO_DATUM The horizontal datum for geographic coordinates. [Domain=hor_datum]
Examples: NAD27, NAD83, WGS84

REMARKS   Comment field for any further explanation of the locality.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
of the original data source.
Example: NORMIN database (NTGO); extracted October 2008

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
features and to auto-generate map legend symbols.

Feature Class Name: SmallMapUnits

Explanation of Contents: small map units (useful for features such as diatremes and kimberlite pipes on regional scale maps)

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=map unit). [Domain=unv_feature]

MAP_UNIT   The name of the map unit.
                        Examples: Mountain River diatreme

PARENTS   The upper level hierarchy names for the map unit, if applicable (formation, group or suite name).
                        Examples: Buffalo Hills suite

MAX_AGE   The chronostratigraphic maximum age of the unit.
                        Examples: Middle Ordovician, 466 Ma

MIN_AGE   The chronostratigraphic minimum age of the unit.
                        Examples: Early Silurian, 430 Ma

LITH_LIST   A short list of lithologies present in the map unit, in descending order of abundance.
                        Examples: kimberlite

GENESIS   The geological process, or environment(s) of creation, of the map unit.
                        Examples: igneous, intrusive

REMARKS   Remarks specific to the map unit.

LABEL   Map unit abbreviation.
                        Examples: OdSl-km

REFERENCE   An abbreviated reference for the current publication.
                        Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
                        Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
                        Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: Notes

Explanation of Contents: Explanatory notes pertaining to specific localities on a map. For example: the location of hot springs, the location of gossans, or localities exposing an important relationship between map units.

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=note). [Domain=nop_feature]

NOTE_ID   A unique identification for each note in this publication or map area.
Example: MWB09-95C/2-Note2

REMARKS   Clarifying comments regarding a feature or features at this location.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Line Data Feature Classes

Feature Class Name: Contacts

Explanation of Contents: contacts between map units

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=contact). [Domain=col_feature]

SUBFEATURE The type of contact. [Domain=col_subfeature]
                Examples: depositional, intrusive, metamorphic, facies change, faulted

CONFIDENCE The confidence in the position of the feature. [Domain=confidence]
                Examples: defined, approximate, inferred, concealed

REMARKS   Comment field available for further explanation.
                Example: interpreted from geophysical data

REFERENCE   An abbreviated reference for the current publication.
                Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
                of the original data source.
                Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
                Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
                features and to auto-generate map legend symbols.

Feature Class Name: GeolUnitConstruct

Explanation of Contents: abstract or conceptual geological lines that form a boundary between map units or define the edge of a map unit

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=geology unit construct). [Domain=gul_feature]

SUBFEATURE The type of geology unit construct. [Domain=gul_subfeature]
                Examples: nomenclature change, mapping precision change, limit of mapping

REMARKS   Comment field available for further explanation.
                Example: these units can no longer be mapped separately due to poor exposure

REFERENCE   An abbreviated reference for the current publication.
                Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
                of the original data source.
                Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
                Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
                features and to auto-generate map legend symbols.

Feature Class Name: BaseMapConstruct

Explanation of Contents: physiographic feature lines from the topographic base, or other sources, that define the edge of a map unit

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=base map construct). [Domain=bml_feature]

SUBFEATURE The type of base map construct. [Domain=bml_subfeature]
                Examples: shoreline, glacier edge, map neat line

REMARKS   Comment field available for further explanation.
                Example: glacier outline from Geomatics Canada 2009

REFERENCE   An abbreviated reference for the current publication.
                Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
                of the original data source.
                Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
                Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

Feature Class Name: ThinStratUnits

Explanation of Contents: units within a layered succession which are too thin to be shown as areas on a printed map, but are deemed significant enough to be shown as a heavy line, separate from adjacent map unit polygons (defined relative to compilation scale); these thin units must also form a boundary between other map units (ie. not internal to another unit)

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=map unit). [Domain=unv_feature]

MAP_UNIT   The name of the map unit.
Examples: Exshaw Formation (a 5-10 m thick regional marker)

PARENTS   The upper level hierarchy names for map unit, if applicable (formation, group or suite name).

CONFIDENCE The confidence in the position of the feature. [Domain=confidence]
Examples: defined, approximate, inferred, concealed

MAX_AGE   The chronostratigraphic maximum age of the unit.
Examples: Devonian, 360 Ma

MIN_AGE   The chronostratigraphic minimum age of the unit.
Examples: Mississippian, 350 Ma

LITH_LIST   A short list of lithologies present in the map unit, in descending order of abundance.
Example: shale

GENESIS   The geological process, or environment(s) of creation, of the map unit.
Examples: sedimentary, marine

REMARKS   Remarks specific to the map unit.

LABEL   Map unit abbreviation.
Examples: DvMs-Ex

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   Symbol code corresponding to the feature's symbol (linestyle) in the FGDC symbol set.

Feature Class Name: ThinDykes

Explanation of Contents: dykes or sills which are too thin to be shown as areas on a printed map (defined relative to compilation scale)

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=map unit). [Domain=unv_feature]

MAP_UNIT   The name of the map unit.
                Examples: Mackenzie Dykes, Matachewan Dykes

PARENTS   The upper level hierarchy names for map unit, if applicable (formation, group or
                suite name).
                Examples: Proterozoic Dykes

CONFIDENCE The confidence in the position of the feature. [Domain=confidence]
                Examples: defined, approximate, inferred, concealed

MAX_AGE   The chronostratigraphic maximum age of the unit.
                Examples: Mesoproterozoic, 1580 Ma

MIN_AGE   The chronostratigraphic minimum age of the unit.
                Examples: Mesoproterozoic, 1520 Ma

LITH_LIST   A short list of lithologies present in the map unit, in descending order of
                abundance.
                Example: diabase

GENESIS   The geological process, or environment(s) of creation, of the map unit.
                Examples: igneous, subvolcanic

REMARKS   Remarks specific to the map unit.

LABEL   Map unit abbreviation.
                Examples: MPt-MD

REFERENCE   An abbreviated reference for the current publication.
                Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
                of the original data source.
                Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
                Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   Symbol code corresponding to the feature's symbol (linestyle) in the FGDC
                symbol set.

Feature Class Name: Faults

Explanation of Contents: fault traces, shear traces, or structural lineaments

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature. [Domain=fal_feature]
                Examples: fault, shear, structural lineament

SUBFEATURE The type of fault. [Domain=fav_subfeature]
                Examples: thrust; dextral strike-slip; generic, steep dip

ATTITUDE   The attitude of the fault. [Domain=attitude]
                Examples: overturned, upright, not applicable

CONFIDENCE The confidence in the position of the feature. [Domain=confidence]
                Examples: defined, approximate, inferred, concealed

GENERATION The phase of generation. [Domain=generation]
                Examples: first, second, third, undefined

MAX_AGE   The chronostratigraphic maximum age of the fault.
                Examples: Middle Ordovician, 466 Ma

MIN_AGE   The chronostratigraphic minimum age of the fault.
                Examples: Early Silurian, 430 Ma

NAME   The name of the feature.
                Examples: Jedhi Deh Thrust, Great Slave Lake Shear Zone

PROPERTIES   Other properties of interest such as: seismic activity, relationship to dominant
                structural grain, unusual geometries.
                Examples: seismically active, klippe, fenster

MOVEMENT   A description of vertical fault movement for faults where the hanging wall cannot
                be established (ie. generic, steep dip fault). [Domain=fal_movement]
                Examples: SW side down, N side down

HWALL_DIR   The direction of the side of the fault on which the hanging wall occurs (for faults
                where a hanging wall can be identified, ie. normal, reverse, thrust).
                [Domain=fav_direction]
                Examples: SW, NE, inward, undefined

REMARKS   Comment field for further explanation of the fault.
                Example: interpreted from seismic data

REFERENCE   An abbreviated reference for the current publication.
                Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
                of the original data source.
                Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).

Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: Folds

Explanation of Contents: fold traces

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=fold). [Domain=fol_feature]

SUBFEATURE The type of fold. [Domain=fol_subfeature]
Examples: anticline, anticlinorium, syncline, synformal sheath, arch, trough

ATTITUDE   The attitude of the fold. [Domain=attitude]
Examples: overturned, upright

CONFIDENCE Confidence in the position of the feature. [Domain=confidence]
Examples: defined, approximate, inferred, concealed

GENERATION The phase of generation. [Domain=generation]
Examples: first, second, third, undefined

MAX_AGE   The chronostratigraphic maximum age of the fold.
Examples: Middle Ordovician, 466 Ma

MIN_AGE   The chronostratigraphic minimum age of the fold.
Examples: Early Silurian, 430 Ma

FOLDTREND   The approximate direction of plunge (=trend) of the fold axis.
[Domain=fol_direction]

FOLDPLUNGE The approximate magnitude of plunge of the fold axis.
Examples: shallow, moderate, steep

NAME   The name of the feature, if a named feature.
Examples: Babiche Anticline, Porcupine Creek Anticlinorium

PROPERTIES Other properties of interest such as: shape, symmetry, interlimb angle
Examples: chevron, cylindrical, symmetrical, tight, open

REMARKS   Comment field available for further explanation of the feature.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

ARROW_DIR   Direction in which the arrows for the limbs point for overturned and monocline
symbols, <u>or</u> direction of short arrow (steep limb) for asymmetrical fold symbols.
[Domain=fol_direction]
Examples: SW, NE, not applicable (for symmetrical symbols)

SYMBOL A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: DriftContacts

Explanation of Contents: drift contacts

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature. [Domain=col_feature]

SUBFEATURE The type of drift contact. [Domain=dcl_subfeature]
                Examples: depositional-unconformable, depositional-conformable, faulted

CONFIDENCE The confidence in the position of the feature. [Domain=confidence]
                Examples: defined, approximate, inferred, concealed

REMARKS   Comment field available for further explanation.

REFERENCE   An abbreviated reference for the current publication.
                Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
                of the original data source.
                Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
                Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
                features and to auto-generate map legend symbols.

Feature Class Name: MeasuredSections

Explanation of Contents: measured stratigraphic sections

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=measured stratigraphic section). [Domain=sel_feature]

SUBFEATURE The type of measured section. [Domain=sel_subfeature]
                      Examples: type section, reference section, study section

SECTION_ID   The unique section identifier.
                      Examples: KB1943-1, NE1977-Mount Lloyd George

SEC_UNIT   A list of units in the section.

UNIT_AGE   The ages of the units listed in the sec_unit field.

OBSERVER   The geologist who measured the section.
                      Examples: E.D. Kindle, B.S. Norford

SEC_YEAR   The year the section was measured.

BASE_LAT   Latitude coordinate for the base of the section (in decimal degrees).

BASE_LONG   Longitude coordinate for the base of the section (in decimal degrees).

TOP_LAT   Latitude coordinate for the top of the section (in decimal degrees).

TOP_LONG   Longitude coordinate for the top of the section (in decimal degrees).

GEO_DATUM   The horizontal datum for geographic coordinates. [Domain=hor_datum]
                      Examples: NAD27, NAD83, WGS84

CONFIDENCE Confidence in the location of the section. [Domain=sel_confidence]
                      Examples: defined, approximate, obliterated

LOC_REMARK Comment field available for remarks concerning the location of the section.

REFERENCE An abbreviated reference for the current publication.
                      Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
                      of the original data source.
                      Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
                      Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
                      features and to auto-generate map legend symbols.

Feature Class Name: Traverses

Explanation of Contents: traces of traverse paths

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=traverse). [Domain=tvl_feature]

TRAVERS_ID Unique identifier for the traverse.
Example: AC-1971-5.

TRAV_DATE   Date the traverse was undertaken (yyyy-mm-dd).

LEADER   The name of the person leading the traverse.

PARTNER   The name of the traverse assistant(s) or partner(s).

REMARKS   Further remarks on the traverse as required.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
features and to auto-generate map legend symbols.

Feature Class Name: Traces

Explanation of Contents: traces of supplementary features not typically essential to the geological interpretation

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=trace). [Domain=trl_feature]

SUBFEATURE The type of trace. [Domain=trl_subfeature]
Examples: marker bed, bedding form line, structural cross-section, non-structural lineament, seismic line, joint

DESCRIPTN   A short description of the trace for clarification of unique subfeatures.
Examples: discontinuous marble lens, chert marker bed, thin mafic sill

NAME   The name of the feature.
Examples: Cross-section A-B, Shell A64-117 (seismic line)

REMARKS   Further remarks on the feature as required.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: Limits

Explanation of Contents: limits or boundaries of supplementary features not essential to the geological interpretation

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature. [Domain=lsl_feature]
Examples: limit, boundary

SUBFEATURE The type of limit or boundary. [Domain=lsl_subfeature]
Examples: gas field; mine, surface; outcrop extent, lava flow margin, etc.

DESCRIPTN   A short description of the limit or boundary for clarification of unique subfeatures.
Examples: working coal mine, outline current as of 2005 (mine, surface)

NAME   The name of the feature.
Examples: Kotaneelee Gas Field

REMARKS   Further remarks on the feature as required.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: Isograds

Explanation of Contents: Isograd lines indicating the appearance or disappearance of index minerals.

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   Type of feature(=isograd). [Domain=igl_feature]

SUBFEATURE Subdivision of the feature type. [Domain=igl_subfeature]
Examples: chlorite in, garnet in, biotite out, kyanite out

CONFIDENCE Confidence in the position of the feature. [Domain=confidence]

MIN_DIR   The side of the line that would have the index mineral present.
[Domain=fav_direction]

REMARKS   Further clarification of the isograd if required.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF Abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Polygon Data Feature Classes

Feature Class Name: FaultZones

Explanation of Contents: fault zones and shear zones

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature. [Domain=faa_feature]
                Examples: fault zone, shear zone

SUBFEATURE The type of fault zone or shear zone. [Domain=fav_subfeature]
                Examples: thrust; dextral strike-slip; generic, steep dip

GENERATION The phase of generation. [Domain=generation]
                Examples: first, second, third, undefined

MAX_AGE   The chronostratigraphic maximum age of the fault zone or shear zone.
                Examples: Middle Ordovician, 466 Ma

MIN_AGE   The chronostratigraphic minimum age of the fault zone or shear zone.
                Examples: Early Silurian, 430 Ma

NAME   The name of the feature.
                Examples: Cate Creek Duplex, Great Slave Lake Shear Zone

PROPERTIES Other properties of interest such as: seismic activity, relationship to dominant
                structural grain, unusual geometries.
                Examples: seismically active, transverse, klippe, fenster

REMARKS   Comment field for further explanation of the fault zone or shear zone.
                Example: interpreted from seismic data

REFERENCE   An abbreviated reference for the current publication.
                Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
                of the original data source.
                Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
                Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
                features and to auto-generate map legend symbols.

Feature Class Name: MapUnits

Explanation of Contents: bedrock map units

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature. [Domain=mapunit_area_feature]
               Examples: map unit, unmapped area

MAP_UNIT   The name of the map unit.
               Examples: Sayunei Fm, Wildhorn Mbr, Nisutlin Batholith

PARENTS   The upper level hierarchy names for map unit, if applicable (formation, group,
               suite, or assemblage name).
               Examples: Rapitan Gp, Scatter Fm, Cassiar Suite

MAX_AGE   The chronostratigraphic maximum age of the unit.
               Examples: Middle Ordovician, 466 Ma

MIN_AGE   The chronostratigraphic minimum age of the unit.
               Examples: Early Silurian, 430 Ma

LITH_LIST   A short list of lithologies present in the map unit, in descending order of
               abundance.
               Example: sandstone, shale, conglomerate

GENESIS   Geological process, or environment(s) of creation, of the map unit.
               Examples: sedimentary, marine; igneous, plutonic; metasedimentary

REMARKS   Remarks specific to the map unit.

LABEL   Map unit abbreviation.
               Examples: Dv-P, NPt-Sa, lCt-Sc-W

REFERENCE An abbreviated reference for the current publication.
               Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
               of the original data source.
               Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
               Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize
               features and to auto-generate map legend symbols.

Feature Class Name: DriftMapUnits

Explanation of Contents: drift map units

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature. [Domain=mapunit_area_feature]
Examples: map unit, unmapped area

MAP_UNIT   The name of the map unit.
Examples: Quaternary alluvium, Quaternary rockslide

PARENTS   The upper level hierarchy names for map unit (formation, group or suite name).
Examples: Laurentian till

MAX_AGE   The chronostratigraphic maximum age of the unit.
Examples: Pleistocene, 1.2 Ma

MIN_AGE   The chronostratigraphic minimum age of the unit.
Examples: Holocene, 0 Ma

LITH_LIST   A short list of sediment present in the map unit, in descending order of abundance.
Example: sand, mud, gravel

GENESIS   The geological process or environment(s) of creation of the map unit.
Examples: sedimentary, continental - glacial

REMARKS   Remarks specific to the map unit.

LABEL   Map unit abbreviation.
Examples: Qt-a, Qt-ls

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

MAP_ID   NTS identifier or map name (if footprint does not correspond to an NTS footprint).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

SYMBOL   A GSC or mapping project code used in conjunction with a style file to symbolize features and to auto-generate map legend symbols.

Feature Class Name: Sources

Explanation of Contents: extents of source data contributing to the compilation

Attributes:

MAP_THEME   Geological map theme or type (=bedrock, at surface). [Domain=map_theme]

FEATURE   The type of feature (=source area). [Domain=soa_feature]

REMARKS   Clarifying comments regarding the sources.

REFERENCE   An abbreviated reference for the current publication.
Example: Author. Year. CGM #

SOURCE_REF An abbreviated publication reference for source information or data, or the name
of the original data source.
Example: Douglas, R.J.W. 1958. GSC Map 1052A

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