Earth Sciences Sector

Geological Map Flow Project

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

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For more information please contact the project team members listed.

Contact for Scientific Content and Geodatabase Development:
Karen Fallas
Research Scientist
Geological Survey of Canada (Calgary)
Phone: 403-292-7004
Email: Karen.Fallas@NRCan.gc.ca

Contact for Geodatabase Implementation:
Larry MacDonald
Geospatial Technologist / Géospatial - Spécialiste
Geological Survey of Canada (Calgary)
Phone: 403-292-7025
Email: Larry.MacDonald@NRCan.gc.ca

Contact for Project Leader:
Andrew Moore
Manager, Data Management and Dissemination Branch
Earth Sciences Sector (Ottawa)
Phone: 613-996-9348
Email: Andrew.Moore@NRCan.gc.ca

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StudyArea feature class is an exception to this rule due to the fact that the information in this feature class will not be published in a Shapefile).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 (*this section revised 22 Aug 2012)

For publication, each file name consists of the publication series number and the feature class name, separated by an underscore (spaces are to be avoided).

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.

Note: - attributes highlighted in **red** will be **required for publication and data management**
- attributes highlighted in **green** are relevant for generating symbology for display or for generating the legend (**these should be populated whenever possible**)
- attributes highlighted in **blue** are optional and intended for the work environment to assist in compilation (**while not absolutely required for publication, these fields may be published at the author's discretion**)
- fields or feature classes highlighted in yellow are not included in the final publication files

Essential Content for Bedrock Geology Maps

Preliminary Maps and Final Maps (1:5,000 to 1:250,000)
Based on common usage on existing GSC maps, the essential feature classes for map production will include: **Stations, Lithologies, Planar, Linear, Contacts, Faults, Folds, MapUnits,** and where applicable: **GeolUnitConstruct, BaseMapConstruct, DriftContacts, DriftMapUnits**. Other feature classes should be used where applicable, as the compiler feels appropriate (time and resources permitting). If no features exist for a particular publication feature class, it is acceptable to omit the feature class from the 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 unique 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: Khudoley and Fallas (2006)

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

RELEASE At what level of release should this information be made available. [Domain=release]
Examples: ESS project only, laboratory, public

AUTHORITY The name of the scientific authority with release date, or explaination of withheld information.

Example: Karen Fallas; data held confidential from September 1, 2009 to September 1, 2010.

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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

LITH_ID The unique 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

LITHTYPE The subdivision of the general rock grouping (for GanFeld functionality).
Examples: intermediate (volcanic), siliciclastic, siliceous chemical, breccia

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

MINERALS A list of minerals present in this lithology with mode (from GanFeld). Igneous, metamorphic and sedimentary minerals combined.
Examples: i-hornblende-5, m-staurolite-7, s-glauconite-15

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: Khudoley and Fallas (2006)

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

RELEASE At what level of release should this information be made available.
[Domain=release]
Examples: ESS project only, laboratory, public

AUTHORITY The name of the scientific authority with release date, or explaination of withheld information.
Example: Karen Fallas; data held confidential from September 1, 2009 to September 1, 2010.

INCLUDE_HC Indication for including this record for plotting during hardcopy production.
[Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)

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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Example: ESS project only, laboratory, public

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INCLUDE_HC	Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.
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 unique 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
RELATED_ID	The unique identifier for related planar or linear measurements.

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: Khudoley and Fallas (2006)

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

RELEASE At what level of release should this information be made available.
[Domain=release]
Example: ESS project only, laboratory, public

AUTHORITY The name of the scientific authority with release date, or explaination of withheld information.
Example: Karen Fallas; data held confidential from September 1, 2009 to September 1, 2010.

INCLUDE_HC Indication for including this record for plotting during hardcopy production.
[Domain=include_hc] Yes or No.

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 unique 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
RELATED_ID	The unique identifier for related measurements.
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: Khudoley and Fallas (2006)

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

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AUTHORITY The name of the scientific authority with release date, or explaination of withheld information.
Example: Karen Fallas; data held confidential from September 1, 2009 to September 1, 2010.

INCLUDE_HC Indication for including this record for plotting during hardcopy production.
[Domain=include_hc] Yes or No.

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: **FieldSamples**

Explanation of Contents: samples information for input into the Sample Management System (SMS); derived from station, lithology and sample details

Attributes:

FEATURE	The type of feature in this feature class (= field sample). [Domain=sap_feature]
SAMPLE_ID	The unique sample number as recorded in the field. Example: 05FNA025A01
STATION_ID	The unique identification of the station where the sample was taken. Example: 05FNA025
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
LOC_DESC	A description of the location.
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
LOC_TYPE	The type of location at which the sample was collected. [Domain=sap_loc_type] Examples: outcrop, subcrop, talus, borehole, quarry
COUNTRY	The country in which this sample was collected.
PROV_TERR	The province or territory in which this sample was collected. [Domain=sap_province]
HOR_DATUM	The horizontal datum for the coordinates provided. [Domain=hor_datum]
LATITUDE	The latitude of the station in decimal degrees.
LONGITUDE	The longitude of the station in decimal degrees.
UTM_ZONE	The UTM longitudinal zone number. [Domain=UTM_lon_zn] Example: 9, 10, 11, 12
EASTING	The UTM easting coordinate value of the station (as confirmed by observing geologist or publication author).
NORTHING	The UTM northing coordinate value of the station (as confirmed by observing geologist or publication author).
LOC_METHOD	The method used to capture coordinates for this station. [Domain=loc_method] Example: GPS, georeferenced image, scaled from 50k topo map
LOC_PRECSN	An estimate of precision (given as maximum error) of the location in metres. [Domain=sap_loc_precsn] Examples: 50 (if loc_method is GPS), 100 (if loc_method is 50k map)
ELEVATION	The numerical value of the sample location elevation.

ELEV_UNIT The unit of measure for elevation.

ELEV_METH The method used to capture elevation for this station. [Domain=elev_meth]
Example: GPS, altimeter, 50k DEM, 250k topo map

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

YEAR The year in which the sample was collected.

MONTH The month (numeric) in which the sample was collected.

DAY The day on which the sample was collected.

SAMPLE_MGR The GSC staff member in charge of the sample.

SAM_TYPE The sample type (morphology). [Domain=sap_sam_type]
Examples: hand, single; hand, oriented; chip sample; core

GEOL_PROV The general geological province in which the sample was collected.
[Domain=sap_geol_prov]
Examples: Slave Province, Cordilleran Orogen, Interior Platform

PURPOSES The list of reasons the sample was collected.
Examples: representative lithology; geochemistry, litho; geochronology, 40Ar-39Ar; paleontology, conodonts

PURPOSE1 The primary reason sample was collected. [Domain=sap_purpose]

PURPOSE2 The secondary reason sample was collected. [Domain=sap_purpose]

PURPOSE3 The tertiary reason sample was collected. [Domain=sap_purpose]

LITH_ID Unique identifier for the lithology that was sampled.

LITH_DESC A text description of the lithology that was sampled.

LITHOLOGY The lithology that was sampled.

LITH_PROP The proportion of sample comprised by the lithology listed.
[Domain=sap_lith_prop]
Examples: all, major, minor, significant

MAP_UNIT The map unit from which the sample was collected.

LOWER_AGE The estimated lower (older) age of the sample. [Domain=sap_age]
Examples: Mesoproterozoic, Ediacaran, Permian, Pliocene

UPPER_AGE The estimated upper (younger) age of the sample. [Domain=sap_age]
Examples: Mesoproterozoic, Ediacaran, Permian, Pliocene

SAM_NOTE Remarks about the sample.

FORMAT The format of measurement for oriented samples. [Domain=sap_format]
Examples: RHR (right-hand rule), DDD (dip direction, dip), TRND-PLNG (trend and plunge)

AZIMUTH The strike, dip direction or trend of measurement in degrees.

DIPPLUNGE The dip or plunge of measurement in degrees.

SURFACE An indication of whether the upper or lower surface of the oriented sample was marked in the field. [Domain=sap_surface]

RELEASE At what level of release should this information be made available. [Domain=release]
Example: ESS project only, laboratory, public

AUTHORITY The name of the scientific authority with release date, or explaination of withheld information.
Example: Karen Fallas; data held confidential from September 1, 2009 to September 1, 2010.

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: Khudoley and Fallas (2006)
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
RELEASE	At what level of release should this information be made available. [Domain=release] Example: ESS project only, laboratory, public
AUTHORITY	The name of the scientific authority with release date, or explaination of withheld information. Example: Karen Fallas; data held confidential from September 1, 2009 to September 1, 2010.
INCLUDE_HC	Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)
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
RELEASE	At what level of release should this information be made available. [Domain=release]

Example: ESS project only, laboratory, public

AUTHORITY The name of the scientific authority with release date, or explaination of withheld information.
Example: Karen Fallas; data held confidential from September 1, 2009 to September 1, 2010.

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)
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

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)

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

INCLUDE_HC Indication for including this record for plotting during hardcopy production.
[Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)
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
INCLUDE_HC	Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.
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: Khudoley and Fallas (2006)

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

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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

DESCRIPTION A description of the map unit.
Example: kimberlite: olivine-phyric, dark green, dark brown weathering, non-diamondiferous

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)
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
INCLUDE_HC	Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.
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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

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

DESCRIPTION A description of the map unit.
Example: shale: carbonaceous, black, dark grey weathering, fissile

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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

DESCRIPTION A description of the map unit.
Example: diabase: aphanitic, dark greyish green, dark greenish grey weathering, massive, resistant

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

ARROW_DIR Direction in which the arrows for the limbs point for overturned and monocline symbols, or 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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production.

[Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)
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
PUB_SCALE	The publication scale to classify the feature according to a data resolution for display. Examples: 50000, 100000, 250000
INCLUDE_HC	Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.
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: Khudoley and Fallas (2006)
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
PUB_SCALE	The publication scale to classify the feature according to a data resolution for display. Examples: 50000, 100000, 250000
INCLUDE_HC	Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.
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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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

DESCRIPTION A description of the map unit.
Example: limestone: argillaceous, finely crystalline, dark grey, beige weathering, thin bedded, bioturbated, locally contains graptolites; shale: black, dark grey weathering, thinly laminated, interbedded with limestone

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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

DESCRIPTION A description of the map unit.
Example: gravel: heterolithic, cobbles to boulders, light brown, beige weathering, massive, fluvial origin.

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: Khudoley and Fallas (2006)

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

PUB_SCALE The publication scale to classify the feature according to a data resolution for display.
Examples: 50000, 100000, 250000

INCLUDE_HC Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.

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: Khudoley and Fallas (2006)
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
PUB_SCALE	The publication scale to classify the feature according to a data resolution for display. Examples: 50000, 100000, 250000
INCLUDE_HC	Indication for including this record for plotting during hardcopy production. [Domain=include_hc] Yes or No.
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: **ESS_Project**

Explanation of Contents: description of the ESS mapping project for SDE spatial indexing and geodatabase querying.

Attributes:

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

PROJ_ID The unique database identifier of the project (composed of the project leader's officer code and the two-digit year for the start of the project).
Example: MWB09

PROJ_TITLE The official ESS project title.

PROJ_LEAD The full name of the project leader.

OFF_CODE The project leader's officer code.

START_DATE The beginning date of the project.
Example: 2005-04-01

END_DATE The end date of the project.
Example: 2008-03-31

REMARKS Remarks specific to the project.

Feature Class Name: StudyArea

Explanation of Contents: Project work and publication inventory - metadata for each study area worked on. Allows for SDE spatial indexing and intranet querying. A subset of the attributes may be used for map publication, where applicable, as an XML, HTML or text file.

Attributes:

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

PROJ_ID The unique database identifier of the project (composed of the project leader's officer code and the two-digit year).
Example: MWB09

MAP_ID NTS identifier or map name of the project study area or map areas (if these areas do not correspond to NTS boundaries).
Examples: 95C/7, NP-11/12, Melville Island, Northern Yukon

REMARKS Remarks specific to the map or study area.

ORIGINATOR The name of the individual that developed the data set. If the name of editors or compilers are provided, the name must be followed by "(ed.)" or "(comp.)" respectively.

PUBLICATION_DATE The date when the data set is published or otherwise made available for release.

TITLE The title of the publication or the name for a study area which is unpublished.

EDITION The version of the title.

GEOSPATIAL_PRESENTATION_FORM
The mode in which the geospatial data are represented.
[Domain = presen_form]
Examples: vector digital data, map, atlas, raster digital data

SERIES_NAME The name of the series publication of which the data set is a part.

ISSUE_IDENTIFICATION
Information identifying the issue of the series publication of which the data set is a part.

PUBLICATION_PLACE The name of the city, province, and country where the data set was published or released.

PUBLISHER The name of the individual or organization that published the data set.

OTHER_CITATION_DETAILS The complete recommended citation.

ABSTRACT A brief narrative summary of the data set.

PURPOSE A summary of the intentions with which the data set was developed.

BEGINNING_DATE	The first year (and optionally month, or month and day) of the study area work.
ENDING_DATE	The last year (and optionally month, or month and day) of the study area work.
PROGRESS	The state of the data set. [Domain=progress]
WEST_BOUNDING_COORDINATE	The western-most coordinate of the limit of coverage expressed in longitude (decimal degrees format).
EAST_BOUNDING_COORDINATE	The eastern-most coordinate of the limit of coverage expressed in longitude (decimal degrees format).
NORTH_BOUNDING_COORDINATE	The northern-most coordinate of the limit of coverage expressed in latitude (decimal degrees format).
SOUTH_BOUNDING_COORDINATE	The southern-most coordinate of the limit of coverage expressed in latitude (decimal degrees format).
THEME_KEYWORD	Common-use word or phrase used to describe the subject of the data set.
THEME_KEYWORD_THESAURUS	Reference to a formally registered thesaurus or a similar authoritative source of theme keywords.
PLACE_KEYWORD	The geographic name of a location covered by the data set.
PLACE_KEYWORD_THESAURUS	Reference to a formally registered thesaurus or a similar authoritative source of place keywords.
USE_CONSTRAINTS	Restrictions and legal prerequisites for using the data set after access is granted. These include any use constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on using the data set.
SCI_CONTENT_CONTACT	The scientific authority associated with the data set.
.	
SCI_CONTENT _CONTACT_ORG	The name of the organization with which the scientific content contact person is affiliated.
SCI_CONTENT_ADDRESS_TYPE	The information provided by the address.
SCI_CONTENT_ADDRESS	An address line for the address.
SCI_CONTENT_CITY	The city of the address.
SCI_CONTENT_PROVINCE	The province of the address. [Domain=sap_province]
SCI_CONTENT_POSTAL_CODE	The postal code of the address.
SCI_CONTENT_COUNTRY	The country of the address.
SCI_CONTENT_VOICE_TELEPHONE	The telephone number by which individuals can speak to the scientific authority.

SCI_CONTENT_FAX_TELEPHONE The telephone number of a facsimile machine of the organization.

SCI_CONTENT_EMAIL_ADDRESS The address of an electronic mailbox by which individuals may contact the scientific authority.

BROWSE_GRA_FILE_NAME The name of a related graphic file that provides an illustration of the data set.

BROWSE_GRA_FILE_DESCRIPTION A text description of the illustration.

BROWSE_GRA_FILE_TYPE The graphic file type of the related graphic file. [Domain=graphic]

DISTRIBUTOR The party from whom the data set may be obtained.
Example: Bookstore

CONTACT_ORGANIZATION The organization associated with the data set.

ADDRESS_TYPE The information provided by the address.

ADDRESS An address line for the address.

CITY The city of the address.

PROVINCE The province of the address. [Domain=sap_province]

POSTAL CODE The postal code of the address.

COUNTRY The country of the address.

CONTACT_VOICE_TELEPHONE The telephone number by which individuals can speak to the organization.

CONTACT_FAX_TELEPHONE The telephone number of a facsimile machine of the organization.

CONTACT_EMAIL_ADDRESS The address of the electronic mailbox of the organization.

METADATA_DATE The date that the metadata were created or last updated.

METADATA_CONTACT_POSITION The title of the individual responsible for the metadata information.
Example: Head Geoinformatics Subdivision

METADATA_ADDRESS_TYPE The information provided by the address.

METADATA_ADDRESS An address line for the address.

METADATA_CITY The city of the address.

METADATA_PROVINCE The province of the address. [Domain=sap_province]

METADATA_POSTAL CODE The postal code of the address.

METADATA_COUNTRY	The country of the address.
METADATA_CONTACT_VOICE_TEL	The telephone number by which individuals can speak to the organization.
METADATA_CONTACT_FAX_TEL	The telephone number of a facsimile machine of the organization.
METADATA_CONTACT_EMAIL_ADDRESS	The address of the electronic mailbox of the organization.