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Geologic-polygon attributes for digital geologic-map data bases produced by the Southern California Areal Mapping Project (SCAMP)
Version 1.0

By

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This document provides geologic attributes and associated codes for polygons defined in digital geologic-map coverages produced by the Southern California Areal Mapping Project (SCAMP)--a geologic-mapping project sponsored jointly by the U.S. Geological Survey and the California Division of Mines and Geology. Attributes include geologic age, lithology, petrology, sedimentary and deformational structures, metamorphic history and protolith, surficial geomorphology, pedology, and other attributes that characterize the properties, origin, and history of geologic materials in southern California.

SCAMP's data-base structure and digital attributes anticipate Nationwide standards currently being developed under the auspices of the U.S. Geological Survey's National Cooperative Geologic Mapping Program (NCGMP). The NCGMP is working in conjunction with State geological surveys and other entities to develop a national geologic-map data model that will describe the format, storage, and use of geologic-map data in a computer. Included in this model will be National spatial-data standards for polygons, lines, and points. These national standards eventually will become a foundation of the Nation's geologic-map data base, currently being developed by the U.S. Geological Survey and the State geological surveys (Soller and Berg, 1997). Information about model development and other aspects of the data-base project can be found at http://ncgmp.usgs.gov/ngmdbproject. Pending widespread review and adoption of the national standards, SCAMP's digital geologic-map data bases are presented as provisional data structures that can easily be integrated into the national model when it is adopted for Nationwide use.

Intended purpose

This document targets two audiences: (1) users of Geographic Information Systems (GIS) who have little or no geologic training but who need to incorporate geologic-map information into their geospatial analyses; and (2) fellow geologists in the southern California region who, like ourselves, are struggling to convert their traditional analog geologic-map products into digital GIS data bases without the benefit of extensive GIS training. The GIS specialist hopefully will benefit from our brief discussion of geologic-map units; the geologic specialist hopefully will benefit from our brief discussion of how we use GIS rules and procedures to develop SCAMP digital geologic-map data bases. Our cursory treatment of these two specialties should allow geologist and GIS analyst to work together as they use digital geologic maps produced by SCAMP.

GEOLOGIC-MAP UNITS, GEOLOGIC POLYGONS, and GEOLOGIC ATTRIBUTES

A geologic map uses a combination of lines, points, and areas to portray the geologic framework of a prescribed geographic region. The geologic framework includes various kinds of earth materials (geologic units) separated from each other at the time of their formation by various kinds of boundaries (geologic contacts) and subsequently modified by various kinds of geologic structures (faults, folds) that have broken or warped the geologic units; in places, faults may bound some geologic units and separate them from others. The geologic map captures the surface distribution of these materials and structures, describes their physical characteristics, and interprets their age, genesis, and history. For maximum usage, the geologic map usually is registered to a cartographic base depicting landscape and cultural features. These features provide a geographic reference frame that allows the map-maker or map-user to determine the position of geologic features with a degree of confidence that depends on the accuracy and detail of the cartographic base and the skill of the observer[1]. This document discusses geologic-map units; companion documents (Matti and others, 1997a, b) discuss geologic points and lines.

A geologic-map unit is a cartographic representation that shows the intersection of a three-dimensional body of earth material with the land's surface. Each mapped body is distinguishable from other such bodies on the basis of geologic criteria (lithology, age, structure, genesis, etc.). The field geologist establishes the existence of various map units from place to place by means of hands-on observations, then extrapolates these units by indirect methods to areas where no reliable hands-on observations have been made. Whether a given geologic outcrop is assigned to one map unit or to another is a judgment the field geologist makes based on cumulative observations in

[1]The advent of global-positioning-satellite (GPS) technology greatly facilitates this locational procedure, but GPS techniques generally were not used to position geologic elements currently defined in SCAMP geologic-map products.

an area or region: an outcrop either matches the characteristics of some previously identified map unit, or the outcrop is so different that it must be classified as a new map unit. This judgment process is affected by a number of variable factors, including the skill and experience of the geologist, the amount of time available to examine the geology of the map area, the number of geologic outcrops available for examination, the information quality of each outcrop, the purpose for which the mapping was undertaken, and especially how the geologist deals with geologic variability--how much variation in litholgy can be tolerated within an existing map unit before a new map unit is recognized. Any of these factors may be compounded when a geologist is compiling extant mapping without the benefit of first-hand field observations.

Geologic attributes

Once the geologic setting of an area has been classified into map units, geologic attributes for each unit must be archived and displayed (for example, lithology, geologic structures, geologic age). With traditional paper-map products, this is accomplished through symbols and colors embedded in the map units and through text and graphics located marginal to the map image. Map-marginal information is linked back to the map itself through use of alpha-numeric labels (e.g., "Tm" for Tertiary Mill Creek Formation or "Mzc" for Mesozoic granitic rocks of Cram Peak or "Qyf3" for Quaternary sand and gravel deposits, subunit 3). The map-marginal information allows the map-user to determine that (for example):

- unit "Qyf3" on the geologic map corresponds with geologic materials termed "young deposits of alluvial fans, subunit 3";
- unit Qyf3 consists of "sand and gravel deposits, unconsolidated to slightly consolidated, capped by pedogenic-soil profiles having thin to moderately thick A horizons";
- unit Qyf3 formed in mid-Holocene time as "alluvial-fan deposits emanating from canyon mouths".

Digital geologic maps incorporate similar linkage between geologic units and their technical attributes--but the computer performs the linkage rather than the map-user. By using methods developed for digital Geographic Information Systems, technical attributes can be assigned digitally to geologic-map areas, lines, and points in such a way that these elements can be edited, searched, selected, combined, and analyzed within the digital-map environment--without the need for explanatory marginal text and graphics. To create these "smart" lines, points, and areas (elements that "know" that they are lines, points, and areas of a particular type), digital attributes are associated with the geologic elements--either directly within the digital line, point, and area files themselves, or through associated data files that are related back to the map files using cross-referencing or linking procedures.

Map units *versus* map polygons

A major difference in the way paper and digital geologic maps store and display information influences how map-maker and the map-user view the two products:

With paper geologic maps, the geologic-map unit conveys geologic information. This results because of the way paper maps use colors and symbols to represent geologic units: the eye automatically corrals map areas of the same color, then relates these colors and their alpha-numeric labels back to their information attributes contained in map-marginal text and graphics. This process inevitably leads to the impression that a map unit is a singular geologic entity that shares a common set of geologic attributes throughout its extent. The paper-map user logically concludes that (1) wherever a geologic unit occurs on the map, it will have the attributes assigned to that unit in the map-marginal text and graphics, and (2) a unit occurring at one locality will have the same attributes as the unit occurring at any other locality. In this sense, the technical information contained in the marginal archive is "swept" through all map occurrences of a geologic unit--whether a given map unit is cartographically continuous throughout a map area or whether it is separated into many separate cartographic domains by faults or by cross-cutting or overlapping contacts with other map units. Map-marginal caveats such as "locally fossiliferous" or "locally fractured" or "coarser-grained in eastern map area" provide a limited means of communicating geographic variation that may exist within a map unit, but the cartographic elements of the traditional paper-map product do not allow such variation to be displayed easily. Ultimately, paper-map products create the impression of map units being singular entities having definitions listed at the map margin.

With digital geologic maps, the geologic polygon conveys geologic information--not the geologic-map unit *per se*. This results because of the spatial and topological rules of digital GIS. A polygon simply is a map area that is spatially isolated from all other map areas by some type of boundary. With geologic maps, polygons arise when geologic circumstances (usually faults or contacts with other cross-cutting or overlapping rock units) cause an otherwise singular map unit to be separated into multiple cartographic domains. Although GIS rules require each of these domains to be digitally assigned the attributes of the parent map unit--an attribution process that the paper-map user accomplishes intuitively and unconsciously by "sweeping" map-marginal attributes throughout a map unit--

the polygons provide the geologist with a powerful capability to communicate geographic variability within a geologic unit. Because the computer stores a map unit as a collection of individual polygons, the geologist can assign not only a map-unit attribute to any particular polygon but also attributes that uniquely characterize that polygon.

DATA-BASE STRUCTURE

SCAMP geologic-map data bases are structured to reflect how geologists think about geologic units and describe their attributes. Geologic descriptions commonly begin with general observations and expand to include progressively more specific observations. For example, the Mill Creek Formation is described as comprising two lithologies:

- Rock-type 1—"quartzofeldspathic sandstone that is ledge-forming, very pale brown to pale yellow, medium to thick-bedded, well cemented, poorly sorted, pebbly fine to very coarse sand-size, flat-laminated to ripple-laminated, with rounded pebbles of basalt"

- Rock-type 2—"mudrock that is clay-rich, slope-forming, grayish green to brown, laminated to indistinctly bedded, consolidated to indurated, texturally massive to flat-laminated, mud-cracked locally, with calcareous concretions and trace fossils.

In addition to these two main lithologic types, the Mill Creek Formation

- "locally is broken by numerous small faults, and all occurrences of the map unit are laced by networks of randomly-oriented fractures, most open but some partially closed with calcareous cement".

Parallelling this descriptive style, SCAMP polygon attributes are organized into the following categories:

General features (summary)
    Major rock type
    Geologic age
    Stratigraphic classification
    Surface features
    General origin
Lithology
    Specific rock type
    Outcrop character
    Composition
Geologic structures
Protolith (for metamorphic and high-strain rocks)
Genesis of specific rock types
Petrography
Paleontology
Geotechnical properties
    Penetration resistance
    Shear-wave velocity
    Magnetic susceptibility

The polygon attributes are assembled in ARC/INFO[2], but the attribute data easily can be exported to other database packages (such as Oracle, Ingres, or Access). The relational data base consists of one polygon attribute table (.pat) and eight relate tables (.REL). The attributes are stored as codes assembled in short sentences. The coding scheme is designed to allow search-and-retrieval analysis which targets geologic categories that are as broad or as narrow as the map-user requires. The coding scheme incorporates two features:

- a small number of data-base fields, each containing short code sentences;

- linguistic root-suffix codes that emphasize relations among related geologic attributes but allow clear separation among non-related attributes;

[2]Use of any trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

A typical data-base field will contain a code sentence comprised of root-suffix code pairs parsed by dots. For example:

.MZO.BED.SDRFDM.TOND.

is a code sentence for a map unit having the general attributes of "Mesozoic.bedrock.strain-dominated rock.fault rock.ductile.mylonite.deformed tonalite.". In this example, .SDRFDM. is the root-suffix code for "mylonitic fault rock". The code is built from the root ".SDR" (strain-dominated rock) and three suffixes: "F" (fault rock), "D" (ductile), and "M" (mylonitic). The root-suffix code structure allows attribution or selection of a host of different geologic attributes, including:

- the family of strain-dominated rocks (.SDR root) without distinction among the several varieties that include fault rocks (.SDRF.), high-strain-rocks (.SDRH.), and crushed or sheared rock (.SDRC.);
- all fault rocks (.SDRF root) including both ductile (.SDRFD.) and brittle (.SDRFB.) fault rock, but not other varieties of strain-dominated rock such as crushed or sheared rock (.SDRC.) or high-strain rock (.SDRH.);
- all ductile fault rocks (.SDRFD root) without distinction among protomylonite (.SDRFDP.), mylonite (.SDRFDM.), and ultramylonite (.SDRFDU.);
- mylonitic fault rock (.SDRFDM.) but not protomylonite (.SDRFDP.) or ultramylonite (.SDRFDU.).

Through the use of code sentences built up from root-suffix code quanta, SCAMP data bases use a combination of embedded data-base fields and relational data-base fields to store digital attributes for polygons. Embedded data apply to all polygons of a map unit; relate data apply to polygon subgroups of a map unit.

DATA-BASE FIELDS EMBEDDED IN .pat FILE		
.aat data-base field	Explanation	Contents
TAG	Polygon tag	TAG is a reference label for subgroups of polygons. These polygons have attributes in common with all other polygons of the same geologic unit (LABL), but they have unique attributes that distinguish them as a variant of the common theme. Tag serves two purposes: (1) it is the relate item that associates each polygon with its attributes stored in various polygon-attribute relate tables and (2) it facilitates attributing and editing the polygon coverage. TAG consists of the unit LABL followed by an upper-case alpha character uniquely associated with a cluster of polygons having identical attributes (e.g., TAG Qyf3A, TAG Qyf3B, TAG Qyf3C, etc.)
LABL	Unit label	LABL provides the map-unit label for each polygon (for example, Qyf3 or Mzg or Tmc).
PLABL	Plot-file label	PLABL contains polygon labels used to generate plot files. For most polygons, the labels in PLABL are identical to those in LABL. However, some polygons have labels that require specialized display fonts for plotting; these labels are coded into PLABL.
NAME	Map-unit name	NAME provides the geologic-unit name for each polygon (for example, "Younger deposits of alluvial fans, subunit 3" or "Mesozoic granite" or "Mill Creek Formation")
SHD	Map-unit color	SHD calls up the appropriate polygon color from the shadeset "ALC1.SHD".
SHDFIL	Map-unit pattern fill	SHDFIL calls up the appropriate polygon-fill pattern from the shadeset "GEOLOGY2.SHD".
POLYCON	Polygon confidence	POLYCON indicates the confidence with which each polygon is assigned to its indicated map unit.
THICK	Map-unit thickness	THICK provides thickness information for geologic units (sedimentary units, surficial units) where thickness is a relevant polygon attribute
SOURCE	Map-unit source	SOURCE provides attribution for polygon data compiled from sources other than the U.S. Geological Survey authors of this map product (e.g., Allen, 1957)
UNIQUE	Unique features	UNIQUE provides attribution for geologic features unique to a specific polygon or to a group of polygons.

Table 1

DATA-BASE FIELDS EMBEDDED IN THE RELATE TABLE "SUMMARY.REL" "SUMMARY.REL" provides general information about a rock unit. This information applies to all polygons of a particular geologic-map unit. "SUMMARY.REL" contains the following data-base fields		
.aat data-base field	Explanation	Contents
TAG	Polygon tag	TAG is the data-base item that relates polygon subgroups back to their associated map unit identified in the .pat file.
AGE	Unit age	AGE indicates the geologic age that is assigned to each map unit. AGE data include (1) age of formation of sedimentary and igneous rocks and surficial materials, (2) metamorphic age for geologic materials that have been metamorphosed, (3) deformation age for geologic materials that have been deformed (folded, faulted, penetratively deformed, brecciated, fractured), and (4) age of alteration for stained and altered geologic materials
AGECON	Age confidence	AGECON indicates the confidence with which a geologic age is assigned to a map unit
SURFACE	Surface features	SURFACE identifies geologic and geomorphic attributes that characterize the upper surface of surficial geologic units
TYPE	Rock type	TYPE provides a hierarchical classification of the specific lithologic types occurring in geologic-map unit, including whether a particular geologic-map unit is a bedrock unit or a surficial unit
CLASS	Stratigraphic classification	CLASS provides the stratigraphic classification of a rock unit in terms of the North American Code of Stratigraphic Nomenclature (group, formation, member, tongue, lentil, formal, informal, etc.)
ORIGIN	Map-unit origin	ORIGIN provides coded attributes for the geologic origin of each map unit

Table 2

RELATE TABLE "LITHOLOGY.REL"

"LITHOLOGY.REL" provides lithologic attributes for major rock types (LITH1, LITH2, LITH3, LITH4, etc.) that occur within a geologic-map rock unit. Information in "LITHOLOGY.REL" applies to specified polygons of a particular geologic-map unit, as referenced through the relate item "TAG". "LITHOLOGY.REL" contains the following data-base fields:

Data-base field	Explanation	Contents
TAG	Polygon tag	TAG is the data-base item that relates polygon subgroups back to their associated map unit identified in the .pat file.
LITH1	Main lithology	LITH1 provides coded lithologic attributes for the main lithologic type in each geologic unit
LITH2	Second lithology	LITH2 provides coded lithologic attributes for the second lithologic type in each geologic unit
LITH3	Third lithology	LITH3 provides coded lithologic attributes for the third lithologic type in each geologic unit
LITH4	Fourth lithology	LITH4 provides coded lithologic attributes for the fourth lithologic type in each geologic unit
LITH5	Fifth lithology	LITH5 provides coded lithologic attributes for the fifth lithologic type in each geologic unit

Table 3

RELATE TABLE "STRUCTURE.REL"

"STRUCTURE.REL" provides geologic-structure attributes for major rock types (LITH1, LITH2, LITH3, LITH4, etc.) that occur within a geologic-map rock unit. Information in "STRUCTURE.REL" applies to specified polygons of a particular geologic-map unit, as referenced through the relate item "TAG". "STRUCTURE.REL" contains the following data-base fields:

Data-base field	Explanation	Contents
TAG	Polygon tag	TAG is the data-base item that relates polygon subgroups back to their associated map unit identified in the .pat file.
LITH1	Main lithology	LITH1 provides coded geologic-structure attributes for the main lithologic type in each geologic unit
LITH2	Second lithology	LITH2 provides coded geologic-structure attributes for the second lithologic type in each geologic unit
LITH3	Third lithology	LITH3 provides coded geologic-structure attributes for the third lithologic type in each geologic unit
LITH4	Fourth lithology	LITH4 provides coded geologic-structure attributes for the fourth lithologic type in each geologic unit
LITH5	Fifth lithology	LITH5 provides coded geologic-structure attributes for the fifth lithologic type in each geologic unit
STRHIST	Structural history	STRHIST provides coded attributes that describe the structural history (folding, faulting, penetrative deformation, etc.) of each geologic unit

Table 4

RELATE TABLE "PROTOLITH.REL"

"PROTOLITH.REL" provides protolith attributes for major rock types (LITH1, LITH2, LITH3, LITH4, etc.) that occur within a geologic-map rock unit. Protolith information applies both to metamorphic rocks and to strain-dominated rocks--both of which had pre-metamorphic or pre-strain parent rocks. Information in "PROTOLITH.REL" applies to specified polygons of a particular geologic-map unit, as referenced through the relate item "TAG". "PROTOLITH.REL" contains the following data-base fields:

Data-base field	Explanation	Contents
TAG	Polygon tag	TAG is the data-base item that relates polygon subgroups back to their associated map unit identified in the .pat file.
LITH1	Main lithology	LITH1 provides coded protolith attributes for the main lithologic type in each geologic unit
LITH2	Second lithology	LITH2 provides coded protolith attributes for the second lithologic type in each geologic unit
LITH3	Third lithology	LITH3 provides coded protolith attributes for the third lithologic type in each geologic unit
LITH4	Fourth lithology	LITH4 provides coded protolith attributes for the fourth lithologic type in each geologic unit
LITH5	Fifth lithology	LITH5 provides coded protolith attributes for the fifth lithologic type in each geologic unit

Table 5

RELATE TABLE "GENESIS.REL"

"GENESIS.REL" provides attributes that summarize the genesis of each of the major rock types (LITH1, LITH2, LITH3, LITH4, etc.) that occur within a geologic-map rock unit. Information in "GENESIS.REL" applies to specified polygons of a particular geologic-map unit, as referenced through the relate item "TAG". "GENESIS.REL" contains the following data-base fields:

Data-base field	Explanation	Contents
TAG	Polygon tag	TAG is the data-base item that relates polygon subgroups back to their associated map unit identified in the .pat file.
LITH1	Main lithology	LITH1 provides coded genesis attributes for the main lithologic type in each geologic unit
LITH2	Second lithology	LITH2 provides coded genesis attributes for the second lithologic type in each geologic unit
LITH3	Third lithology	LITH3 provides coded genesis attributes for the third lithologic type in each geologic unit
LITH4	Fourth lithology	LITH4 provides coded genesis attributes for the fourth lithologic type in each geologic unit
LITH5	Fifth lithology	LITH5 provides coded genesis attributes for the fifth lithologic type in each geologic unit

Table 6

RELATE TABLE "PETROGRAPHY.REL"

"PETROGRAPHY.REL" provides petrographic attributes (grain composition and morphology, clast composition and morphology) for each of the major rock types (LITH1, LITH2, LITH3, LITH4, etc.) that occur within a geologic-map rock unit. Information in "PETROGRAPHY.REL" applies to specified polygons of a particular geologic-map unit, as referenced through the relate item "TAG". "PETROGRAPHY.REL" contains the following data-base fields:

Data-base field	Explanation	Contents
TAG	Polygon tag	TAG is the data-base item that relates polygon subgroups back to their associated map unit identified in the .pat file.
LITH1	Main lithology	LITH1 provides coded petrographic attributes for the main lithologic type in each geologic unit
LITH2	Second lithology	LITH2 provides coded petrographic attributes for the second lithologic type in each geologic unit
LITH3	Third lithology	LITH3 provides coded petrographic attributes for the third lithologic type in each geologic unit
LITH4	Fourth lithology	LITH4 provides coded petrographic attributes for the fourth lithologic type in each geologic unit
LITH5	Fifth lithology	LITH5 provides coded petrographic attributes for the fifth lithologic type in each geologic unit

Table 7

RELATE TABLE "PALEONTOLOGY.REL"

"PALEONTOLOGY.REL" provides attributes that summarize information about fossil types occurring ineach of the major rock types (LITH1, LITH2, LITH3, LITH4, etc.) that occur within a geologic-map rock unit. Information in "PALEONTOLOGY.REL" applies to specified polygons of a particular geologic-map unit, as referenced through the relate item "TAG". "PALEONTOLOGY.REL" contains the following data-base fields:

Data-base field	Explanation	Contents
TAG	Polygon tag	TAG is the data-base item that relates polygon subgroups back to their associated map unit identified in the .pat file.
LITH1	Main lithology	LITH1 provides coded paleontologic attributes for the main lithologic type in each geologic unit
LITH2	Second lithology	LITH2 provides coded paleontologic attributes for the second lithologic type in each geologic unit
LITH3	Third lithology	LITH3 provides coded paleontologic attributes for the third lithologic type in each geologic unit
LITH4	Fourth lithology	LITH4 provides coded paleontologic attributes for the fourth lithologic type in each geologic unit
LITH5	Fifth lithology	LITH5 provides coded paleontologic attributes for the fifth lithologic type in each geologic unit

Table 8

RELATE TABLE "GEOTECHNICAL.REL"

"GEOTECHNICAL.REL" provides geotechnical attributes (penetration resistance, shear-wave velocity, magnetic susceptibility values, etc.) for a geologic-map rock unit. Information in "GEOTECHNICAL.REL" applies to specified polygons of a particular geologic-map unit, as referenced through the relate item "TAG". "GEOTECHNICAL.REL " contains the following data-base fields:

Data-base field	Explanation	Contents
TAG	Polygon tag	TAG is the data-base item that relates polygon subgroups back to their associated map unit identified in the .pat file.
PENMEAN	Penetration mean	PENMEAN provides mean penetration resistance for each surficial map unit
PENRANGE	Penetration range	PENRANGE provides the range of penetration resistance for each surficial map unit
SHEARMEAN	Shear-wave velocity mean	SHEARMEAN provides mean shear-wave velocities for each surficial map unit
SHEARRANGE	Shear-wave velocity range	SHEARRANGE provides the range of shear-wave velocities for each surficial map unit
SUSMEAN	Magnetic susceptibility mean	SUSMEAN provides mean magnetic-susceptibility values for each map unit
SUSRANGE	Magnetic susceptibility range	SUSRANGE provides the range of magnetic-susceptibility values for each map unit

Table 9

HIERARCHICAL POLYGON-ATTRIBUTE SCHEME

The SCAMP data-base structure allows for flexibility in portraying polygon attributes--irrespective of map-scale, intended scope of the information product, or richness or poorness of polygon data. As figure 1 illustrates, the density distribution of information attributes can be likened to an inverted tree whose information branches increase and diversify downward. For each geologic-map unit (and each polygon of each unit), the density of information attributes captured in the information data base depends on how far down the data-base tree the map-maker progressed or map-user wishes to go. Three different decisions are represented by three slices through the data-base tree (fig. 1):

- At slice 1, either the knowledge base is poor, or the search-and-retrieval objective requires only a few attributes. A simple example is ".mesozoic.bedrock.igneous.intrusive.granitic rock."
- At slice 2, the knowledge base is richer, and a more diverse information structure is required. Additional data about the map unit described in slice 1 might yield ".mesozoic.cretaceous.late cretaceous.bedrock.igneous.intrusive.plutonic.sill.granitic rock.quartz-rich.tonalite.equigranular.homblende-biotite.isotopic age.isotopic age is emplacement age.certain."
- At slice 3, the knowledge base is very rich, and an extensive data-base scheme is required to represent the polygon adequately. Additional information about the map unit described in slices 1 and 2 might yield ".map unit identified in field.identity certain.mesozoic.cretaceous.late cretaceous.age based on isotopic data.age is certain.bedrock.igneous.intrusive.plutonic.sill.granitic rock.quartz-rich.tonalite.massive to slightly foliated.equigranular.locally porphyritic.groundmass grain shape variable.phenocrysts euhedral.groundmass medium to coarse.phenocrysts medium.charcterizlng minerals hornblende-biotite.phenocrysts potassium feldspar.rimmed.local cataclastic seams.isotopic age.uranium lead zircon.isotopic age is emplacement age.age from outside map area."

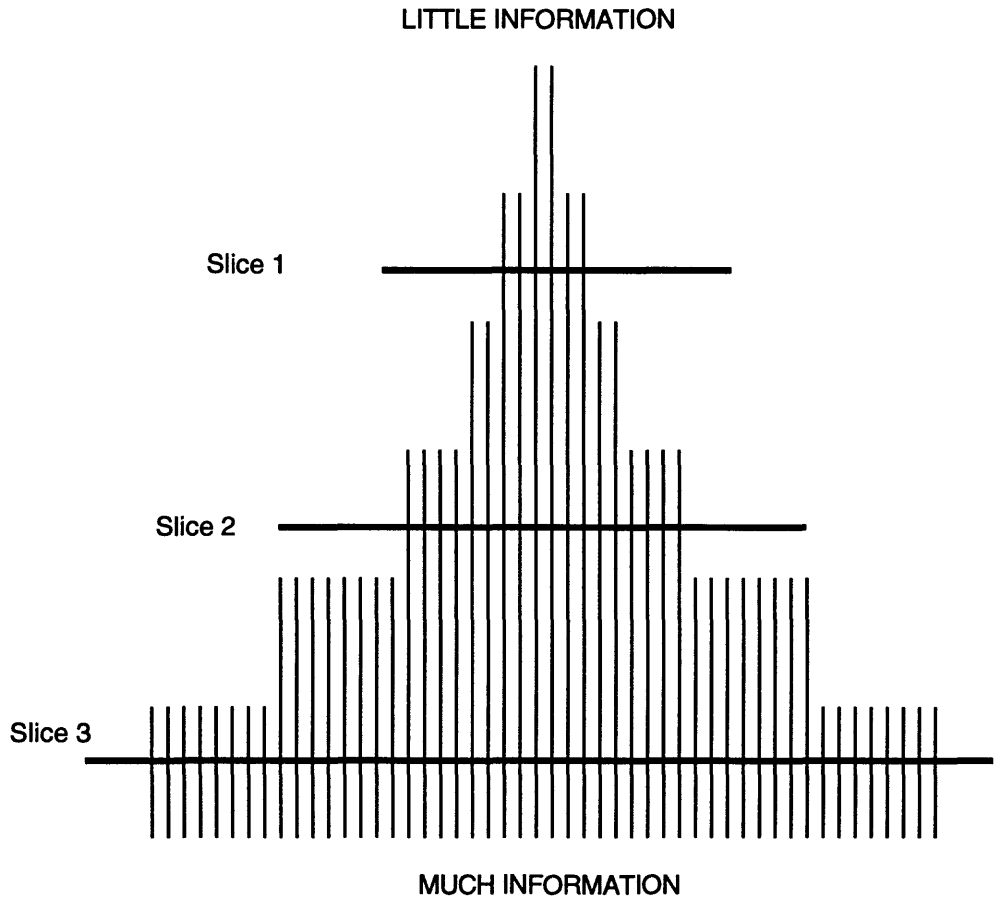

Figure 1.--Diagram illustrating three separate slices through a data-base tree that becomes progressively richer, more diverse, and more detailed downward through the tree structure.

The slice-3 level represents the intended scope of polygon attribution for 1:24,000-scale geologic maps produced by the Southern California Areal Mapping Project. The attribution dictionary documented in this report represents a suite of characteristics used to describe map-unit polygons in the southern California region--where the digital geologic maps not only must characterize polygons in structurally complex terranes ranging from Holocene surficial materials through Proterozoic basement rocks but must also allow for practical applications ranging from general land-use management activities to evaluations of ground water, geohazards, mineral resources, energy resources, and ecosystems.

The remainder of this report lists the polygon attributes and associated codes used in geologic-map coverages produced by SCAMP. Appendix A provides INFO command-line narratives that allow the data base to be searched for one or more specific attributes; Appendix A also provides some examples of completed data bases for representative polygons developed in SCAMP geologic-map coverages. Appendix B provides graphical flow diagrams that illustrate the hierarchical architecture of the polygon-attribute scheme.

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POLYGON-ATTRIBUTE CODES (alphabetic listing by specific key words)

Version 1.0

U.S. Geological Survey, Southern California Areal Mapping Project

Note: The following list of alphabetized keywords is repetitive and redundant because geologic features are listed more than once--but in slightly diifferent form. This redundancy results because most geologic attributes can be referenced in more than one way. For example, sedimentary processes that result in inclined laminae can be references as "cross lamination" or "sedimentary structures, cross lamination", or "lamination, cross".

A-horizon soil, weak=.SSOAW.
A/Bw/C-horizon soil=.SSOABW.
A/C-horizon soil=.SSOAC.
A/C/Bcambic soil=.SSOBC.
actinolite=.MMMAC.
age unknown=.AGU.
agglomerate=.SEDVA.
air-fall tuff=.IGNPTFA.
air-fall tuff, not re-worked=-TNRW-
air-fall tuff, re-worked=-TRW-
air-fall tuff unmapped within mapped geologic unit=-IVAA-
air-photo interpretation, basis for geologic-unit identification=-APH-
albite (metamorphic mineral)=.MMMAL.
albitization, local=.ALRLA.
albitization, pervasive=.ALRPA.

algal lamination=.SDSLA.
algal lamination, cryptalgal laminae=.SDSLAC.
algal lamination, laterally linked columnar heads=.SDSLAL.
allanite=.MACAL.

altered rock=.ARL.
alteration, local=.ALRL root
alteration, local, albitization=.ALRLA.
alteration, local, chloritic=.ALRLC.
alteration, local, dolomitization=.ALRLD.
alteration, local, greisenization (fluorine metasomatism)=.ALRLG.
alteration, local, kaolinization (clay alteration)=.ALRLK.
alteration, local, saussuritic (epidotization)=.ALRLSA.
alteration, local, sericitic=.ALRLSE.
alteration, local, silicification=.ALRLSI.
alteration, local, toumalinization (boron metasomatism)=.ALRLT.
alteration, local, zeolitic=.ALRLZ.

alteration, pervasive=.ALRP root
alteration, pervasive, albitization=.ALRPA.
alteration, pervasive, chloritic=.ALRPC.
alteration, pervasive, dolomitization=.ALRPD.
alteration, pervasive, greisenization (fluorine metasomatism)=.ALRPG.
alteration, pervasive, kaolinization (clay alteration)=.ALRPK.
alteration, pervasive, saussuritic (epidotization)=.ALRPSA.
alteration, pervasive, sericitic=.ALRPSE.
alteration, pervasive, silicification=.ALRPSI.
alteration, pervasive, toumalinization (boron metasomatism)=.ALRPT.
alteration, pervasive, zeolitic=.ALRPZ.

alluvial deposit=.SURA.
alluvial deposit, unspecified=.SURU.

alluvial-fan deposit (bedrock)=.AFD.
alluvial-fan deposit (bedrock), colluvial admixture=-ADMC-
alluvial-fan deposit (bedrock), debris flow dominant over stream flow=.AFDD.
alluvial-fan deposit (bedrock), eolian admixture=-ADME-

alluvial-fan deposit (bedrock), fan-delta deposit=.AFDL.
alluvial-fan deposit (bedrock), fan-delta deposit, delta-plain deposit=.AFDLP.
alluvial-fan deposit (bedrock), fan-delta deposit, delta-front deposit=.AFDLF.
alluvial-fan deposit (bedrock), stream flow dominant over debris flow=.AFDS.
alluvial-fan deposit (bedrock), stream flow and debris flow subequal=.AFDQ.

alluvial-fan deposit (surficial deposit)=.SURAF.
alluvial-fan deposit, debris flow dominant over stream flow (surficial deposit)=.SURAFD.
alluvial-fan deposit, alluvial fan, stream flow dominant over debris flow (surficial deposit)=.SURAFS.
alluvial-fan deposit, stream flow and debris flow subequal (surficial deposit)=.SURAFQ.
alluvial-fan-delta deposit, (surficial deposit)=.SURAFL.
alluvial-plain setting=.ALVP.

alteration age Archean, early=.APRCAE.
alteration age Archean, late=.APRCAL.
alteration age Archean, middle=.APRCAM.
alteration age Archean=.APRCA.
alteration age Cambrian, early=.APZOCE.
alteration age Cambrian, late=.APZOCL.
alteration age Cambrian=.APZOC.
alteration age Cenozoic=.ACZO.
alteration age Cretaceous, early=.AMZOKE.
alteration age Cretaceous, late=.AMZOKL.
alteration age Cretaceous=.AMZOK.
alteration age Devonian, early=.APZODE.
alteration age Devonian, late=.APZODL.
alteration age Devonian=.APZOD.
alteration age Early Tertiary=-ACZOTE-
alteration age Eocene, early=.CZOTEE.
alteration age Eocene, late=.ACZOTEL.
alteration age Eocene, middle=.ACZOTEM.
alteration age Eocene=.ACZOTE.
alteration age Holocene, early=.ACZOQHE.
alteration age Holocene, late=.ACZOQHL.
alteration age Holocene, middle=.ACZOQHM.
alteration age Holocene, Modern=.ACZOQHD.
alteration age Holocene=.ACZOQH.
alteration age Jurassic, early=.AMZOJE.
alteration age Jurassic, late=.AMZOJL.
alteration age Jurassic=.AMZOJ.
alteration age known, certain=.AALKC.
alteration age known, likely, but not certain=.AALKL.
alteration age known, possible=.AALKQ.
alteration age known=.AALK.
alteration age Late Tertiary=-ACZOTL-
alteration age Mesozoic, Early=-AMZOE-
alteration age Mesozoic, Late=-AMZOL-
alteration age Mesozoic, Middle=-AMZOM-
alteration age Mesozoic=.AMZO.
alteration age Middle Tertiary=-ACZOTM-
alteration age Miocene, early=.ACZOTME.
alteration age Miocene, late=.ACZOTML.
alteration age Miocene, middle=.ACZOTMM.
alteration age Miocene=.ACZOTM.
alteration age Mississippian, early=.APZOME.
alteration age Mississippian, late=.APZOML.
alteration age Mississippian=.APZOM.
alteration age Neogene=-ANGN-
alteration age Oligocene, early=.ACZOTOE.
alteration age Oligocene, late=.ACZOTOL.
alteration age Oligocene=.ACZOTO.
alteration age Ordovician, early=.APZOOE.
alteration age Ordovician, late=.APZOOL.
alteration age Ordovician=.APZOO.

alteration age Paleocene, early=.ACZOTAE.
alteration age Paleocene, late=.ACZOTAL.
alteration age Paleocene=.ACZOTA.
alteration age Paleogene=-APGN-
alteration age Paleozoic, Early=-APZOE-
alteration age Paleozoic, Late=-APZOL-
alteration age Paleozoic, Middle=-APZOM-
alteration age Paleozoic=.APZO.
alteration age Pennsylvanian, early=.APZOPE.
alteration age Pennsylvanian, late=.APZOPL.
alteration age Pennsylvanian=.APZOP.
alteration age Permian, early=.APZORE.
alteration age Permian, late=.APZORL.
alteration age Permian=.APZOR.
alteration age Pleistocene, early=.ACZOQPE.
alteration age Pleistocene, late=.ACZOQPL.
alteration age Pleistocene, middle=.ACZOQPM.
alteration age Pleistocene=.ACZOQP.
alteration age Pliocene, early=.ACZOTPE.
alteration age Pliocene, late=.ACZOTPL.
alteration age Pliocene=.ACZOTP.
alteration age Precambrian=.APRC.
alteration age Proterozoic, early=.APRCPE.
alteration age Proterozoic, late=.APRCPL.
alteration age Proterozoic, middle=.APRCPM.
alteration age Proterozoic=.APRCP.
alteration age Quaternary=.ACZOQ.
alteration age Silurian, early=.APZOSE.
alteration age Silurian, late=.APZOSL.
alteration age Silurian=.APZOS.
alteration age Tertiary=.ACZOT.
alteration age Triassic, early=.AMZOTE.
alteration age Triassic, late=.AMZOTL.
alteration age Triassic=.AMZOT.
alteration age unknown=.AALU.

alteration age=.AAL.
alteration age, limiting age determined=.AALL.
alteration age, limiting age determined, upper=.AALLU.
alteration age, upper limiting age determined, pre-Cambrian, late=.AALLUMLC.
alteration age, upper limiting age determined, pre-Cenozoic=.AALLUC.
alteration age, upper limiting age determined, pre-Cretaceous=.AALLUCK.
alteration age, upper limiting age determined, pre-Cretaceous, late=.AALLUCLK.
alteration age, upper limiting age determined, pre-Devonian, late=.AALLUMLD.
alteration age, upper limiting age determined, pre-Devonian=.AALLUMD.
alteration age, upper limiting age determined, pre-Eocene=.AALLUQE.
alteration age, upper limiting age determined, pre- Eocene, late=.AALLUQLE.
alteration age, upper limiting age determined, pre-Eocene, middle=.AALLUQME.
alteration age, upper limiting age determined, pre-Holocene=.AALLUH.
alteration age, upper limiting age determined, pre-Holocene, late=.AALLULH.
alteration age, upper limiting age determined, pre-Holocene, middle=.AALLUMH.
alteration age, upper limiting age determined, pre-Jurassic=.AALLUCJ.
alteration age, upper limiting age determined, pre-Jurassic, late=.AALLUCLJ.
alteration age, upper limiting age determined, pre-Mesozoic=.AALLUM.
alteration age, upper limiting age determined, pre-Miocene=.AALLUQM.
alteration age, upper limiting age determined, pre- Miocene, late=.AALLUQLM.
alteration age, upper limiting age determined, pre-Miocene, middle=.AALLUQMM.
alteration age, upper limiting age determined, pre-Mississippian, late=.AALLUMLM.
alteration age, upper limiting age determined, pre-Mississippian=.AALLUMM.
alteration age, upper limiting age determined, pre-Modern=.AALLUD.
alteration age, upper limiting age determined, pre-Oligocene=.AALLUQO.
alteration age, upper limiting age determined, pre-Oligocene, late=.AALLUQLO.
alteration age, upper limiting age determined, pre-Ordovician=.AALLUMO.
alteration age, upper limiting age determined, pre-Ordovician, late=.AALLUMLO.

alteration age, upper limiting age determined, pre-Paleocene, late=.AALLUQLA.
alteration age, upper limiting age determined, pre-Paleocene, late=.AALLUQLA.
alteration age, upper limiting age determined, pre-Paleozoic=.AALLUP.
alteration age, upper limiting age determined, pre-Pennsylvanian, late=.AALLUMLP.
alteration age, upper limiting age determined, pre-Pennsylvanian=.AALLUMP.
alteration age, upper limiting age determined, pre-Permian=.AALLUMR.
alteration age, upper limiting age determined, pre-late Permian=.AALLUMLR.
alteration age, upper limiting age determined, pre-Pleistocene, late=.AALLULP.
alteration age, upper limiting age determined, pre-Pleistocene, middle=.AALLUMP.
alteration age, upper limiting age determined, pre-Pliocene, late=.AALLUQLP.
alteration age, upper limiting age determined, pre-Pliocene=.AALLUQP.
alteration age, upper limiting age determined, pre-Proterozoic (pre-early Proterozoic)=.AALLUR.
alteration age, upper limiting age determined, pre-Proterozoic, late=.AALLUPLP.
alteration age, upper limiting age determined, pre-Proterozoic, middle=.AALLUPMP.
alteration age, upper limiting age determined, pre-Quaternary (pre-early Pleistocene)=.AALLUQ.
alteration age, upper limiting age determined, pre-Silurian, late=.AALLUMLS.
alteration age, upper limiting age determined, pre-Silurian=.AALLUMS.
alteration age, upper limiting age determined, pre-Triassic, late=.AALLUCLT.

alteration age, limiting age determined, upper=.AALLL.
alteration age, lower limiting age determined, post-Archean=.AALLLA.
alteration age, lower limiting age determined, post-Cambrian=.AALLLRC.
alteration age, lower limiting age determined, post-Cambrian early=.AALLLREC.
alteration age, lower limiting age determined, post-Cretaceous early=.AALLLPJEK.
alteration age, lower limiting age determined, post-Devonian early=.AALLLRSED.
alteration age, lower limiting age determined, post-Devonian=.AALLLRD.
alteration age, lower limiting age determined, post- Eocene, middle=.AALLLMAME.
alteration age, lower limiting age determined, post-Eocene early=.AALLLMAEO.
alteration age, lower limiting age determined, post-Eocene=.AALLLME.
alteration age, lower limiting age determined, post-Holocene early=.AALLLTPEH.
alteration age, lower limiting age determined, post-Holocene, middle=.AALLLTPMH.
alteration age, lower limiting age determined, post-Jurassic early=.AALLLPTEJ.
alteration age, lower limiting age determined, post-Jurassic=.AALLLPJ.
alteration age, lower limiting age determined, post-Mesozoic (post-Cretaceous)=.AALLLM.
alteration age, lower limiting age determined, post-Miocene early=.AALLLMOEM.
alteration age, lower limiting age determined, post- Miocene, middle=.AALLLMOMM.
alteration age, lower limiting age determined, post-Miocene=.AALLLMM.
alteration age, lower limiting age determined, post-Mississippian early=.AALLLRDEM.
alteration age, lower limiting age determined, post-Mississippian=.AALLLRM.
alteration age, lower limiting age determined, post-Oligocene early=.AALLLMEEO.
alteration age, lower limiting age determined, post-Oligocene=.AALLLMO.
alteration age, lower limiting age determined, post-Ordovician early=.AALLLRCEO.
alteration age, lower limiting age determined, post-Ordovician=.AALLLRO.
alteration age, lower limiting age determined, post-Paleocene early=.AALLLMEA.
alteration age, lower limiting age determined, post-Paleocene=.AALLLMA.
alteration age, lower limiting age determined, post-Paleozoic=.AALLLP.
alteration age, lower limiting age determined, post-Pennsylvanian early=.AALLLRMEP.
alteration age, lower limiting age determined, post-Pennsylvanian=.AALLLRP.
alteration age, lower limiting age determined, post-Permian early=.AALLLRPER.
alteration age, lower limiting age determined, post-Pleistocene early=.AALLLTEP.
alteration age, lower limiting age determined, post-Pleistocene, middle=.AALLLTMP.
alteration age, lower limiting age determined, post-Pleistocene=.AALLLTP.
alteration age, lower limiting age determined, post-Pliocene early=.AALLLMMEP.
alteration age, lower limiting age determined, post-Proterozoic (post-late Proterozoic)=.AALLLR.
alteration age, lower limiting age determined, post-Proterozoic early=.AALLLAER.
alteration age, lower limiting age determined, post-Proterozoic, middle=.AALLLAMR.
alteration age, lower limiting age determined, post-Silurian early=.AALLLROES.
alteration age, lower limiting age determined, post-Silurian=.AALLLRS.
alteration age, lower limiting age determined, post-Tertiary (post-late Pliocene)=.AALLLT.
alteration age, lower limiting age determined, post-Triassic early=.AALLLPET.
alteration age, lower limiting age determined, post-Triassic=.AALLLPT.

amalgamated bedding (sedimentary structure)=.SDSBA.
amphibolite=.MIGA.

amphibolite facies, lower=.MGDAL.
amphibolite facies, upper=.MGDAU.
amygdaloidal texture=.TIGA.
amygdaloidal texture, deformed=.TIGAD.
anastomosed-channel fluvial deposit=.BRDA.
anastomosing channels, surface morphology preserved=.SMOPC.

andalusite=.MMMA.
andesite=.AND.
andesite flows and (or) plugs, unmapped within mapped geologic unit=-IVBA-

angular grain shape=.GSHA.
angular to subangular grain shape=.GSHAG.
angular to subrounded grain shape=.GSHAD.
angular to rounded grain shape=.GSHAR.

anhedral groundmass=.GMSA.
anorthosite=.ANA.
apatite=.MACAP.
aplite=.IGNIPKA.

Archean=.PRCA.
Archean, early=.PRCAE.
Archean, late=.PRCAL.

architectural element of fluvial deposits, channels=.CHA.
architectural element of fluvial deposits, gravel bars and bedforms=.GBB.
architectural element of fluvial deposits, sandy bedforms=.SBB.
architectural element of fluvial deposits, downstream-accretion macroforms (longitudinal bars)=.DAF.
architectural element of fluvial deposits, lateral-accretion macroforms (transverse bars)=.LAF.
architectural element of fluvial deposits, scour hollows=.SCH.
architectural element of fluvial deposits, sediment-gravity flows=.SGF.
architectural element of fluvial deposits, laminated sand sheets=.LSS.
architectural element of fluvial deposits, overbank fines=.OBF.

argillaceous carbonate rock=.SEDCIMA.
argillaceous carbonate rock, dolomitic=.SEDCIMAD.
argillaceous carbonate rock, limestone=.SEDCIMAL.
argillaceous dolomite=.SEDCIMAD.
argillaceous limestone=.SEDCIMAL.
argillite=.MSDA.

Arikareean land-mammal age=.LMAA.
arkose (sedimentary rock)=.ARK.
ash-flow tuff=.IGNPTFL.
ash-flow tuff unmapped within mapped geologic unit=-IVAS-
augite (phenocryst mineralogy)=.PHMAU.

Av-horizon soil, moderate=-PAVM-
Av-horizon soil, strong=-PAVS-
Av-horizon soil, weak=-PAVW-

alluvial-valley fluvial deposit (bedrock)=.FLUV.
alluvial-valley fluvial deposit high-sinuosity channel (bedrock)=.FLUVH.
alluvial-valley fluvial deposit low-sinuosity channel (bedrock)=.FLUVL.

alluvial-valley deposit (surficial)=.SURAA.
alluvial-valley deposit, (surficial) braided-channel=.SURAAB.
alluvial-valley deposit, (surficial) meandering-channel=.SURAAM.
alluvial-valley deposit, (surficial) marshy-pond=.SURAAP.
alluvial-valley deposit, (surficial) meandering-channel overbank=.SURAAO.

banded gneiss (metasedimentary)=.MSDBG.

banded gneiss (metaigneous)=.MIGGB.
banded structure (igneous flow banding)=.SFEB.

bar and swale=.SMOPB.
Barstovian land-mammal age=.LMAB.

basalt=.BSL.
basalt, unmapped within mapped geologic unit=-IVBB-
basalt flows, unmapped within mapped geologic unit=-IVBBF-
basalt plugs, unmapped within mapped geologic unit=-IVBBP-

basin deposit, convergent-margin, forearc=.BASCF.
basin deposit, convergent-margin, interarc and backarc=.BASCI.
basin deposit, convergent-margin, retroarc (foreland)=.BASCR.
basin deposit, convergent-margin, trenches and subduction=.BASCT.
basin deposit, convergent-margin=.BASC.
basin deposit, cratonic basin=.BASK.
basin deposit, divergent-margin, Atlantic type=.BASDCA.
basin deposit, divergent-margin, aulacogen (failed rifts)=.BASDA.
basin deposit, divergent-margin, continental-margin basin=.BASDC.
basin deposit, divergent-margin, Red Sea type=.BASDCR.
basin deposit, divergent-margin, rift basins, half-graben basin=.BASDRH.
basin deposit, divergent-margin, rift basins, rifted arch basin=.BASDRA.
basin deposit, divergent-margin, rift basins, rim basin=.BASDRR.
basin deposit, divergent-margin, rift basins, sag basin=.BASDRS.
basin deposit, divergent-margin, rift basins.BASDR=.
basin deposit, divergent-margin=.BASD.
basin deposit, generic=.BASG.
basin deposit, interior shelf-basin complex=.ISBB.
basin deposit, interior shelf-basin complex, basin-slope deposit=.ISBBS.
basin deposit, interior shelf-basin complex, vasin-floor deposit=.ISBBF.

bedding=.BED.
bedding, cross=.BEDX.
bedding, crude=.BEDC.
bedding, indistinct=.BEDI.
bedding, laminated=.BEDL.
bedding, medium=.BEDM.
bedding, medium to thick=.BEDMK.
bedding, medium to very thick=.BEDMKV.
bedding, non-bedded=.BEDN.
bedding, thick=.BEDK.
bedding, thick to very thick=.BEDKKV.
bedding, thin=.BEDT.
bedding, thin to medium=.BEDTM.
bedding, thin to thick=.BEDTK.
bedding, thin to very thick=.BEDTKV.
bedding, thickness variable=.BEDV.
bedding, very thick=.BEDKV.

bedrock=.BRK.

binocular identification basis for geologic-unit identification=-BIN-
biogenic sedimentary rock=.SEDB.
biogenic rock (unmapped) interbedded with nonbiogenic sedimentary rock=.INSB.

biotite (metamorphic)=.MMMB.
biotite (igneous characterizing mineral)=.MCHB.
biotite, grain composition=.GCOAB.
biotite-muscovite=.MCHBM.
bioturbated=.SDSBT.

Blancan land-mammal age=.LMAL.
blastoporphyritic fabric (metamorphic)=.SFMFT.

blebs (calcite fillings)=.SPDCB.
boudinage, resulting from metamorphism=.SFMBD.
boudinage, resulting from penetrative deformation=.SDFPB.
boulder conglomerate=.GRKCB.
bouldery sand=.SNDGB.

Bouma sequences in turbidity-current deposit=.SDSBS.
Bouma A interval=-BSA-
Bouma B interval=-BSB-
Bouma C interval=-BSC-
Bouma D interval=-BSD-
Bouma AB interval=-BSAB-
Bouma ABC interval=-BSABC-
Bouma ABCD interval=-BSABCD-
Bouma BC interval=-BSBC-
Bouma BCD interval=-BSBCD-
Bouma CD interval=-BSCD-

bound rock=.BDRK.
boxwork mineralization, outcrop occurrence, mineralized rock=.MINOB.

braided-channel fluvial deposit=.BRD.
braided-channel fluvial deposit, low sinuosity, with alternate bars=.BRDB.
braided-channel fluvial deposit, sand-bed=.BRDS.
braided-channel fluvial deposit, sand-bed, shallow, perenniel=.BRDSS.
braided-channel fluvial deposit, sand-bed, deep, perenniel=.BRDSD.
braided-channel fluvial deposit, sand-bed, high-energy=.BRDSH.
braided-channel fluvial deposit, sand-bed, sheetflood, distal=.BRDSF.

brecciated structure, non-penetrative deformation=.SDFNB.

brecciated carbonate rock (shattered rock)=-BRCC-
brecciated granitic rock (shattered rock)=-BRCG-
brecciated granitic and metamorphic rock (shattered rock)=-BRCGM-
brecciated metamorphic rock (shattered rock)=-BRCM-
brecciated metamorphic rock (shattered rock), brecciated marble=-BRCMM-
brecciated metamorphic rock (shattered rock), brecciated marble, white=-BRCMMW-
brecciated metamorphic rock (shattered rock), brecciated marble, gray=-BRCMMG-
brecciated mixed rock (shattered rock)=-BRCX-
brecciated sedimentary rock (shattered rock)=.SEDKB.
brecciated sedimentary rock (shattered rock)=-BRCS-
brecciated rock (shattered rock), shattered blocks=.SEDKBS.
brecciated rock (shattered rock), shattered blocks and rubble=.SEDKBSR.
brecciated rock (shattered rock), breccia unspecified=.SEDKBU.
breccia, fault=.SDRFBB.
brecciated rock, generic=.SDRCB.

Bridgerian land-mammal age=.LMAG.

brittle fabric resulting from metamorphism=.SMFFB.
brittle fabric resulting from penetrative deformation=.SDFPFB.
brittle-ductile fabric resulting from metamorphism=.SMFFBD.
brittle-ductile fabric resulting from penetrative deformation=.SDFPFBD.

brittle fault rocks=.SDRFB.
brittle fault rocks, breccia series=.SDRFBB.
brittle fault rocks, breccia series, breccia=.SDRFBBB.
brittle fault rocks, breccia series, fault gouge=.SDRFBBG.
brittle fault rocks, breccia series, megabreccia=.SDRFBBM.
brittle fault rocks, breccia series, microbreccia=.SDRFBBI.

brittle grain-size reduction=.SDFPGRB.

broken formation=.TECB.

Bt-horizon-bearing soil, moderate=.SSOBTM.
Bt-horizon-bearing soil, strong=.SSOBTS.
Bulitian West Coast foraminiferal stage=.WCFB.

calcareous=.SEDCC.
calcareous dolomite=.SEDCDNDC.
calcareous dolomite marble=.SEDCDMC.

calcareous nannoplankton zone=.NPZ.
calcareous nannoplankton zone NN21=.NPZN21.
calcareous nannoplankton zone NN20=.NPZN20.
calcareous nannoplankton zone NN19=.NPZN19.
calcareous nannoplankton zone NN19=.NPZN19.
calcareous nannoplankton zone NN18=.NPZN18.
calcareous nannoplankton zone NN17=.NPZN17.
calcareous nannoplankton zone NN16=.NPZN16.
calcareous nannoplankton zone NN15=.NPZN15.
calcareous nannoplankton zone NN14=.NPZN14.
calcareous nannoplankton zone NN13=.NPZN13.
calcareous nannoplankton zone NN12=.NPZN12.
calcareous nannoplankton zone NN12=.NPZN12.
calcareous nannoplankton zone NN11=.NPZN11.
calcareous nannoplankton zone NN10=.NPZN10.
calcareous nannoplankton zone NN09=.NPZN09.
calcareous nannoplankton zone NN08=.NPZN08.
calcareous nannoplankton zone NN07=.NPZN07.
calcareous nannoplankton zone NN06=.NPZN06.
calcareous nannoplankton zone NN05=.NPZN05.
calcareous nannoplankton zone NN04=.NPZN04.
calcareous nannoplankton zone NN03=.NPZN03.
calcareous nannoplankton zone NN02=.NPZN02.
calcareous nannoplankton zone NN01=.NPZN01.
calcareous nannoplankton zone NP25=.NPZP25.
calcareous nannoplankton zone NP24=.NPZP24.
calcareous nannoplankton zone NP23=.NPZP23.
calcareous nannoplankton zone NP22=.NPZP22.
calcareous nannoplankton zone NP21=.NPZP21.
calcareous nannoplankton zone NP20=.NPZP20.
calcareous nannoplankton zone NP19=.NPZP19.
calcareous nannoplankton zone NP18=.NPZP18.
calcareous nannoplankton zone NP17=.NPZP17.
calcareous nannoplankton zone NP17=.NPZP17.
calcareous nannoplankton zone NP16=.NPZP16.
calcareous nannoplankton zone NP15=.NPZP15.
calcareous nannoplankton zone NP14=.NPZP14.
calcareous nannoplankton zone NP13=.NPZP13.
calcareous nannoplankton zone NP12=.NPZP12.
calcareous nannoplankton zone NP11=.NPZP11.
calcareous nannoplankton zone NP10=.NPZP10.
calcareous nannoplankton zone NP09=.NPZP09.
calcareous nannoplankton zone NP08=.NPZP08.
calcareous nannoplankton zone NP07=.NPZP07.
calcareous nannoplankton zone NP06=.NPZP06.
calcareous nannoplankton zone NP05=.NPZP05.
calcareous nannoplankton zone NP04=.NPZP04.
calcareous nannoplankton zone NP03=.NPZP03.
calcareous nannoplankton zone NP02=.NPZP02.
calcareous nannoplankton zone NP01=.NPZP01.

calcareous rock, metamorphosed=.SEDCCM.
calcareous rock, non-metamorphosed=.SEDCCN.

calcite (metamorphic mineral)=.MMMCA.

calcite fillings=.SPDC.

calclastic sedimentary rock=.SEDL.

calcrete body unmapped within mapped geologic unit=-CALC-
calcsilicate rock=.MSDC.

caliche=-CLC-
caliche, pedogenic=-CLCP-
caliche, non-pedogenic=-CLCN-
caliche filaments=-CLCNF-
caliche seams=-CLCNS-
caliche nodules=-CLCNN-
caliche filled fractures=-CLCNR-

calcic soil=.SSOC.

Cambrian=.PZOC.
Cambrian, early=.PZOCE.
Cambrian, late=.PZOCL.

carbonate conglomerate=.SEDLC.
carbonate conglomerate, sandy=.SEDLCS.
carbonate sandstone=.SEDLSS.
carbonate sandstone, conglomeratic=.SEDLSSC.
carbonate sandstone, silty=.SEDLSSM.=
carbonate siltstone=.SEDLML.

carbonate impurities=-CIM-
carbonate impurities, disseminated pyrite=-CIMDP-
carbonate impurities, disseminated graphite=-CIMDG-
carbonate impurities, graphite streaks=-CIMGS-
carbonate impurities, fetid odor=-CIMF-

carbonate material interbedded with surficial deposit =-ICM-
carbonate material interbedded with surficial deposit, calcrete=-CALC-
carbonate material interbedded with surficial deposit, caliche =-CLC-
carbonate material interbedded with surficial deposit, pedogenic caliche=-CLCP-
carbonate material interbedded with surficial deposit, non-pedogenic caliche=-CLCN-
carbonate material interbedded with surficial deposit, caliche filaments=-CLCNF-
carbonate material interbedded with surficial deposit, caliche filled fractures=-CLCNR-
carbonate material interbedded with surficial deposit, caliche nodules=-CLCNN-
carbonate material interbedded with surficial deposit, caliche seams=-CLCNS-
carbonate material interbedded with surficial deposit, limestone=-LMST-
carbonate material interbedded with surficial deposit, marl=-MRL-

carbonate mineralization=.MINTC.
carbonate mineralization, copper carbonate=-CCU-
carbonate mineralization, lead carbonate=-CPB-
carbonate mineralization, zinc carbonate=-CZN-

carbonate rock=.SEDC.
carbonate rock, argillaceous=.SEDCIMA.
carbonate rock, calcareous=.SEDCC.
carbonate rock, cherty=.SEDCIMC.
carbonate rock, conglomeratic=.SEDCIMG.
carbonate rock, dolomitic=.SEDCD.
carbonate rock, heterogeneous=.SEDCH.
carbonate rock, heterogeneous, metamorphosed=.SEDCHM.
carbonate rock, heterogeneous, non-metamorphosed=.SEDCHN.
carbonate rock, impure=.SEDCI.
carbonate rock, impure, metamorphosed=.SEDCIM.
carbonate rock, impure, non-metamorphosed=.SEDCIN.
carbonate rock, pure and impure mixed=.SEDCX.

carbonate rock, pure and impure mixed, metamorphosed=.SEDCXM.
carbonate rock, pure and impure mixed, non-metamorphosed=.SEDCXN.
carbonate rock, sandy=.SEDCIMS.
carbonate rock, silty=.SEDCIMM.

carbonate rock and non-carbonate rock interbedded=.SEDCBN.
carbonate rock and non-carbonate rock interbedded, interbedded chert=.SEDCBNC.
carbonate rock and non-carbonate rock interbedded, intermingled intrusive rock=.SEDCBNI.
carbonate rock and non-carbonate rock interbedded, interbedded siliciclastic rock=.SEDCBNS.
carbonate rock and non-carbonate rock interbedded, interbedded volcanic rock=.SEDCBNV.
carbonate rock and non-carbonate rock interbedded, interbedded volcaniclastic rock=.SEDCBNK.

carbonate rock and non-carbonate rock interbedded (metamorphosed)=.SEDCB.
carbonate rock and non-carbonate rock interbedded, siliciclastic rock (metamorphosed)=.SEDCBMS.
carbonate rock and non-carbonate rock interbedded, volcanic rock (metamorphosed)=.SEDCBMV.
carbonate rock and non-carbonate rock interbedded, intrusive rock (metamorphosed)=.SEDCBMI.
carbonate rock and non-carbonate rock interbedded, chert (metamorphosed)=.SEDCBMC.
carbonate rock and non-carbonate rock interbedded, volcaniclastic rock (metamorphosed)=.SEDCBMK.

carbonate rock (unmapped) interbedded with non-carbonate sedimentary rock=.INSC.

cataclasis, intergranular, resulting from metamorphic=.SFMCI.
cataclasis, intergranular, resulting from penetrative deformation=.SDFPCI.
cataclasite series=.SDRFBC.
cataclasite, high-strain rock, cataclasite series=.SDRFBC.
cataclasite series, cataclasite=.SDRFBCC.
cataclasite series, ultracataclasite=.SDRFBCU.
cataclasite series, pseudotachylite=.SDRFBCP.

cataclastic fabric=.SFMOC.
cataclastic gneiss (metamorphic rock)=.METSGC.
cataclastic rock, generic=.SDRHC.
cataclastic seams=.SDFPC.
cataclastic seams, discrete =.SDFNCSD.
cataclastic seams, local=.SDFPCL.
cataclastic seams, pervasive=.SDFPCP.

catastrophic sedimentary rock=.SEDK.
catastrophic sedimentary rock, breccia and shattered rock=.SEDKB.
catastrophic sedimentary rock, breccia unspecified=.SEDKBU.
catastrophic sedimentary rock, brecciated carbonate rock=-BRCC-
catastrophic sedimentary rock, brecciated granitic rock=-BRCG-
catastrophic sedimentary rock, brecciated granitic and metamorphic rock=-BRCGM-
catastrophic sedimentary rock, brecciated marble=-BRCMM-
catastrophic sedimentary rock, brecciated marble, white=-BRCMMW-
catastrophic sedimentary rock, brecciated marble, gray=-BRCMMG-
catastrophic sedimentary rock, brecciated metamorphic rock=-BRCM-
catastrophic sedimentary rock, brecciated mixed rock=-BRCX-
catastrophic sedimentary rock, brecciated sedimentary rock=-BRCS-
catastrophic sedimentary rock, catastrophically deposited sedimentary breccia=.SEDKS.
catastrophic sedimentary rock, roundstone conglomerate=.SEDKR.
catastrophic sedimentary rock, rubble=.SEDKBR.
catastrophic sedimentary rock, shattered blocks=.SEDKBS.
catastrophic sedimentary rock, shattered blocks and rubble=.SEDKBSR.

catastrophic rock (unmapped) interbedded with non-catastrophic sedimentary rock=.INSCA.

cemented (sedimentary rock)=.INDE.
cemented, calcite cement (sedimentary rock)=-CEMC-
cemented, clay cement (sedimentary rock)=-CEMCY-
cemented, hematite cement (sedimentary rock)=-CEMH-
cemented, silica cement (sedimentary rock)=-CEMS-
cemented, zeolitic cement (sedimentary rock)=-CEMZ-
cemented locally (surficial deposit)=.CONEL.

Cenozoic=.CZO.

Chadronianland-mammal age=.LMAN.
chalcedony silicification (alteration)=-CHAL-
channel element of fluvial deposit=.CHA.
channelate bedding=.SDSBC.

charnockite=.CHK.

chert, ribbon=.SEDH.
chert, bedded=.SEDHB.
chert, nodular=.SEDHN.
chert (unmapped) interbedded with nonchert sedimentary rock=.INSC.

chert-bearing locally=-LCB-
cherty carbonate=.SEDCIMC.
cherty dolomite=.SEDCIMCD.
cherty limestone=.SEDCIMCL.

chlorite=.MMMCH.
chloritic alteration, local=.ALRLC.
chloritic alteration, pervasive=.ALRLP.
cinder cone=.IGNPC.

Clarendonian land-mammal age=.LMAC.
Clarkforkian land-mammal age=.LMAK.

clast affinities=.CCOA.
clast affinities, Bighorn/Arrastre Canyon type=.CCOATBB.
clast affinities, Catalina Schist type=.CCOAC.
clast affinities, Chocolate Mountain type=.CCOATC.
clast affinities, clasts recycled out of older formation=.CCOR.
clast affinities, clasts recycled out of older formation, formation known=.CCORK.
clast affinities, clasts recycled out of older formation, formation unknown=.CCORUK.
clast affinities, clasts recycled out of older formation, Crowder formation=.CCORKC.
clast affinities, clasts recycled out of older formation, San Timoteo formation=.CCORKS.
clast affinities, Little San Bernardino Mountains type=.CCOATL.
clast affinities, Mojave Desert type=.CCOAM.
clast affinities, Peninsular Ranges type=.CCOAP.
clast affinities, San Bernardino Mountains type=.CCOATB.
clast affinities, San Bernardino Mountains type, Bighorn/Arrastre Canyon type=.CCOATBB.
clast affinities, San Gabriel Mountain type=.CCOATG.
clast affinities, Pelona type schist=.CCOATGP.
clast affinities, Lowe type plutonic rock=.CCOATGL.
clast affinities, Transverse Ranges type=.CCOAT.

clast composition, polygon contains information about=.CCO.
clast composition, amphibolite=.CCOMIA.
clast composition, algal material=.CCOKA.
clast composition, amphibolite=.CCOMIA.
clast composition, andesite=.CCOIVA.
clast composition, aplite=.CCOIA.
clast composition, basalt=.CCOIVB.
clast composition, brachiopods=.CCOKBR.
clast composition, bryozoans=.CCOKBZ.
clast composition, carbonate rock=.CCOSC.
clast composition, cataclasite=.CCODC.
clast composition, chert=.CCOSH.
clast composition, conglomerate=.CCOSG.
clast composition, corals=.CCOKC.
clast composition, dacite-latite=.CCOIVD.
clast composition, dioritic-gabbroic=.CCOIPMD.
clast composition, dolomite=.CCOSCD.

clast composition, dolomite marble=.CCOMSMD.
clast composition, felsic volcanic=.CCOIVF.
clast composition, fusulinids=.CCOKF.
clast composition, gneiss=.CCOMG.
clast composition, granitic=.CCOIPG.
clast composition, granodioritic=.CCOIPGG.
clast composition, hypabyssal=.CCOIH.
clast composition, igneous=.CCOI.
clast composition, intraclasts=.CCON.
clast composition, lapilli=.CCOIVL.
clast composition, limestone=.CCOSCL.
clast composition, limestone marble=.CCOMSML.
clast composition, mafic volcanic=.CCOIVM.
clast composition, marble=.CCOMSM.
clast composition, marble, dolomite=.CCOMSMD.
clast composition, marble, limestone=.CCOMSML.
clast composition, meta-agglomerate=.CCOMIVA.
clast composition, metaigneous=.CCOMI.
clast composition, metamorphic=.CCOM.
clast composition, metaquartzite=.CCOMSQ.
clast composition, metasedimentary=.CCOMS.
clast composition, metavolcanic=.CCOMIV.
clast composition, metavolcanic, agglomerate=.CCOMIVA.
clast composition, metavolcanic, metatuff=.CCOMIVT.
clast composition, mollusks=.CCOKM.
clast composition, monzodioritic=.CCOIPGZD.
clast composition, monzogranitic=.CCOIPGM.
clast composition, monzonitic=.CCOIPGZ.
clast composition, mudrock=.CCOSM.
clast composition, muscovite leucogranite=.CCOIPGL.
clast composition, mylonite=.CCODM.
clast composition, ooids=.CCOO.
clast composition, pegmatite=.CCOIG.
clast composition, pelmatozoans=.CCOKP.
clast composition, peloids=.CCOP.
clast composition, peloids, phosphatic=.CCOPP.
clast composition, plutonic=.CCOIP.
clast composition, plutonic, mafic=.CCOIPM.
clast composition, quartz monzonitic=.CCOIPGZQ.
clast composition, quartzite=.CCOSQ.
clast composition, rhyolite=.CCOIVR.
clast composition, sandstone=.CCOSS.
clast composition, schist=.CCOMC.
clast composition, sedimentary=.CCOS.
clast composition, shale=.CCOSL.
clast composition, skeletal fragments=.CCOK.
clast composition, strain dominated=.CCOD.
clast composition, trilobite fragments=.CCOKT.
clast composition, tuff fragments=.CCOIVT.
clast composition, tuff fragments, ash-flow tuff fragments=.CCOIVTF.
clast composition, tuff fragments, tuff-breccia fragments=.CCOIVTB.
clast composition, volcanic=.CCOIV.
clast composition, volcanic, porphyrys=.CCOIVP.

clast composition, igneous=.CCOI.
clast composition, igneous, aplite=.CCOIA.
clast composition, igneous, dioritic-gabbroic=.CCOIPMD.
clast composition, igneous, granitic=.CCOIPG.
clast composition, igneous, granitic=.CCOIPG.
clast composition, igneous, granitic, dioritic-gabbroic=.CCOIPMD.
clast composition, igneous, granitic, granodioritic=.CCOIPGG.
clast composition, igneous, granitic, monzodioritic=.CCOIPGZD.
clast composition, igneous, granitic, monzogranitic=.CCOIPGM.
clast composition, igneous, granitic, monzonitic=.CCOIPGZ.

clast composition, igneous, granitic, muscovite leucogranite=.CCOIPGL.
clast composition, igneous, granitic, quartz monzonitic=.CCOIPGZQ.
clast composition, igneous, hypabyssal=.CCOIH.
clast composition, igneous, mafic plutonic=.CCOIPM.
clast composition, igneous, pegmatite=.CCOIG.
clast composition, igneous, plutonic=.CCOIP.
clast composition, igneous, volcanic=.CCOIV.
clast composition, igneous, volcanic, andesite=.CCOIVA.
clast composition, igneous, volcanic, basalt=.CCOIVB.
clast composition, igneous, volcanic, dacite-latite=.CCOIVD.
clast composition, igneous, volcanic, felsic=.CCOIVF.
clast composition, igneous, volcanic, mafic=.CCOIVM.
clast composition, igneous, volcanic, porphyry=.CCOIVP.
clast composition, igneous, volcanic, rhyolite=.CCOIVR.
clast composition, igneous, volcanic, tuff fragments=.CCOIVT.

clast composition, granitic=.CCOIPG.
clast composition, granitic, dioritic-gabbroic=.CCOIPMD.
clast composition, granitic, granodioritic=.CCOIPGG.
clast composition, granitic, monzodioritic=.CCOIPGZD.
clast composition, granitic, monzogranitic=.CCOIPGM.
clast composition, granitic, monzonitic=.CCOIPGZ.
clast composition, granitic, muscovite leucogranite=.CCOIPGL.
clast composition, granitic, quartz monzonitic=.CCOIPGZQ.

clast composition, gneiss=.CCOMG.
clast composition, limestone=.CCOSCL.
clast composition, limestone marble=.CCOMSML.
clast composition, mafic volcanic=.CCOIVM.
clast composition, mafic plutonic rock=.CCOIPM.
clast composition, marble=.CCOMSM.

clast composition, metamorphic=.CCOM.
clast composition, metamorphic, gneiss=.CCOMG.
clast composition, metamorphic, marble=.CCOMSM.
clast composition, metamorphic, marble, dolomite=.CCOMSMD.
clast composition, metamorphic, marble, limestone=.CCOMSML.
clast composition, metamorphic, metaquartzite=.CCOMSQ.
clast composition, metamorphic, metavolcanic=.CCOMIV.
clast composition, metamorphic, metavolcanic, agglomerate=.CCOMIVA.
clast composition, metamorphic, metavolcanic, metatuff=.CCOMIVT.
clast composition, metamorphic, schist=.CCOMC.

clast composition, sedimentary=.CCOS.
clast composition, sedimentary, carbonate rock=.CCOSC.
clast composition, sedimentary, conglomerate=.CCOSG.
clast composition, sedimentary, dolomite=.CCOSCD.
clast composition, sedimentary, limestone=.CCOSCL.
clast composition, sedimentary, mudrock=.CCOSM.
clast composition, sedimentary, quartzite=.CCOSQ.
clast composition, sedimentary, sandstone=.CCOSS.
clast composition, sedimentary, shale=.CCOSL.

clast composition, skeletal fragments=.CCOK.
clast composition, algal material=.CCOKA.
clast composition, brachiopods=.CCOKBR.
clast composition, bryozoans=.CCOKBZ.
clast composition, corals=.CCOKC.
clast composition, fusulinids=.CCOKF.
clast composition, mollusks=.CCOKM.
clast composition, pelmatozoans=.CCOKP.
clast composition, trilobite fragments=.CCOKT.

clast composition, specified map unit=.CCOU.

clast composition, specified map unit, Pelona-type schist=.CCOUP.
clast composition, specified map unit, Pelona-type schist, grayschist unit=.CCOUPS.
clast composition, specified map unit, Pelona-type schist, greenschist unit=.CCOUPE.
clast composition, specified map unit, Triassic megaporphyry=.CCOUT.
clast composition, specified map unit, Keller Peak granodiorite=.CCOUK.
clast composition, specified map unit, Wildhorse quartzite=.CCOUW.
clast composition, specified map unit, Mill Creek Formation=.CCOUM.

clast composition, strain dominated=.CCOD.
clast composition, strain dominated, cataclasite=.CCODC.
clast composition, strain dominated, mylonite=.CCODM.

clast composition, volcanic=.CCOIV.
clast composition, volcanic, andesite=.CCOIVA.
clast composition, volcanic, basalt=.CCOIVB.
clast composition, volcanic, dacite-latite=.CCOIVD.
clast composition, volcanic, felsic=.CCOIVF.
clast composition, volcanic, lapilli=.CCOIVL.
clast composition, volcanic, mafic=.CCOIVM.
clast composition, volcanic, porphyry=.CCOIVP.
clast composition, volcanic, rhyolite=.CCOIVR.
clast composition, volcanic, tuff fragments=.CCOIVT.
clast composition, volcanic, tuff fragments, ash-flow tuff fragments=.CCOIVTF.
clast composition, volcanic, tuff fragments, tuff-breccia fragments=.CCOIVTB.

clast composition, unspecified=.CCOU.
clast composition, variable=.CCOV.

clast imbrication=.SDSCI.

clast shape=.CSH.
clast shape, angular=.CSHA.
clast shape, subangular=.CSHG.
clast shape, subrounded=.CSHD.
clast shape, rounded=.CSHR.
clast shape, spherical=.CSHSPH.
clast shape, angular to subangular=.CSHAG.
clast shape, angular to subrounded=.CSHAD.
clast shape, angular to rounded=.CSHAR.
clast shape, subangular to subrounded=.CSHGD.
clast shape, subangular to rounded=.CSHGR.
clast shape, subrounded to rounded=.CSHDR.
clast shape, variable=.CSHV.

clast size=.CSZ.
clast size, boulder=.CSZB.
clast size, boulder, large=.CSZBL.
clast size, boulder, medium=.CSZBM.
clast size, boulder, small=.CSZBS.
clast size, cobble=.CSZC.
clast size, cobble, large=.CSZCL.
clast size, cobble, small=.CSZCS.
clast size, cobble-boulder size=.CSZCB.
clast size, granule=.CSZG.
clast size, granule-cobble=.CSZGC.
clast size, granule-pebble=.CSZGP.
clast size, pebble-boulder=.CSZPB.
clast size, pebble-cobble=.CSZPC.
clast size, pebble -large cobble=.CSZPCL.
clast size, pebble-small cobble=.CSZPCS.
clast size, pebble=.CSZP.
clast size, uncertain due to recrystallization=.CSZUX.
clast size, uncertain due to deformation=.CSZUD.
clast size, variable=.CSZV.

clast support (sedimentary and surficial)=.CMXCS.
clast support dominant over matrix support (sedimentary and surficial)=.CMXCM.
clast support and matrix support subequal (sedimentary and surficial)=.CMXQ.

clay (surficial deposit)=.CLMCL.
clay, gravelly (surficial deposit)=.CLMCLG.
clay, sandy (surficial deposit)=.CLMCLS.
clay, silty (surficial deposit)=.CLMCLML.
clay (surficial deposit)=.CLMCL.
clay and mud deposit (surficial deposit)=.CLM.

claystone=.MRKCL.
claystone, silty=.MRKCLML.
claystone, sandy=.MRKCLS.

cleavage, slaty, resulting from metamorphism=.SFMK.
cleavage, slaty, resulting from penetrative deformation=.SDFPKS.
clinozoisite, accessory mineral=.MACCL.

coal (unmapped) interbedded with other sedimentary rocks=.INSCO.

coarse sand=.SNDC.
coarse to very coarse sand=.SNDCVC.
coarsely crystalline recrystallized fabric=.RXFC.

cobble conglomerate (bedrock)=.GRKCC.
cobble gravel (surficial deposit)=.GVLC.
cobble-boulder conglomerate (bedrock)=.GRKCCB.
cobble-boulder gravel (surficial deposit)=.GVLCB.
cobbly sand (surficial deposit)=.SNDGC.
cobbly sandstone (bedrock)=.GRKSSCC.
cobbly and bouldery sandstone (bedrock)=.GRKSSCCB.
cobbly siltstone (bedrock)=.GRKMLCC.

colluvial deposit (surficial)=.SURHC.
colluvial deposit (bedrock)=.HSPWC.

color index (for plutonic and volcanic rocks)=.CIN.
color index, light-colored (CI<14)=.COLL.
color index, medium colored (CI15 to CI29)=.COLM.
color index, dark-colored (CI>30)=.COLD.
color index variable=.CINV.

color, banded (bands cm to dm thick)=.COLZ.
color, black=.COLK.
color, brown, grayish=.COLBG.
color, brown, greenish=.COLBE.
color, brown, light yellowish=.COLBYL.
color, brown, orange=.COLBO.
color, brown, pale=.COLBP.
color, brown, pale, very=.COLBPV.
color, brown, reddish=.COLBR.
color, brown, yellowish=.COLBY.
color, brownish=.COLB.
color, dark colored=.COLD.
color, gray, brownish=.COLGB.
color, gray, brownish, light=.COLGBL.
color, gray, dark=.COLGD.
color, gray, greenish=.COLGE.
color, gray, light=.COLGL.
color, gray, light to dark=.COLGLD.
color, gray, light to medium=.COLGLM.
color, gray, medium=.COLGM.

color, gray, medium to dark=.COLGMD.
color, gray, mottled=.COLGT.
color, gray, olive=.COLGO.
color, gray, olive, light=.COLGOL.
color, gray, olive, pale=.COLGOP.
color, gray, pinkish=.COLGP.
color, gray, reddish=.COLGR.
color, gray, yellowish=.COLGY.
color, grayish=.COLG.
color, greenish=.COLE.
color, light colored=.COLL.
color, medium colored=.COLM.
color, olive=.COLO.
color, olive, pale=.COLOP.
color, pink, pale=.COLPP.
color, pinkish=.COLP.
color, purple, grayish red=.COLURG.
color, purplish=.COLU.
color, red, pale=.COLRP.
color, striped (thin stripes mm to cm thick)=.COLS.
color, variable=.COLV.
color, white=.COLW.
color, white to light gray=.COLWGL.

conglomerate=.GRKC.
conglomerate, boulder=.GRKCB.
conglomerate, cobble-boulder=.GRKCCB.
conglomerate, pebble-boulder=.GRKCPB.
conglomerate, cobble=.GRKCC.
conglomerate, pebble-cobble=.GRKCPC.
conglomerate, granule-cobble=.GRKCGC.
conglomerate, pebble=.GRKCP.
conglomerate, granule-pebble=.GRKCGP.
conglomerate, granule=.GRKCG.
conglomerate, matrix-rich=.GRKCX.
conglomerate, matrix-rich, clayey=.GRKCXCL.
conglomerate, matrix-rich, silty=.GRKCXML.
conglomerate, sandy=.GRKCS.
conglomerate, sandy pebble-cobble=.GRKCSPC.
conglomerate, sandy pebble=.GRKCSP.
conglomerate, sandy granule-pebble=.GRKCGPS.
conglomerate, sandy granule=.GRKCSG.
conglomerate, silty=.GRKCXML.

colluvial deposit (surficial deposit)=.SURHC.

conglomeratic carbonate rock=.SEDCIMG.
conglomeratic dolomite=.SEDCIMGD.
conglomeratic limestone=.SEDCIMGL.

consolidation (surficial materials)=.CON.
consolidation (surficial materials), cemented locally=.CONEL.
consolidation (surficial materials), consolidated=.CONC.
consolidation (surficial materials), consolidated to cemented=.CONCE.
consolidation (surficial materials), slightly=.CONCS.
consolidation (surficial materials), slightly to moderately=.CONCSM.
consolidation (surficial materials), slightly to well=.CONCSW.
consolidation (surficial materials), moderately=.CONCM.
consolidation (surficial materials), moderately to well=.CONCMW.
consolidation (surficial materials), moderately to indurated=.CONCMI.
consolidation (surficial materials), unconsolidated=.CONU.
consolidation (surficial materials), unconsolidated to cemented=.CONUE.
consolidation (surficial materials), unconsolidated to slightly consolidated=.CONUCS.
consolidation (surficial materials), unconsolidated to moderately consolidated=.CONUCM.

consolidation (surficial materials), unconsolidated to well consolidated=.CONUCW.
consolidation (surficial materials), variably=.CONCV.
consolidation (surficial materials), well consolidated=.CONCW.
consolidation (surficial materials), well consolidated to indurated=.CONCWI.

contact metamorphic rock=.METC.

continental rise-continental slope=.CTMR.
continental slope deposit=.CTMRS.
continental rise deposit=.CTMRR.

continental shelf deposit=.CTMS.
continental shelf deposit, inner shelf=.CTMSI.
continental shelf deposit, outer shelf=.CTMSO.

convolute lamination, sedimentary rocks=.SDSLC.
country rock intermingled with intrusive rock=.SFER.
cordierite=.MMMCO.
corundum=.MMMCR.

Cretaceous=.MZOK.
Cretaceous, early=.MZOKE.
Cretaceous, late=.MZOKL.

cross lamination=.SDSLX.
cross lamination, hummocky=.SDSLXH.
cross lamination, planar=.SDSLXP.
cross lamination, trough=.SDSLXT.

crushed and (or) sheared rock=.SDRC.
crushed and (or) sheared rock, crushed rock=.SDRCC.
crushed and (or) sheared rock,discrete crush zones enclosing intact blocks of parent rock=.SDRCCD.
crushed and (or) sheared rock, pervasively crushed rock=.SDRCCP.
crushed and (or) sheared rock, sheared rock=.SDRCS.
crushed and (or) sheared rock, discrete shear zones enclosing intact blocks of parent rock=.SDRCSD.
crushed and (or) sheared rock, pervasively sheared rock=.SDRCSP.
crushed and (or) sheared rock, brecciated rock, generic=.SDRCB.

cryptalgal lamination=.SDSLAC.
crystalline=.INDY.
cumulate layering, igneous rocks=.SFEC.

dacite=.DAC.
dacite-latite body unmapped within mapped geologic unit=-IVBD-
Danian West Coast foraminiferal stage=.WCFA.

dark-colored=.COLD.

debris-flow deposit (bedrock)=-GFLD-
debris-flow deposit (surficial deposit)=.SURSD.
debris-flow lobe (surficial deposit)=.SMOPD.

deformation age=.ADF.
deformation age, unknown=.ADFU.
deformation age, known=.ADFK.

deformation age, brecciation or shearing=.ADFKB.
deformation age, faulting=.ADFKF.
deformation age, faulting, age certain=.ADFKFC.
deformation age, faulting, age likely but not certain=.ADFKFL.
deformation age, faulting, age questionable=.ADFKFQ.

deformation age, folding=.ADFKO.
deformation age, folding, age certain=.ADFKOC.

deformation age, folding, age likely but not certain=.ADFKOL.
deformation age, folding, age questionable=.ADFKOQ.

deformation age, fracturing=.ADFKR.
deformation age, fracturing, age certain=.ADFKRC.
deformation age, fracturing, age likely but not certain=.ADFKRL.
deformation age, fracturing, age questionable=.ADFKRQ.

deformation age, penetrative deformation=.ADFKP.
deformation age, penetrative deformation, age certain=.ADFKPC.
deformation age, penetrative deformation, age likely but not certain=.ADFKPL.
deformation age, penetrative deformation, age questionable=.ADFKPQ.

deformation age, Archean=.DPRCA.
deformation age, Archean, early=.DPRCAE.
deformation age, Archean, late=.DPRCAL.
deformation age, Archean, middle=.DPRCAM.
deformation age, Cambrian=.DPZOC.
deformation age, Cambrian, early=.DPZOCE.
deformation age, Cambrian, late=.DPZOCL.
deformation age, Cenozoic=.DCZO.
deformation age, Cretaceous=.DMZOK.
deformation age, Cretaceous, early=.DMZOKE.
deformation age, Cretaceous, late=.DMZOKL.
deformation age, Devonian=.DPZOD.
deformation age, Devonian, early=.DPZODE.
deformation age, Devonian, late=.DPZODL.
deformation age, Eocene=.DCZOTE.
deformation age, Eocene, early=.CZOTEE.
deformation age, Eocene, late=.DCZOTEL.
deformation age, Eocene, middle=.DCZOTEM.
deformation age, Holocene=.DCZOQH.
deformation age, Holocene, early=.DCZOQHE.
deformation age, Holocene, late=.DCZOQHL.
deformation age, Holocene, middle=.DCZOQHM.
deformation age, Holocene, Modern=.DCZOQHD.
deformation age, Jurassic=.DMZOJ.
deformation age, Jurassic, early=.DMZOJE.
deformation age, Jurassic, late=.DMZOJL.
deformation age, Mesozoic=.DMZO.
deformation age, Mesozoic, early=-DMZOE-
deformation age, Mesozoic, late=-DMZOL-
deformation age, Mesozoic, middle=-DMZOM-
deformation age, Miocene=.DCZOTM.
deformation age, Miocene, early=.DCZOTME.
deformation age, Miocene, late=.DCZOTML.
deformation age, Miocene, middle=.DCZOTMM.
deformation age, Mississippian=.DPZOM.
deformation age, Mississippian, early=.DPZOME.
deformation age, Mississippian, late=.DPZOML.
deformation age, Neogene=-DNGN-
deformation age, Oligocene=.DCZOTO.
deformation age, Oligocene, early=.DCZOTOE.
deformation age, Oligocene, late=.DCZOTOL.
deformation age, Ordovician=.DPZOO.
deformation age, Ordovician, early=.DPZOOE.
deformation age, Ordovician, late=.DPZOOL.
deformation age, Paleocene=.DCZOTA.
deformation age, Paleocene, early=.DCZOTAE.
deformation age, Paleocene, late=.DCZOTAL.
deformation age, Paleogene=-DPGN-
deformation age, Paleozoic=.DPZO.
deformation age, Paleozoic, early=-DPZOE-
deformation age, Paleozoic, late=-DPZOL-

deformation age, Paleozoic, middle=-DPZOM-
deformation age, Pennsylvanian=.DPZOP.
deformation age, Pennsylvanian, early=.DPZOPE.
deformation age, Pennsylvanian, late=.DPZOPL.
deformation age, Permian=.DPZOR.
deformation age, Permian, early=.DPZORE.
deformation age, Permian, late=.DPZORL.
deformation age, Pleistocene=.DCZOQP.
deformation age, Pleistocene, early=.DCZOQPE.
deformation age, Pleistocene, late=.DCZOQPL.
deformation age, Pleistocene, middle=.DCZOQPM.
deformation age, Pliocene=.DCZOTP.
deformation age, Pliocene, early=.DCZOTPE.
deformation age, Pliocene, late=.DCZOTPL.
deformation age, Precambrian=.DPRC.
deformation age, Proterozoic, early=.DPRCPE.
deformation age, Proterozoic=.DPRCP.
deformation age, Proterozoic, late=.DPRCPL.
deformation age, Proterozoic, middle=.DPRCPM.
deformation age, Quaternary=.DCZOQ.
deformation age, Silurian=.DPZOS.
deformation age, Silurian, early=.DPZOSE.
deformation age, Silurian, late=.DPZOSL.
deformation age, Tertiary=.DCZOT.
deformation age, Tertiary, early=-DCZOTE-
deformation age, Tertiary, late=-DCZOTL-
deformation age, Tertiary, middle=-DCZOTM-
deformation age, Triassic=.DMZOT.
deformation age, Triassic, early=.DMZOTE.
deformation age, Triassic, late=.DMZOTL.

deformation age, limiting age determined=.ADFL.
deformation age, upper limiting age determined=.ADFLU.
deformation age, upper limiting age determined, pre-Cambrian, late =.ADFLUMLC.
deformation age, upper limiting age determined, pre-Cenozoic=.ADFLUC.
deformation age, upper limiting age determined, pre-Cretaceous=.ADFLUCK.
deformation age, upper limiting age determined, pre-Cretaceous, late =.ADFLUCLK.
deformation age, upper limiting age determined, pre-Devonian=.ADFLUMD.
deformation age, upper limiting age determined, pre-Devonian, late =.ADFLUMLD.
deformation age, upper limiting age determined, pre-Eocene=.ADFLUQE.
deformation age, upper limiting age determined, pre- Eocene, late =.ADFLUQLE.
deformation age, upper limiting age determined, pre-Eocene, middle =.ADFLUQME.
deformation age, upper limiting age determined, pre-Holocene=.ADFLUH.
deformation age, upper limiting age determined, pre-Holocene, late =.ADFLULH.
deformation age, upper limiting age determined, pre-Holocene, middle =.ADFLUMH.
deformation age, upper limiting age determined, pre-Jurassic=.ADFLUCJ.
deformation age, upper limiting age determined, pre-Jurassic, late =.ADFLUCLJ.
deformation age, upper limiting age determined, pre-Mesozoic=.ADFLUM.
deformation age, upper limiting age determined, pre-Miocene=.ADFLUQM.
deformation age, upper limiting age determined, pre- Miocene, late =.ADFLUQLM.
deformation age, upper limiting age determined, pre-Miocene, middle =.ADFLUQMM.
deformation age, upper limiting age determined, pre-Mississippian=.ADFLUMM.
deformation age, upper limiting age determined, pre-Mississippian, late =.ADFLUMLM.
deformation age, upper limiting age determined, pre-Modern=.ADFLUD.
deformation age, upper limiting age determined, pre-Oligocene=.ADFLUQO.
deformation age, upper limiting age determined, pre-Oligocene, late =.ADFLUQLO.
deformation age, upper limiting age determined, pre-Ordovician=.ADFLUMO.
deformation age, upper limiting age determined, pre-Ordovician, late =.ADFLUMLO.
deformation age, upper limiting age determined, pre-Paleocene, late =.ADFLUQLA.
deformation age, upper limiting age determined, pre-Paleozoic=.ADFLUP.
deformation age, upper limiting age determined, pre-Pennsylvanian=.ADFLUMP.
deformation age, upper limiting age determined, pre-Pennsylvanian, late =.ADFLUMLP.
deformation age, upper limiting age determined, pre-Permian=.ADFLUMR.
deformation age, upper limiting age determined, pre-Permian, late=.ADFLUMLR.

deformation age, upper limiting age determined, pre-Pleistocene, late =.ADFLULP.
deformation age, upper limiting age determined, pre-Pleistocene, middle =.ADFLUMP.
deformation age, upper limiting age determined, pre-Pliocene=.ADFLUQP.
deformation age, upper limiting age determined, pre-Pliocene, late =.ADFLUQLP.
deformation age, upper limiting age determined, pre-Proterozoic=.ADFLUR.
deformation age, upper limiting age determined, pre-Proterozoic, late =.ADFLUPLP.
deformation age, upper limiting age determined, pre-Proterozoic, middle =.ADFLUPMP.
deformation age, upper limiting age determined, pre-Quaternary =.ADFLUQ.
deformation age, upper limiting age determined, pre-Silurian=.ADFLUMS.
deformation age, upper limiting age determined, pre-Silurian, late =.ADFLUMLS.
deformation age, upper limiting age determined, pre-Triassic, late =.ADFLUCLT.

deformation age, lower limiting age determined=.ADFLL.
deformation age, lower limiting age determined, post-Archean=.ADFLLA.
deformation age, lower limiting age determined, post-Cambrian=.ADFLLRC.
deformation age, lower limiting age determined, post-Cambrian, early =.ADFLLREC.
deformation age, lower limiting age determined, post-Cretaceous, early =.ADFLLPJEK.
deformation age, lower limiting age determined, post-Devonian=.ADFLLRD.
deformation age, lower limiting age determined, post-Devonian, early =.ADFLLRSED.
deformation age, lower limiting age determined, post-Eocene=.ADFLLME.
deformation age, lower limiting age determined, post- Eocene, middle =.ADFLLMAME.
deformation age, lower limiting age determined, post-Eocene, early =.ADFLLMAEO.
deformation age, lower limiting age determined, post-Holocene, early =.ADFLLTPEH.
deformation age, lower limiting age determined, post-Holocene, middle =.ADFLLTPMH.
deformation age, lower limiting age determined, post-Jurassic=.ADFLLPJ.
deformation age, lower limiting age determined, post-Jurassic, early =.ADFLLPTEJ.
deformation age, lower limiting age determined, post-Mesozoic=.ADFLLM.
deformation age, lower limiting age determined, post-Miocene=.ADFLLMM.
deformation age, lower limiting age determined, post- Miocene, middle =.ADFLLMOMM.
deformation age, lower limiting age determined, post-Miocene, early =.ADFLLMOEM.
deformation age, lower limiting age determined, post-Mississippian, early =.ADFLLRDEM.
deformation age, lower limiting age determined, post-Mississippian=.ADFLLRM.
deformation age, lower limiting age determined, post-Oligocene=.ADFLLMO.
deformation age, lower limiting age determined, post-Oligocene, early =.ADFLLMEEO.
deformation age, lower limiting age determined, post-Ordovician=.ADFLLRO.
deformation age, lower limiting age determined, post-Ordovician, early =.ADFLLRCEO.
deformation age, lower limiting age determined, post-Paleocene=.ADFLLMA.
deformation age, lower limiting age determined, post-Paleocene, early =.ADFLLMEA.
deformation age, lower limiting age determined, post-Paleozoic=.ADFLLP.
deformation age, lower limiting age determined, post-Pennsylvanian=.ADFLLRP.
deformation age, lower limiting age determined, post-Pennsylvanian, early =.ADFLLRMEP.
deformation age, lower limiting age determined, post-Permian, early =.ADFLLRPER.
deformation age, lower limiting age determined, post-Pleistocene=.ADFLLTP.
deformation age, lower limiting age determined, post-Pleistocene, early =.ADFLLTEP.
deformation age, lower limiting age determined, post-Pleistocene, middle =.ADFLLTMP.
deformation age, lower limiting age determined, post-Pliocene, early =.ADFLLMMEP.
deformation age, lower limiting age determined, post-Proterozoic=.ADFLLR.
deformation age, lower limiting age determined, post-Proterozoic, early =.ADFLLAER.
deformation age, lower limiting age determined, post-Proterozoic, middle =.ADFLLAMR.
deformation age, lower limiting age determined, post-Silurian=.ADFLLRS.
deformation age, lower limiting age determined, post-Silurian, early =.ADFLLROES.
deformation age, lower limiting age determined, post-Tertiary=.ADFLLT.
deformation age, lower limiting age determined, post-Triassic=.ADFLLPT.
deformation age, lower limiting age determined, post-Triassic, early =.ADFLLPET.

deformational history=.DEF.
deformational history, deformational style, polygon contains information about=.DEFY.
deformational history, deformational style, rock is faulted=.DEFYF.
deformational history, deformational style, rock is folded=.DEFYO.
deformational history, rock is folded, assymetric folds=-FLDA-
deformational history, rock is folded, open folds=-FLDO-
deformational history, rock is folded, tight folds=-FLDT-
deformational history, rock is folded, tight folds broken by thrust faults=-FLDTT-
deformational history, rock is folded, overtumed folds=-FLDV-

deformational history, deformational style, rock is folded and faulted=.DEFYOF.
deformational history, rock deformed under brittle conditions.=DEFB.
deformational history, rock deformed under brittle-ductile conditions.=DEFBD.
deformational history, rock deformed under ductile conditions.=DEFD.
deformational history, rock deformed within contractional strain field.=DEFC.
deformational history, rock deformed within extensional strain field.=DEFE.
deformational history, rock deformed within fault zone.=DEFF.
deformational history, rock deformed within fault zone, normal-slip.=DEFFN.
deformational history, rock deformed within fault zone, strike-slip.=DEFFS.
deformational history, rock deformed within fault zone, thrust-slip.=DEFFT.
deformational history, rock deformed within fault zone, thrust-slip, above thrust fault.=DEFFTA.
deformational history, rock deformed within fault zone, thrust-slip, beneath thrust fault.=DEFFTB.
deformational history, rock deformed under high-strain conditions.=DEFH.
deformational history, rock deformed under low-strain conditions.=DEFL.
deformational history, rock deformed during metamorphism.=DEFM.
deformational history, rock deformed within fold belt.=DEFO.
deformational history, rock deformed within fold-and-thrust belt.=DEFOT.
deformational history, rock deformed during pluton emplacement.=DEFP.
deformational history, rock deformed within shear zone.=DEFS.
deformational history, rock deformed within transtensional strain field.=DEFT.
deformational history, rock deformed by multiple deformations.=DEFU.
deformational history, rock intruded under high-strain conditions.=DEFIH.
deformational history, rock intruded under low-strain conditions.=DEFIL.
deformational history, rock intruded under brittle conditions.=DEFIB.
deformational history, rock intruded under brittle-ductile conditions.=DEFIBD.
deformational history, rock intruded under ductile conditions.=DEFID.
deformational history, rock recrystallized under plutonic conditions.=DEFRP.

Delmontian West Coast foraminiferal stage=.WCFD.

deltaic deposit (bedrock)=.DEL.
deltaic deposit (surficial deposit)=.SURD.
deltaic deposit, abandoned distributary-fill deposit=.DELPLA.
deltaic deposit, bay-fill deposit=.DELPLB.
deltaic deposit, braided-channel deposit=-MCB-
deltaic deposit, crevasse-splay deposit=-BFC-
deltaic deposit, delta plain deposit=.DELP.
deltaic deposit, distributary-mouth-bar deposit=.DELPSD.
deltaic deposit, interdistributary bay deposit=-BFI-
deltaic deposit, lacustrine delta-fill deposit=.DELPUL.
deltaic deposit, levee deposit=-BFL-
deltaic deposit, lower delta plain deposit=.DELPL.
deltaic deposit, marsh deposit=-BFM-
deltaic deposit, meandering-channel deposit=-MCM-
deltaic deposit, migratory-channel deposit=.DELPUM.
deltaic deposit, pro-delta deposit=.DELR.
deltaic deposit, river-mouth tidal-ridge deposit=.DELPSR.
deltaic deposit, subaqueous delta plain deposit=.DELPS.
deltaic deposit, subaqueous slump deposit=.DELPSS.
deltaic deposit, upper delta plain deposit=.DELPU.

depositional origin, marine=.MAR.
depositional origin, marine, unspecified=.MARU.

depositional origin, marine, continental shelf=.CTMS.
depositional origin, marine, continental shelf, inner =.CTMSI.
depositional origin, marine, continental shelf, outer =.CTMSO.
depositional origin, marine, epicontinental seaway=.ESW.
depositional origin, marine, epicontinental seawayf, nearshore =.ESWN.
depositional origin, marine, epicontinental seaway, shelf =.ESWS.
depositional origin, marine, interior shelf-basin=.ISBB.
depositional origin, marine, interior shelf-basin, basin-slope deposit=.ISBBS.
depositional origin, marine, interior shelf-basin, basin-floor deposit=.ISBBF.
depositional origin, marine, oceanic=.OCE.

depositional origin, marine, oceanic, abyssal plain deposit=.OCEA.
depositional origin, marine, oceanic, plateau deposit=.OCEP.
depositional origin, marine, oceanic, seamount deposit=.OCES.

depositional origin, nonmarine=.NMA.
depositional origin, nonmarine, unspecified=.NMAU.

depositional origin, nonmarine, alluvial-plain geographic setting=.ALP.

depositional origin, nonmarine, alluvial fan (bedrock)=.AFD.
depositional origin, nonmarine alluvial fan (bedrock), colluvial admixture=-ADMC-
depositional origin, nonmarine alluvial fan (bedrock), debris flow dominant over stream flow=.AFDD.
depositional origin, nonmarine alluvial fan (bedrock), eolian admixture=-ADME-
depositional origin, nonmarine, alluvial fan (bedrock), stream flow dominant over debris flow=.AFDS.
depositional origin, nonmarine, alluvial fan (bedrock), stream flow and debris flow subequal=.AFDQ.
depositional origin, nonmarine, alluvial fan (bedrock), fan-delta deposit=.AFDL.
depositional origin, nonmarine, alluvial fan (bedrock), fan-delta deposit, delta-plain=.AFDLP.
depositional origin, nonmarine, alluvial fan (bedrock), fan-delta deposit, delta-front=.AFDLF.

depositional origin, nonmarine, coastal-plain geographic setting=.CPL.

depositional origin, nonmarine, deltaic (bedrock)=.DEL.
depositional origin, nonmarine, deltaic, abandoned distributary-fill deposit (bedrock)=.DELPLA.
depositional origin, nonmarine, deltaic, bay-fill deposit (bedrock)=.DELPLB.
depositional origin, nonmarine, deltaic, braided-channel deposit=-MCB-
depositional origin, nonmarine, deltaic, crevasse-splay deposit=-BFC-
depositional origin, nonmarine, deltaic, delta plain deposit (bedrock)=.DELP.
depositional origin, nonmarine, deltaic, distributary-mouth-bar deposit (bedrock)=.DELPSD.
depositional origin, nonmarine, deltaic, interdistributary bay deposit=-BFI-
depositional origin, nonmarine, deltaic, lacustrine delta-fill deposit (bedrock)=.DELPUL.
depositional origin, nonmarine, deltaic, levee deposit=-BFL-
depositional origin, nonmarine, deltaic, lower delta plain deposit (bedrock)=.DELPL.
depositional origin, nonmarine, deltaic, marsh deposit=-BFM-
depositional origin, nonmarine, deltaic, meandering-channel deposit=-MCM-
depositional origin, nonmarine, deltaic, migratory-channel deposit (bedrock)=.DELPUM.
depositional origin, nonmarine, deltaic, pro-delta deposit (bedrock)=.DELR.
depositional origin, nonmarine, deltaic, river-mouth tidal-ridge deposit (bedrock)=.DELPSR.
depositional origin, nonmarine, deltaic, subaqueous delta plain deposit (bedrock)=.DELPS.
depositional origin, nonmarine, deltaic, subaqueous slump deposit (bedrock)=.DELPSS.
depositional origin, nonmarine, deltaic, upper delta plain deposit (bedrock)=.DELPU.

depositional origin, nonmarine, eolian (bedrock)=.EOL.
depositional origin, nonmarine, eolian (bedrock), dune sand=.EOLD.
depositional origin, nonmarine, eolian (bedrock), sheet sand=.EOLS.
depositional origin, nonmarine, eolian (bedrock), unspecified=.EOLU.

depositional origin, nonmarine, fluvial (bedrock)=.FLU.
depositional origin, nonmarine, fluvial, alluvial-fan setting (bedrock)=.FLUF.
depositional origin, nonmarine, fluvial, alluvial-valley setting (bedrock)=.FLUV.
depositional origin, nonmarine, fluvial, alluvial-valley setting (bedrock), high-sinuosity channel=.FLUVH.
depositional origin, nonmarine, fluvial, alluvial-valley setting (bedrock), low-sinuosity channel=.FLUVL.
depositional origin, nonmarine, fluvial, deltaic setting (bedrock)=.FLUD.
depositional origin, nonmarine, fluvial (bedrock), undifferentiated=.FLUU.

depositional origin, nonmarine, glacial (bedrock)=.GLA.
depositional origin, nonmarine, alpine glacier (bedrock)=.GLAA.
depositional origin, nonmarine, continental glacier (bedrock)=.GLAC.

depositional origin, nonmarine, hillslope (bedrock)=.HSP.
depositional origin, nonmarine, hillslope, low-angle slopes (bedrock)=.HSPL.
depositional origin, nonmarine, hillslope, moderate slopes (bedrock)=.HSPM.
depositional origin, nonmarine, hillslope, low-angle slopes (bedrock)=.HSPH.
depositional origin, nonmarine, hillslope, gravity-controlled deposit (bedrock)=.HSPGC.
depositional origin, nonmarine, hillslope, gravity-controlled deposit, talus (bedrock)=-TLS-

depositional origin, nonmarine, hillslope, gravity-driven deposit (bedrock)=.HSPG.
depositional origin, nonmarine, hillslope, gravity-driven deposit, debris flows (bedrock)=-GFLD-
depositional origin, nonmarine, hillslope, gravity-driven deposit, gravity flows (bedrock)=.HSPGF.
depositional origin, nonmarine, hillslope, gravity-driven deposit, gravity slides (bedrock)=.HSPGS.
depositional origin, nonmarine, hillslope, gravity-driven deposit, rock-avalanche deposit (bedrock)=-GFLR-
depositional origin, nonmarine, hillslope, gravity-driven deposit, slide-breccia deposit (bedrock)=-CSB-
depositional origin, nonmarine, hillslope, water-driven deposit (bedrock)=.HSPW.
depositional origin, nonmarine, hillslope, water-driven deposit, colluvial deposit (bedrock)=.HSPWC.
depositional origin, nonmarine, hillslope, water-driven deposit, slopewash deposit (bedrock)=.HSPWS.
depositional origin, nonmarine, hillslope, gravity-driven deposit, unspecified (bedrock)=.HSPU.

depositional origin, nonmarine, lake deposit (bedrock)=.LAC.
depositional origin, nonmarine, lake deposit, bar=-LAKB-
depositional origin, nonmarine, lake deposit, carbonate flat=-LAKC-
depositional origin, nonmarine, lake deposit, delta=-LAKD-
depositional origin, nonmarine, lake deposit, fresh water (bedrock)=-LAKH-
depositional origin, nonmarine, lake deposit, interdeltaic=-LAKI-
depositional origin, nonmarine, lake deposit, lake floor=-LAKF-
depositional origin, nonmarine, lake deposit, marginal lake=.LACM.
depositional origin, nonmarine, lake deposit, mud flat=-LAKM-
depositional origin, nonmarine, lake deposit, open lake=.LACO.
depositional origin, nonmarine, lake deposit, saline=-LAKL-
depositional origin, nonmarine, lake deposit, shore=-LAKS-

depositional origin, nonmarine, volcanogenic=.VOLG.
depositional origin, nonmarine, volcanogenic near-source environments=.VOLGN.
depositional origin, nonmarine, volcanogenic near-source environments=.VOLGD.

depositional origin, alluvial deposit (surficial)=.SURA.
depositional origin, alluvial deposit, unspecified (surficial)=.SURU.

depositional origin, alluvial fan (surficial)=.SURAF.
depositional origin, alluvial fan, debris flow dominant over stream flow (surficial)=.SURAFD.
depositional origin, alluvial fan, stream flow dominant over debris flow (surficial)=.SURAFS.
depositional origin, alluvial fan, stream flow and debris flow subequal (surficial)=.SURAFQ.
depositional origin, alluvial fan, fan delta (surficial)=.SURAFL.

depositional origin, alluvial-valley (surficial)=.SURAA.
depositional origin, alluvial-valley, braided-channel (surficial)=.SURAAB.
depositional origin, alluvial-valley, meandering-channel (surficial)=.SURAAM.
depositional origin, alluvial-valley, marshy-pond (surficial)=.SURAAP.
depositional origin, alluvial-valley, meandering-channel overbank (surficial)=.SURAAO.

depositional origin, eolian (surficial)=.SURE.
depositional origin, eolian (surficial), dune sand=.SURED.
depositional origin, eolian (surficial), sheet sand=.SURES.
depositional origin, eolian (surficial), unspecified=.SUREU.

depositional origin, glacial (surficial)=.SURG.
depositional origin, glacial, (surficial), alpine=.SURGA.
depositional origin, glacial, (surficial), continental=.SURGC.
depositional origin, glacial, unspecified (surficial)=.SURGU.

depositional origin, hillslope deposit (surficial)=.SURH.
depositional origin, hillslope deposit, colluvium (surficial)=.SURHC.
depositional origin, hillslope deposit, slopewash (surficial)=.SURHS.
depositional origin, hillslope deposit, talus (surficial)=.SURHT.
depositional origin, hillslope deposit, hillslope deposit, unspecified (surficial)=.HILUN.

depositional origin, lake deposit (bedrock)=.LAC.
depositional origin, lake deposit (surficial)=.SURL.
depositional origin, lake deposit, bar=-LAKB-
depositional origin, lake deposit, carbonate flat=-LAKC-
depositional origin, lake deposit, delta=-LAKD-

depositional origin, lake deposit, fresh water=-LAKH-
depositional origin, lake deposit, interdeltaic=-LAKI-
depositional origin, lake deposit, lake floor=-LAKF-
depositional origin, lake deposit, marginal lake (bedrock)=.LACM.
depositional origin, lake deposit, marginal lake (surficial)=.SURLM.
depositional origin, lake deposit, open lake (bedrock)=.LACO.
depositional origin, lake deposit, open lake (surficial)=.SURLO.
depositional origin, lake deposit, saline=-LAKL-
depositional origin, lake deposit, shore=-LAKS-

depositional origin, alluvial deposit, modern wash=.ALLMW.
depositional origin, alluvial deposit, modern wash, active=.SURAWA.
depositional origin, alluvial deposit, modern wash, intermittent=.SURAWI.
depositional origin, alluvial deposit, modern wash, older=.SURAWO.

depositional origin, pediment-veneer (surficial)=.SURAP.

depositional origin, playa (surficial)=.SURP.
depositional origin, playa (surficial), fluvial deposit=.SURPF.
depositional origin, playa (surficial), lacustrine deposit=.SURPL.
depositional origin, playa (surficial), sheetwash deposit=.SURPS.

depositional origin, rock-fall deposit (surficial)=.SURSF.

deposit type, surficial, alluvial=.SURA.
deposit type, surficial, deltaic=.SURD.
deposit type, surficial, eolian=.SURE.
deposit type, surficial, glacial=.SURG.
deposit type, surficial, hillslope=.SURH.
deposit type, surficial, lake=.SURL.
deposit type, surficial, playa=.SURP.
deposit type, surficial, slope failure=.SURS.
deposit type, surficial, unspecified=.SURU.
deposit type, surficial, weathered or modified parent material=.SURW.

desert pavement=.SAR.
desert pavement, no pavement=.SARN.
desert pavement, slight pavement=.SARS.
desert pavement, moderate pavement=.SARM.
desert pavement, hard pavement slightly degraded=.SARHSD.
desert pavement, degraded relict pavement=.SARDRP.

Devonian=.PZOD.
Devonian, early=.PZODE.
Devonian, late=.PZODL.

dewatering structures=.SPDW.
dike, volcanic feeder=.IGNIVK.
dike, hypabyssal=.IGNIHK.
dike, plutonic=.IGNIPK.
diopside (metamorphic)=.MMMDI.

dioritic rock, composition unspecified=.DIOU.
dioritic rock, composition heterogeneous=.DIOH.
dioritic rock, composition variable=.DIOV.

displaced block (landslide, gravity slide)=-DBL-
displaced block with internal stratigraphy intact (landslide, gravity slide)=-DBLS-
displaced debris (landslide, gravity slide), carbonate rock=-DDC-
displaced debris (landslide, gravity slide), granitic rock=-DDG-
displaced debris (landslide, gravity slide), metamorphic rock=-DDM-
displaced debris (landslide, gravity slide), mixed rock=-DDMX-
displaced debris (landslide, gravity slide), sedimentary rock=-DDS-
displaced rubble (landslide, gravity slide)=-DRUB-

displaced rubble and blocks (landslide, gravity slide)=-DRB-
disseminated mineral traces=.MINOD.

dissolution breccia (carbonate rocks)=.SPDB.

dolomite (metamorphic mineral)=.MMMD.
dolomite (rock)=.SEDCDND.
dolomite, calcareous=.SEDCDNDC.
dolomite, heterogeneous=.SEDCDNDH.
dolomite and limestone, heterogeneous=.SEDCHND.
dolomite and limestone marble, heterogeneous=.SEDCHMD.
dolomite marble=.SEDCDMD.
dolomite marble, calcareous=.SEDCDMC.
dolomite marble, heterogeneous=.SEDCDMDH.

dolomitic boundstone=.BSTD.
dolomitic grainrock=.GROD.
dolomitic grainstone=.GRODG.
dolomitic limestone marble=.SEDCCMLD.
dolomitic limestone=.SEDCCNLD.
dolomitic mudrock=.MROD.
dolomitic mudstone=.MRODM.
dolomitic packstone=.GRODP.
dolomitic rock=.SEDCD.
dolomitic rock, metamorphosed=.SEDCDM.
dolomitic rock, non-metamorphosed=.SEDCDN.
dolomitic wackestone=.MRODW.

dolomitization, local=.ALRLD.
dolomitization, pervasive=.ALRPD.
downstream-accretion element of fluvial deposit (longitudinal bars)=.DAF.

ductile fabric resulting from metamorphism=.SFMFD.
ductile fabric resulting from penetrative deformation=.SDFPFD.
ductile fault rocks=.SDRFD.
ductile fault rocks, protomylonite=.SDRFDP.
ductile fault rocks, mylonite=.SDRFDM.
ductile fault rocks, ultramylonite=.SDRFDU.

ductile grain-size reduction=.SDFPGRD.

dunite=.UMRN.
Duchesnean land-mammal age=.LMAD.
duripan soil=.SSOSID.

Eocene=.CZOTE.
Eocene, early=.CZOTEE.
Eocene, late=.CZOTEL.

eolian deposit (bedrock)=.EOL.
eolian deposit, (bedrock), dune sand=.EOLD.
eolian deposit, (bedrock), sheet sand=.EOLS.
eolian deposit, (bedrock), unspecified=.EOLU.
eolian deposit, (surficial)=.SURE.
eolian deposit, (surficial), dune sand=.SURED.
eolian deposit, (surficial), sheet sand=.SURES.
eolian deposit, (surficial), unspecified=.SUREU.

epidote (metamorphic)=.MMME.
epidote (igneous, accessory imineral)=.MACE.

evaporite deposit=.SEDE.
evaporite, filamentous=.SEDEF.
evaporite, nodular=.SEDEN.

evaporite, varved=.SEDEV.
evaporite, bedded=.SEDEB.
evaporitic minerals in sedimentary rock=-EVA-

extrusive=.IGNX.
extrusive rock, unspecified=.IGNXU.

fabric, brittle=.SDFPFB.
fabric, brittle-ductile=.SDFPFBD.
fabric, clast-supported (non-carbonate rocks)=.CMXCS.
fabric, ductile=.SDFPFD.
fabric, grain-supported (carbonate rocks)=.ORFG.

fabric, foliated (igneous)=.SFEFF.
fabric, foliated (metamorphic)=.SFMO.

fabric (igneous)=.FAB.
fabric (igneous), foliated=.SFEFF.
fabric (igneous), foliated, moderately =.SFEFFM.
fabric (igneous), foliated, slightly=.SFEFFS.
fabric (igneous), foliated, well=.SFEFFW.
fabric (igneous), lineated=.SFEFL.
fabric (igneous), lineated, slightly=.SFEFLS.
fabric (igneous), lineated, moderately=.SFEFLM.
fabric (igneous), lineated, well=.SFEFLW.
fabric (igneous), heterogeneous fabric=.SFEFE.
fabric (igneous), homogeneous fabric=.SFEFO.
fabric (igneous), massive fabric=.SFEFM.
fabric (igneous), massive to foliated=.SFEFMF.
fabric (igneous), massive to slightly foliated=.SFEFMFS.

fabric, massive (igneous)=.SFEFM.
fabric, massive (metamorphic)=.SFMFM.
fabric, massive (sedimentary)=.SDSM.
fabric, matrix-supported (non-carbonate rocks)=.CMXMS.

fabric, metamorphic, blastoporphyritic=.SFMFT.
fabric, metamorphic, brittle=.SFMFB.
fabric, metamorphic, brittle-ductile=.SFMFBD.
fabric, metamorphic, ductile=.SFMFD.
fabric, metamorphic, granoblastic=.SFMFG.
fabric, metamorphic, laminated=.SFMFL.
fabric, metamorphic, massive=.SFMFM.
fabric, metamorphic, poikiloclastic=.SFMFK.
fabric, metamorphic, porphyroblastic=.SFMFP.
fabric, metamorphic, porphyroclastic=.SFMFC.
fabric, metamorphic, recrystallized=.SFMR.
fabric, metamorphic, recrystallized, slightly=.SFMRS.
fabric, metamorphic, recrystallized, slightly to moderately=.SFMRSM.
fabric, metamorphic, recrystallized, moderately=.SFMRM.
fabric, metamorphic, recrystallized, moderately to highly=.SFMRMH.
fabric, metamorphic, recrystallized, highly=.SFMRH.

fabric, mud-supported (carbonate rocks)=.ORFM.
fabric, organic-supported (carbonate rocks)=.ORFO.
fabric, original (carbonate rocks)=.ORF.

fabric, penetrative, brittle=.SDFPFB.
fabric, penetrative, brittle-ductile=.SDFPFBD.
fabric, penetrative, ductile=.SDFPFD.
fabric, penetrative, heterogeneous=.SDFPFHE.
fabric, penetrative, homogeneous=.SDFPFHO.
fabric, penetrative, laminated=.SDFPFL.
fabric, penetrative, porphyroclastic=.SDFPFP.

fabric, penetrative, porphyroclastic locally=.SDFPFPL.
fabric, penetrative, recrystallized=.SDFPFR.
fabric, penetrative, recrystallized, slight=-RCRS-
fabric, penetrative, recrystallized, slight to moderate=-RCRSM-
fabric, penetrative, recrystallized, moderate=-RCRM-
fabric, penetrative, recrystallized, moderate to high=-RCRMH-
fabric, penetrative, recrystallized, high=-RCRH-

fabric, recrystallized (carbonate rocks)=.RXF.

fault-bound rock body=.TECB.
fault breccia=.SDRFBB.
fault gouge=.SDRFBBG.

fenestrae (dissolution feature, carbonate rocks)=.SPDF.
fenestrate structure (origin unknown)=.SDSFS.

fine sand=.SNDF.
fine to coarse sand=.SNDFC.
fine to medium sand=.SNDFM.
fine to very coarse sand=.SNDFVC.

fissil=.OGMF.
flaser structure=.SDSZ.
flood-plain deposit=-FPD-
flow breccia=.IGNXB.
fluorite (igneous)=.MACF.

fluvial deposit, (bedrock)=.FLU.
fluvial deposit, alluvial-fan setting (bedrock)=.FLUF.
fluvial deposit, alluvial-valley setting (bedrock)=.FLUV.
fluvial deposit, alluvial-valley setting (bedrock), high-sinuosity channel=.FLUVH.
fluvial deposit, alluvial-valley setting (bedrock), low-sinuosity channel=.FLUVL.
fluvial deposit, channel element=.CHA.
fluvial deposit, colluvial admixture (bedrock)=-ADMC-
fluvial deposit, deltaic setting (bedrock)=.FLUD.
fluvial deposit, downstream-accretion element (longitudinal bars)=.DAF.
fluvial deposit, eolian admixture (bedrock)=-ADME-
fluvial deposit, gravel bar and bedform element=.GBB.
fluvial deposit, laminated sand-sheet element=.LSS.
fluvial deposit, lateral-accretion element (transverse bars)=.LAF.
fluvial deposit, overbank-fines element=.OBF.
fluvial deposit, sandy-bedform element=.SBB.
fluvial deposit, scour-hollow element=.SCH.
fluvial deposit, sediment-gravity flow element=.SGF.
fluvial deposit, undifferentiated (sedimentary rock)=.FLUU.

fluvial lithofacies assemblage, anastomosed=.BRDA.
fluvial lithofacies assemblage, braided=.BRD.
fluvial lithofacies assemblage, braided, low sinuosity, with alternate bars=.BRDB.
fluvial lithofacies assemblage, braided, sand-bed=.BRDS.
fluvial lithofacies assemblage, braided, sand-bed, deep, perenniel=.BRDSD.
fluvial lithofacies assemblage, braided, sand-bed, high-energy=.BRDSH.
fluvial lithofacies assemblage, braided, sand-bed, shallow, perenniel=.BRDSS.
fluvial lithofacies assemblage, braided, sand-bed, sheetflood, distal=.BRDSF.
fluvial lithofacies assemblage, fine-grained, meandering=.MNDF.
fluvial lithofacies assemblage, gravel bed=.GBD.
fluvial lithofacies assemblage, gravel bed, braided=.GBDB.
fluvial lithofacies assemblage, gravel bed, braided, deep=.GBDBD.
fluvial lithofacies assemblage, gravel bed, braided, shallow=.GBDBS.
fluvial lithofacies assemblage, gravel bed, braided, with sediment-gravity flow deposits=.GBDBG.
fluvial lithofacies assemblage, gravel bed, wandering=.GBDW.
fluvial lithofacies assemblage, gravel bed, meandering=.MNDG.
fluvial lithofacies assemblage, gravel-sand bed, meandering=.MNDGS.

fluvial lithofacies assemblage, meandering channel=.MND.
fluvial lithofacies assemblage, sandy, meandering=.MNDS.
fluvial lithofacies assemblage, sandy, meandering, ephemeral=.MNDSE.
fluvial lithofacies assemblage, sheetflood, sand bed, ephemeral, flashy=.SHF.

foliation fish, resulting from penetrative deformation=.SDFPTF.

foliation, cataclastic, resulting from metamorphism=.SFMOC.
foliation, cataclastic, resulting from penetrative deformation=.SDFPOC.

foliation, generic, origin unspecified=.SOUFO.
foliation, generic, origin unspecified, weak=-GFOW-
foliation, generic, origin unspecified, moderate=-GFOM-
foliation, generic, origin unspecified, strong=-GFOS-

foliation, generic, resulting from penetrative deformation=.SDFPO.
foliation, generic, resulting from penetrative deformation, weak=-PFOLW-
foliation, generic, resulting from penetrative deformation, weak to moderate=-PFOLWM-
foliation, generic, resulting from penetrative deformation, moderate=-PFOLM-
foliation, generic, resulting from penetrative deformation, moderate to strong=-PFOLMS-
foliation, generic, resulting from penetrative deformation, strong=-PFOLS-

foliation, gneissic, resulting from metamorphism=.SFMOG.
foliation, gneissose, resulting from penetrative deformation=.SDFPOG.

foliation, igneous, resulting from magmatic flow=.SFEFF.
foliation, igneous, resulting from magmatic flow, moderate=.SFEFFM.
foliation, igneous, resulting from magmatic flow, slight=.SFEFFS.
foliation, igneous, resulting from magmatic flow, well foliated=.SFEFFW.
foliation, igneous, resulting from magmatic flow, heterogeneous=.SFEFE.
foliation, igneous, resulting from magmatic flow, homogeneous=.SFEFO.

foliation, metamorphic=.SFMO.
foliation, mylonitic, resulting from metamorphism=.SFMOM.
foliation, mylonitic, resulting from penetrative deformation=.SDFPOM.
foliation, schistose, resulting from metamorphism=.SFMOS.

forsterite (metamorphic mineral)=.MMMF.

fossil age=.FSL.
fossil age, age is certain=.FSLC.
fossil age, age is uncertain=.FSLU.

fossils=.FOS.
fossils, none observed=.FZLN.
fossils, abundant=.FZLA.
fossils, localized=.FZLL.
fossils, moderately abundant=.FZLM.
fossils, sparse=.FZLS.

fossils, acritarchs (marine)=.FOSMIAC.
fossils, algae (nonmarine)=.FOSNPA.
fossils, ammonites (marine)=.FOSMIMA.
fossils, beaver (nonmarine)=.FOSNVMSB.
fossils, brachiopods (marine)=.FOSMIBR.
fossils, bryozoa (marine)=.FOSMIBZ.
fossils, camel (nonmarine)=.FOSNVMLCM.
fossils, cat (nonmarine)=.FOSNVMLCA.
fossils, cephalopods (marine)=.FOSMIMC.
fossils, coniferous plants (nonmarine)=.FOSNPC.
fossils, conodonts (marine)=.FOSMICD.
fossils, corals (marine)=.FOSMICO.
fossils, crinoids (marine)=.FOSMIPC.
fossils, crocodile (nonmarine)=.FOSNVRC.

fossils, deciduous plants (nonmarine)=.FOSNPD.
fossils, diatoms (marine)=.FOSMPD.
fossils, dinoflagellates (marine)=.FOSMPDF.
fossils, dog (nonmarine)=.FOSNVMLD.
fossils, elephant (nonmarine)=.FOSNVMLE.
fossils, fish (marine)=.FOSMVF.
fossils, fish (nonmarine)=.FOSMVF.
fossils, flowering plants (nonmarine)=.FOSNPF.
fossils, fusulinids (marine)=.FOSMZFF.
fossils, gastropods (marine)=.FOSMIMG.
fossils, gastropods (nonmarine)=.FOSNIMG.
fossils, graptolites (marine)=.FOSMIGP.
fossils, horse (nonmarine)=.FOSNVMLH.
fossils, invertebrates (marine)=.FOSMI.
fossils, invertebrates (nonmarine)=.FOSNI.
fossils, mammals (nonmarine)=.FOSNVM.
fossils, mammals, large (nonmarine)=.FOSNVML.
fossils, mammals, small (nonmarine)=.FOSNVMS.
fossils, mollusks (nonmarine)=.FOSNIM.
fossils, nonmarine=.FOSN.
fossils, ostracods (marine)=.FOSMIO.
fossils, ostracods (nonmarine)=.FOSNIO.
fossils, pelecypods (marine)=.FOSMIMP.
fossils, pelecypods (nonmarine)=.FOSNIMP.
fossils, pelmatozoans (marine)=.FOSMIP.
fossils, plants (marine)=.FOSMP.
fossils, plants (nonmarine)=.FOSNP.
fossils, radiolaria (marine)=.FOSMZR.
fossils, reptiles (nonmarine)=.FOSNVR.
fossils, rhinoceras (nonmarine)=.FOSNVMLR.
fossils, rodent (nonmarine)=.FOSNVMSR.
fossils, shrew (nonmarine)=.FOSNVMSS.
fossils, stromatoporoids (marine)=.FOSMIS.
fossils, trace fossils (marine)=.FOSMT.
fossils, trace fossils (nonmarine)=.FOSNT.
fossils, tracks (nonmarine)=.FOSNTT.
fossils, trilobites (marine)=.FOSMIT.
fossils, turtle (nonmarine)=.FOSNVRT.
fossils, vertebrates (marine)=.FOSMV.
fossils, vertebrates (nonmarine)=.FOSNV.
fossils, wood (nonmarine)=.FOSNPW.
fossils, wood=.FOSNPW.

fossils, marine=.FOSM.
fossils, marine, acritarchs=.FOSMIAC.
fossils, marine, ammonites=.FOSMIMA.
fossils, marine, brachiopods=.FOSMIBR.
fossils, marine, bryozoa=.FOSMIBZ.
fossils, marine, cephalopods=.FOSMIMC.
fossils, marine, conodonts=.FOSMICD.
fossils, marine, corals=.FOSMICO.
fossils, marine, crinoids=.FOSMIPC.
fossils, marine, diatoms=.FOSMPD.
fossils, marine, dinoflagellates=.FOSMPDF.
fossils, marine, fish=.FOSMVF.
fossils, marine, fusulinids=.FOSMZFF.
fossils, marine, gastropods=.FOSMIMG.
fossils, marine, graptolites=.FOSMIGP.
fossils, marine, invertebrates=.FOSMI.
fossils, marine, ostracods=.FOSMIO.
fossils, marine, pelecypods=.FOSMIMP.
fossils, marine, pelmatozoans=.FOSMIP.
fossils, marine, plants=.FOSMP.
fossils, marine, radiolaria=.FOSMZR.

fossils, marine, stromatoporoids=.FOSMIS.
fossils, marine, trace fossils=.FOSMT.
fossils, marine, trilobites=.FOSMIT.
fossils, marine, vertebrates=.FOSMV.

fossils, nonmarine=.FOSN.
fossils, nonmarine, algae=.FOSNPA.
fossils, nonmarine, beaver=.FOSNVMSB.
fossils, nonmarine, camel=.FOSNVMLCM.
fossils, nonmarine, cat=.FOSNVMLCA.
fossils, nonmarine, crocodile=.FOSNVRC.
fossils, nonmarine, dog=.FOSNVMLD.
fossils, nonmarine, elephant=.FOSNVMLE.
fossils, nonmarine, fish=.FOSMVF.
fossils, nonmarine, gastropods=.FOSNIMG.
fossils, nonmarine, horse=.FOSNVMLH.
fossils, nonmarine, invertebrates=.FOSNI.
fossils, nonmarine, mammals=.FOSNVM.
fossils, nonmarine, mammals, large=.FOSNVML.
fossils, nonmarine, mammals, small=.FOSNVMS.
fossils, nonmarine, mollusks=.FOSNIM.
fossils, nonmarine, ostracods=.FOSNIO.
fossils, nonmarine, pelecypods=.FOSNIMP.
fossils, nonmarine, plants=.FOSNP.
fossils, nonmarine, plants, coniferous=.FOSNPC.
fossils, nonmarine, plants, deciduous=.FOSNPD.
fossils, nonmarine, plants, flowering=.FOSNPF.
fossils, nonmarine, plants, wood=.FOSNPW.
fossils, nonmarine, reptiles=.FOSNVR.
fossils, nonmarine, rhinoceras=.FOSNVMLR.
fossils, nonmarine, rodent=.FOSNVMSR.
fossils, nonmarine, shrew=.FOSNVMSS.
fossils, nonmarine, trace fossils=.FOSNT.
fossils, nonmarine, tracks=.FOSNTT.
fossils, nonmarine, turtle=.FOSNVRT.
fossils, nonmarine, vertebrates=.FOSNV.
fossils, nonmarine, wood=.FOSNPW.

fractures, non-penetrative=.SDFNR.
fractures, non-penetrative, open=.SDFNRO.
fractures, non-penetrative, partly closed=.SDFNRCP.
fractures, non-penetrative, closed=.SDFNRC.
fractures, non-penetrative, conjugate=-FRACON-
fractures, non-penetrative, locally abundant=-FRALA-
fractures, non-penetrative, pervasive=-FRAP-
fractures, non-penetrative, oriented=-FRAO-
fractures, non-penetrative, orthogonal=-FRAORT-
fractures, non-penetrative, random=-FRAR-
fractures, non-penetrative, sparse=-FRAS-
fractures, non-penetrative, tension=-FRAT-

gabbro=.GAB.
gabbro=.GABQ.
garnet (metamorphic)=.MMMG.

isotopic age=.IAG.
isotopic age, age is certain=.IAGC.
isotopic age, age is uncertain=.IAGU.

geographic setting, alluvial plain=.ALVP.
geographic setting, coastal plain=.CPL.
geographic setting, intermontaine=.IMT.
geographic setting, mountain margin=.MTM.
geographic setting, playa=.PLY.

geologic age unknown=.AGU.

geologic-age criteria and basis, fossil age=.FSL.
geologic-age criteria and basis, fossil age, age is certain=.FSLC.
geologic-age criteria and basis, fossil age, age is uncertain=.FSLU.
geologic-age criteria and basis, isoptopic age=.IAG.
geologic-age criteria and basis, isoptopic age, age is certain=.IAGC.
geologic-age criteria and basis, isoptopic age, age is uncertain=.IAGU.
geologic-age criteria and basis, geomorphic development=.GMD.
geologic-age criteria and basis, geomorphic development, age is certain=.GMDC.
geologic-age criteria and basis, geomorphic development, age is uncertain=.GMDU.
geologic-age criteria and basis, intrusive relations=.INR.
geologic-age criteria and basis, intrusive relations, age is certain=.INRC.
geologic-age criteria and basis, intrusive relations, age is uncertain=.INRU.
geologic-age criteria and basis, paleomagnetism=.PMG.
geologic-age criteria and basis, paleomagnetism, age is certain=.PMGC.
geologic-age criteria and basis, paleomagnetism, age is uncertain=.PMGU.
geologic-age criteria and basis, pedogenic-soil development=.SOD.
geologic-age criteria and basis, pedogenic-soil development, age is certain=.SODC.
geologic-age criteria and basis, pedogenic-soil development, age is uncertain=.SODU.
geologic-age criteria and basis, regional correlation=.RCO.
geologic-age criteria and basis, regional correlation, age is certain=.RCOC.
geologic-age criteria and basis, regional correlation, age is uncertain=.RCOU.
geologic-age criteria and basis, stratigraphic relations=.SRL.
geologic-age criteria and basis, stratigraphic relations, age is certain=.SRLC.
geologic-age criteria and basis, stratigraphic relations, age is uncertain=.SRLU.
geologic-age criteria and basis, tephrochronology=.TEP.
geologic-age criteria and basis, tephrochronology, age is certain=.TEPC.
geologic-age criteria and basis, tephrochronology, age is uncertain=.TEPU.

geologic-age subdivision, calcareous nannoplankton zone=.NPZ.
geologic-age subdivision, calcareous nannoplankton zone NN21=.NPZN21.
geologic-age subdivision, calcareous nannoplankton zone NN20=.NPZN20.
geologic-age subdivision, calcareous nannoplankton zone NN19=.NPZN19.
geologic-age subdivision, calcareous nannoplankton zone NN19=.NPZN19.
geologic-age subdivision, calcareous nannoplankton zone NN18=.NPZN18.
geologic-age subdivision, calcareous nannoplankton zone NN17=.NPZN17.
geologic-age subdivision, calcareous nannoplankton zone NN16=.NPZN16.
geologic-age subdivision, calcareous nannoplankton zone NN15=.NPZN15.
geologic-age subdivision, calcareous nannoplankton zone NN14=.NPZN14.
geologic-age subdivision, calcareous nannoplankton zone NN13=.NPZN13.
geologic-age subdivision, calcareous nannoplankton zone NN12=.NPZN12.
geologic-age subdivision, calcareous nannoplankton zone NN12=.NPZN12.
geologic-age subdivision, calcareous nannoplankton zone NN11=.NPZN11.
geologic-age subdivision, calcareous nannoplankton zone NN10=.NPZN10.
geologic-age subdivision, calcareous nannoplankton zone NN09=.NPZN09.
geologic-age subdivision, calcareous nannoplankton zone NN08=.NPZN08.
geologic-age subdivision, calcareous nannoplankton zone NN07=.NPZN07.
geologic-age subdivision, calcareous nannoplankton zone NN06=.NPZN06.
geologic-age subdivision, calcareous nannoplankton zone NN05=.NPZN05.
geologic-age subdivision, calcareous nannoplankton zone NN04=.NPZN04.
geologic-age subdivision, calcareous nannoplankton zone NN03=.NPZN03.
geologic-age subdivision, calcareous nannoplankton zone NN02=.NPZN02.
geologic-age subdivision, calcareous nannoplankton zone NN01=.NPZN01.
geologic-age subdivision, calcareous nannoplankton zone NP25=.NPZP25.
geologic-age subdivision, calcareous nannoplankton zone NP24=.NPZP24.
geologic-age subdivision, calcareous nannoplankton zone NP23=.NPZP23.
geologic-age subdivision, calcareous nannoplankton zone NP22=.NPZP22.
geologic-age subdivision, calcareous nannoplankton zone NP21=.NPZP21.
geologic-age subdivision, calcareous nannoplankton zone NP20=.NPZP20.
geologic-age subdivision, calcareous nannoplankton zone NP19=.NPZP19.
geologic-age subdivision, calcareous nannoplankton zone NP18=.NPZP18.
geologic-age subdivision, calcareous nannoplankton zone NP17=.NPZP17.

geologic-age subdivision, calcareous nannoplankton zone NP17=.NPZP17.
geologic-age subdivision, calcareous nannoplankton zone NP16=.NPZP16.
geologic-age subdivision, calcareous nannoplankton zone NP15=.NPZP15.
geologic-age subdivision, calcareous nannoplankton zone NP14=.NPZP14.
geologic-age subdivision, calcareous nannoplankton zone NP13=.NPZP13.
geologic-age subdivision, calcareous nannoplankton zone NP12=.NPZP12.
geologic-age subdivision, calcareous nannoplankton zone NP11=.NPZP11.
geologic-age subdivision, calcareous nannoplankton zone NP10=.NPZP10.
geologic-age subdivision, calcareous nannoplankton zone NP09=.NPZP09.
geologic-age subdivision, calcareous nannoplankton zone NP08=.NPZP08.
geologic-age subdivision, calcareous nannoplankton zone NP07=.NPZP07.
geologic-age subdivision, calcareous nannoplankton zone NP06=.NPZP06.
geologic-age subdivision, calcareous nannoplankton zone NP05=.NPZP05.
geologic-age subdivision, calcareous nannoplankton zone NP04=.NPZP04.
geologic-age subdivision, calcareous nannoplankton zone NP03=.NPZP03.
geologic-age subdivision, calcareous nannoplankton zone NP02=.NPZP02.
geologic-age subdivision, calcareous nannoplankton zone NP01=.NPZP01.

geologic-age subdivision, land-mammal age=.LMA.
geologic-age subdivision, land-mammal age, Arikareean=.LMAA.
geologic-age subdivision, land-mammal age, Arikareean=.LMAA.
geologic-age subdivision, land-mammal age, Barstovian=.LMAB.
geologic-age subdivision, land-mammal age, Blancan =.LMAL.
geologic-age subdivision, land-mammal age, Bridgerian=.LMAG.
geologic-age subdivision, land-mammal age, Chadronian=.LMAN.
geologic-age subdivision, land-mammal age, Chadronian=.LMAN.
geologic-age subdivision, land-mammal age, Clarendonian =.LMAC.
geologic-age subdivision, land-mammal age, Clarkforkian=.LMAK.
geologic-age subdivision, land-mammal age, Clarkforkian=.LMAK.
geologic-age subdivision, land-mammal age, Duchesnean=.LMAD.
geologic-age subdivision, land-mammal age, Hemphillian=.LMAH.
geologic-age subdivision, land-mammal age, Irvingtonian=.LMAI.
geologic-age subdivision, land-mammal age, Orellan=.LMAO.
geologic-age subdivision, land-mammal age, Puercan=.LMAP.
geologic-age subdivision, land-mammal age, Rancholabrean=.LMAR.
geologic-age subdivision, land-mammal age, Tiffanian=.LMAF.
geologic-age subdivision, land-mammal age, Torrejonian=.LMAT.
geologic-age subdivision, land-mammal age, Uintan=.LMAU.
geologic-age subdivision, land-mammal age, Wasatchian=.LMAS.
geologic-age subdivision, land-mammal age, Whitneyan=.LMAW.

geologic-age subdivision, magnetic chron C1=.PMC01.
geologic-age subdivision, magnetic chron C2=.PMC02.
geologic-age subdivision, magnetic chron C2A=.PMC02A.
geologic-age subdivision, magnetic chron C3 =.PMC03.
geologic-age subdivision, magnetic chron C3A=.PMC03A.
geologic-age subdivision, magnetic chron C3B=.PMC03B.
geologic-age subdivision, magnetic chron C4 =.PMC04.
geologic-age subdivision, magnetic chron C4A =.PMC04A.
geologic-age subdivision, magnetic chron C5 =.PMC05.
geologic-age subdivision, magnetic chron C5A=.PMC05A.
geologic-age subdivision, magnetic chron C5B=.PMC05B.
geologic-age subdivision, magnetic chron C5C=.PMC05C.
geologic-age subdivision, magnetic chron C5D=.PMC05D.
geologic-age subdivision, magnetic chron C5E=.PMC05E.
geologic-age subdivision, magnetic chron C6 =.PMC06.
geologic-age subdivision, magnetic chron C6A=.PMC06A.
geologic-age subdivision, magnetic chron C6B=.PMC06B.
geologic-age subdivision, magnetic chron C6C=.PMC06C.
geologic-age subdivision, magnetic chron C7=.PMC07.
geologic-age subdivision, magnetic chron C7A=.PMC07.
geologic-age subdivision, magnetic chron C8=.PMC08.
geologic-age subdivision, magnetic chron C9=.PMC09.

geologic-age subdivision, magnetic chron C10=.PMC10.
geologic-age subdivision, magnetic chron C11=.PMC11.
geologic-age subdivision, magnetic chron C12=.PMC12.
geologic-age subdivision, magnetic chron C13=.PMC13.
geologic-age subdivision, magnetic chron C15=.PMC15.
geologic-age subdivision, magnetic chron C16=.PMC16.
geologic-age subdivision, magnetic chron C17=.PMC17.
geologic-age subdivision, magnetic chron C17=.PMC17.
geologic-age subdivision, magnetic chron C18=.PMC18.
geologic-age subdivision, magnetic chron C19=.PMC19.
geologic-age subdivision, magnetic chron C20=.PMC20.
geologic-age subdivision, magnetic chron C21=.PMC21.
geologic-age subdivision, magnetic chron C22=.PMC22.
geologic-age subdivision, magnetic chron C23=.PMC23.
geologic-age subdivision, magnetic chron C24=.PMC24.
geologic-age subdivision, magnetic chron C25=.PMC25.
geologic-age subdivision, magnetic chron C26=.PMC26.
geologic-age subdivision, magnetic chron C27=.PMC27.
geologic-age subdivision, magnetic chron C28=.PMC28.
geologic-age subdivision, magnetic chron C29=.PMC29.
geologic-age subdivision, magnetic chron C30=.PMC30.
geologic-age subdivision, magnetic chron C31=.PMC31.
geologic-age subdivision, magnetic chron C32=.PMC32.
geologic-age subdivision, magnetic chron C33=.PMC33.
geologic-age subdivision, magnetic chron C34=.PMC34.

geologic-age subdivision, planktonic foraminiferal zone=.PFZ.
geologic-age subdivision, planktonic foraminiferal zone N23=.PFZN23.
geologic-age subdivision, planktonic foraminiferal zone N22=.PFZN22.
geologic-age subdivision, planktonic foraminiferal zone N22=.PFZN22.
geologic-age subdivision, planktonic foraminiferal zone N21=.PFZN21.
geologic-age subdivision, planktonic foraminiferal zone N20=.PFZN20.
geologic-age subdivision, planktonic foraminiferal zone N19=.PFZN19.
geologic-age subdivision, planktonic foraminiferal zone N18=.PFZN18.
geologic-age subdivision, planktonic foraminiferal zone N17=.PFZN17.
geologic-age subdivision, planktonic foraminiferal zone N16=.PFZN16.
geologic-age subdivision, planktonic foraminiferal zone N15=.PFZN15.
geologic-age subdivision, planktonic foraminiferal zone N14=.PFZN14.
geologic-age subdivision, planktonic foraminiferal zone N13=.PFZN13.
geologic-age subdivision, planktonic foraminiferal zone N12=.PFZN12.
geologic-age subdivision, planktonic foraminiferal zone N11=.PFZN11.
geologic-age subdivision, planktonic foraminiferal zone N10=.PFZN10.
geologic-age subdivision, planktonic foraminiferal zone N09=.PFZN09.
geologic-age subdivision, planktonic foraminiferal zone N08=.PFZN08.
geologic-age subdivision, planktonic foraminiferal zone N07=.PFZN07.
geologic-age subdivision, planktonic foraminiferal zone N06=.PFZN06.
geologic-age subdivision, planktonic foraminiferal zone N05=.PFZN05.
geologic-age subdivision, planktonic foraminiferal zone N04=.PFZN04.
geologic-age subdivision, planktonic foraminiferal zone P22=.PFZP22.
geologic-age subdivision, planktonic foraminiferal zone P21=.PFZP21.
geologic-age subdivision, planktonic foraminiferal zone P20=.PFZP20.
geologic-age subdivision, planktonic foraminiferal zone P19=.PFZP19.
geologic-age subdivision, planktonic foraminiferal zone P18=.PFZP18.
geologic-age subdivision, planktonic foraminiferal zone P17=.PFZP17.
geologic-age subdivision, planktonic foraminiferal zone P16=.PFZP16.
geologic-age subdivision, planktonic foraminiferal zone P15=.PFZP15.
geologic-age subdivision, planktonic foraminiferal zone P14=.PFZP14.
geologic-age subdivision, planktonic foraminiferal zone P13=.PFZP13.
geologic-age subdivision, planktonic foraminiferal zone P12=.PFZP12.
geologic-age subdivision, planktonic foraminiferal zone P11=.PFZP11.
geologic-age subdivision, planktonic foraminiferal zone P10=.PFZP10.
geologic-age subdivision, planktonic foraminiferal zone P09=.PFZP09.
geologic-age subdivision, planktonic foraminiferal zone P08=.PFZP08.
geologic-age subdivision, planktonic foraminiferal zone P07=.PFZP07.

geologic-age subdivision, planktonic foraminiferal zone P06=.PFZP06.
geologic-age subdivision, planktonic foraminiferal zone P06=.PFZP06.
geologic-age subdivision, planktonic foraminiferal zone P05=.PFZP05.
geologic-age subdivision, planktonic foraminiferal zone P04=.PFZP04.
geologic-age subdivision, planktonic foraminiferal zone P03=.PFZP03.
geologic-age subdivision, planktonic foraminiferal zone P02=.PFZP02.
geologic-age subdivision, planktonic foraminiferal zone P01=.PFZP01.

geologic-age subdivision, West Coast foraminiferal age=.WCF.
geologic-age subdivision, West Coast foraminiferal age, Bulitian=.WCFB.
geologic-age subdivision, West Coast foraminiferal age, Danian=.WCFA.
geologic-age subdivision, West Coast foraminiferal age, Delmontian=.WCFD.
geologic-age subdivision, West Coast foraminiferal age, Delmontian=.WCFD.
geologic-age subdivision, West Coast foraminiferal age, Hallian=.WCFH.
geologic-age subdivision, West Coast foraminiferal age, Luisian=.WCFL.
geologic-age subdivision, West Coast foraminiferal age, Mohnian=.WCFM.
geologic-age subdivision, West Coast foraminiferal age, Narizian=.WCFN.
geologic-age subdivision, West Coast foraminiferal age, Penutian=.WCFP.
geologic-age subdivision, West Coast foraminiferal age, Refugian=.WCFF.
geologic-age subdivision, West Coast foraminiferal age, Relizian=.WCFR.
geologic-age subdivision, West Coast foraminiferal age, Repettian=.WCFT.
geologic-age subdivision, West Coast foraminiferal age, Saucesian=.WCFS.
geologic-age subdivision, West Coast foraminiferal age, Ulatizian=.WCFU.
geologic-age subdivision, West Coast foraminiferal age, Venturian=.WCFV.
geologic-age subdivision, West Coast foraminiferal age, Wheelerian=.WCFW.
geologic-age subdivision, West Coast foraminiferal age, Ynezian=.WCFY.
geologic-age subdivision, West Coast foraminiferal age, Zemorrian=.WCFZ.
geologic-age subdivision, West Coast foraminiferal age, Zemorrian=.WCFZ.

geologic structures, deformational=.SDF.
geologic structures, deformational, non-penetrative=.SDFN.
geologic structures, deformational, penetrative=.SDFP.

geologic structures, deformational origin unspecified=.SOU.
geologic structures, deformational origin unspecified, banding=.SOUB.
geologic structures, deformational origin unspecified, cataclastic fabric=.SOUFC.
geologic structures, deformational origin unspecified, foliation, generic=.SOUFO.
geologic structures, deformational origin unspecified, gneissose layering=.SOUGL.
geologic structures, deformational origin unspecified, lineation=.SOUL.
geologic structures, deformational origin unspecified, mylonitic fabric=.SOUFM.

geologic structures, igneous=.SFE.
geologic structures, deformational=.SDF.
geologic structures, metamorphic=.SFM.
geologic structures, origin unspecified=.SOU.
geologic structures, post-depositional=.SPD.

geologic structures resulting from deformation=.SDF.
geologic structures resulting from deformation, non-penetrative deformation=.SDFN.
geologic structures resulting from deformation, penetrative deformation=.SDFP.

geologic structures resulting from igneous emplacement, cumulate layering=.SFEC.
geologic structures resulting from igneous emplacement, flow banding=.SFEB.
geologic structures resulting from igneous emplacement, massive=.SFEFM.
geologic structures resulting from igneous emplacement, massive to foliated=.SFEFMF.
geologic structures resulting from igneous emplacement, massive to slightly foliated=.SFEFMFS.
geologic structures resulting from igneous emplacement, foliated=.SFEFF.
geologic structures resulting from igneous emplacement, foliated, moderately=.SFEFFM.
geologic structures resulting from igneous emplacement, foliated, slightly=.SFEFFS.
geologic structures resulting from igneous emplacement, foliated, well=.SFEFFW.
geologic structures resulting from igneous emplacement, lineated=.SFEFL.
geologic structures resulting from igneous emplacement, lineated, slightly=.SFEFLS.
geologic structures resulting from igneous emplacement, lineated, moderately=.SFEFLM.
geologic structures resulting from igneous emplacement, lineated, well=.SFEFLW.

geologic structures resulting from igneous emplacement, gneissose compositional layering=.SFEG.
geologic structures resulting from igneous emplacement, inclusions, local=.SFEIL.
geologic structures resulting from igneous emplacement, inclusion-rich structure=.SFEIR.
geologic structures resulting from igneous emplacement, magmatic migmatite=.SFEM.
geologic structures resulting from igneous emplacement, schlieren=.SFES.
geologic structures resulting from igneous emplacement, variable=.SFEV.

geologic structures resulting from metamorphism, boudinage=.SFMBD.
geologic structures resulting from metamorphism, cataclasis, intergranular=.SFMCI.
geologic structures resulting from metamorphism, grain flattening=.SFMGF.
geologic structures resulting from metamorphism, grain lenticulation=.SFMGL.
geologic structures resulting from metamorphism, grain-size reduction, brittle=.SFMGRB.
geologic structures resulting from metamorphism, grain-size reduction, ductile=.SFMGRD.
geologic structures resulting from metamorphism, layering, migmatitic=.SFMYM.
geologic structures resulting from metamorphism, layering, mineral-segregation=.SFMYS.
geologic structures resulting from metamorphism, mullions=.SFMMU.
geologic structures resulting from metamorphism, slaty cleavage=.SFMK.
geologic structures resulting from metamorphism, S-C structures=.SFMSC.

geologic structures resulting from non-penetrative deformation, brecciation=.SDFNB.
geologic structures resulting from non-penetrative deformation, cataclastic seams, discrete=.SDFNCSD.
geologic structures resulting from non-penetrative deformation, fissures=.SDFNU.
geologic structures resulting from non-penetrative deformation, fractures=.SDFNR.
geologic structures resulting from non-penetrative deformation, open fractures=.SDFNRO.
geologic structures resulting from non-penetrative deformation, partly closed fractures=.SDFNRCP.
geologic structures resulting from non-penetrative deformation, closed fractures=.SDFNRC.
geologic structures resulting from non-penetrative deformation, fractures, caliche-filled=-FRACA-
geologic structures resulting from non-penetrative deformation, fractures, conjugate=-FRACON-
geologic structures resulting from non-penetrative deformation, fractures, locally abundant=-FRALA-
geologic structures resulting from non-penetrative deformation, fractures, oriented=-FRAO-
geologic structures resulting from non-penetrative deformation, fractures, orthogonal=-FRAORTH-
geologic structures resulting from non-penetrative deformation, fractures, pervasive=-FRAP-
geologic structures resulting from non-penetrative deformation, fractures, random=-FRAR-
geologic structures resulting from non-penetrative deformation, fractures, sparse=-FRAS-
geologic structures resulting from non-penetrative deformation, fractures, tension=-FRAT-
geologic structures resulting from non-penetrative deformation, fractures (fault-rock related)=.SDFPR.
geologic structures resulting from non-penetrative deformation, open fractures=.SDFPRO.
geologic structures resulting from non-penetrative deformation, partly closed fractures=.SDFPRCP.
geologic structures resulting from non-penetrative deformation, closed fractures=.SDFPRC.
geologic structures resulting from non-penetrative deformation, fractures, caliche-filled=-FRACA-
geologic structures resulting from non-penetrative deformation, fractures, conjugate=-FRACON-
geologic structures resulting from non-penetrative deformation, fractures, locally abundant=-FRALA-
geologic structures resulting from non-penetrative deformation, fractures, oriented=-FRAO-
geologic structures resulting from non-penetrative deformation, fractures, orthogonal=-FRAORT-
geologic structures resulting from non-penetrative deformation, fractures, pervasive=-FRAP-
geologic structures resulting from non-penetrative deformation, fractures, random=-FRAR-
geologic structures resulting from non-penetrative deformation, fractures, sparse=-FRAS-
geologic structures resulting from non-penetrative deformation, fractures, tension=-FRAT-
geologic structures resulting from non-penetrative deformation, jointed=.SDFNJ.
geologic structures resulting from non-penetrative deformation, mullions=.SDFNM.

geologic structures resulting from penetrative deformation=.SDFP.
geologic structures resulting from penetrative deformation, brittle fabric=.SDFPFB.
geologic structures resulting from penetrative deformation, brittle-ductile fabric=.SDFPFBD.
geologic structures resulting from penetrative deformation, cataclasis, intergranular=.SDFPCI.
geologic structures resulting from penetrative deformation, cataclastic seams=.SDFPC.
geologic structures resulting from penetrative deformation, cataclastic seams, local=.SDFPCL.
geologic structures resulting from penetrative deformation, cataclastic seams, pervasive=.SDFPCP.
geologic structures resulting from penetrative deformation, cleavage, slaty=.SDFPKS.
geologic structures resulting from penetrative deformation, ductile fabric=.SDFPFD.
geologic structures resulting from penetrative deformation, foliation=.SDFPO.
geologic structures resulting from penetrative deformation, foliation, weak=PFOLW-
geologic structures resulting from penetrative deformation, foliation, moderate=PFOLM-
geologic structures resulting from penetrative deformation, foliation strong=PFOLS-

geologic structures resulting from penetrative deformation, foliation, cataclastic=.SDFPOC.
geologic structures resulting from penetrative deformation, foliation, gneissose=.SDFPOG.
geologic structures resulting from penetrative deformation, foliation, mylonitic=.SDFPOM.
geologic structures resulting from penetrative deformation, foliation fish=.SDFPTF.
geologic structures resulting from penetrative deformation, grain flattening=.SDFPGF.
geologic structures resulting from penetrative deformation, grain lenticulation=.SDFPGL.
geologic structures resulting from penetrative deformation, grain-size reduction, brittle=.SDFPGRB.
geologic structures resulting from penetrative deformation, grain-size reduction, ductile=.SDFPGRD.
geologic structures resulting from penetrative deformation, laminated fabric=.SDFPFL.
geologic structures resulting from penetrative deformation, layering=.SDFPY.
geologic structures resulting from penetrative deformation, lineation=.SDFPL.
geologic structures resulting from penetrative deformation, mica fish=.SDFPTM.
geologic structures resulting from penetrative deformation, microtectonite features=.SDFPT.
geologic structures resulting from penetrative deformation, milling=.SDFPX.
geologic structures resulting from penetrative deformation, mylonitic seams=.SDFPM.
geologic structures resulting from penetrative deformation, porphyroclastic fabric=.SDFPFP.
geologic structures resulting from penetrative deformation, porphyroclastic fabric locally=.SDFPFPL.
geologic structures resulting from penetrative deformation, pressure shadows=.SDFPTP.
geologic structures resulting from penetrative deformation, pseudotachylite seams=.SDFPU.
geologic structures resulting from penetrative deformation, recrystallized fabric=SDFPFR.
geologic structures resulting from penetrative deformation, S-C structures=SDFPMTS.
geologic structures resulting from penetrative deformation, winged porphyroclasts=.SDFPTW.

geologic structures, sedimentary=.SDS.

geologic unit assignment criteria (polygon confidence levels)=.CAG.

geologic-unit identification based on extrapolation=.CAGE.
geologic-unit identification based on extrapolation, identification is certain=.CAGEC.
geologic-unit identification based on extrapolation, identification is likely but not confirmed=.CAGEL.
geologic-unit identification based on extrapolation, identification is uncertain=.CAGEU.

geologic-unit identification based on field observation=.CAGF.
geologic-unit identification based on field observation, identification is certain=.CAGFC.
geologic-unit identification based on field observation, identification is likely but not confirmed=.CAGFL.
geologic-unit identification based on field observation, identification is uncertain=.CAGFU.

geologic-unit identification based on air-photo interpretation=-APH-
geologic-unit identification based on binocular identification=-BIN-
geologic-unit identification based on observation station in polygon=-OST-
geologic-unit identification based on published observation by other workers=-PUBW-
geologic-unit identification based on unpublished observation by other workers=-PUBWU-
geologic-unit identification based on remote-sensing imagery identification=-RSI-

geomorphic-development age basis=.GMD.
geomorphic-development age basis, age is certain=.GMDC.
geomorphic-development age basis, age is uncertain=.GMDU.

glacial deposit (bedrock)=.GLA.
glacial deposit, alpine (bedrock)=.GLAA.
glacial deposit, continental (bedrock)=.GLAC.
glacial deposit, unspecified (bedrock)=.GLAU.
glacial deposit (surficial)=.SURG.
glacial deposit, alpine (surficial)=.SURGA.
glacial deposit, continental (surficial)=.SURGC.
glacial deposit, unspecified (surficial)=.SURGU.
glacial deposit, moraine=-MOR-
glacial deposit, outwash=-OWP-

gneiss, generic=.MMGG.
gneiss (metasedimentary)=.MSDG.
gneiss (metaigneous)=.MIGG.
gneiss, augen (metaigneous)=.MIGGA.
gneiss, augen (generic, protolith unspecified)=.MMGGA.

gneiss, banded (metasedimentary)=.MSDBG.
gneiss, cataclastic (metamorphic, strain-dominated)=.METSGC.
gneiss, granitic (generic, protolith unspecified)=.MMGGG
gneiss, layered (generic, protolith unspecified)=.MMGGLY.
gneiss, mylonitic (metamorphic, strain dominated)=.METSGM.
gneiss, orthogneiss=.MIGGO.
gneiss, paragneiss=.MSDPG.

gneissic foliation (metamorphic layering)=.SFMOG.
gneissose foliation (igneous layering)=.SFEG.
gneissose granitic rock (metaigneous)=.MIGRG.
gneissose layering (origin unspecified)=.SOUG.

grain composition=.GCO.
grain composition, andesite=.GCOLIVA.
grain composition, basalt=.GCOLIVB.
grain composition, biotite=.GCOAB.
grain composition, carbonate minerals=.GCOC.
grain composition, carbonate rock fragments=.GCOLSC.
grain composition, chert rock fragments=.GCOLSH.
grain composition, feldspar dominant=.GCOF.
grain composition, gneiss rock fragments=.GCOLMG.
grain composition, granitic rock fragments=.GCOLIG.
grain composition, igneous rock fragments=.GCOLI.
grain composition, intraclasts=.GCOI.
grain composition, lithics dominant over quartz & feldspar=.GCOL.
grain composition, marble rock fragments=.GCOLMM.
grain composition, metamorphic rock fragments=.GCOLM.
grain composition, metaquartzite=.GCOLMQ.
grain composition, metavolcanic=.GCOLMV.
grain composition, micas=.GCOA.
grain composition, micas, biotite=.GCOAB.
grain composition, micas, muscovite=.GCOAM.
grain composition, mudrock=.GCOLSM.
grain composition, mylonite=.GCOLMY.
grain composition, ooids=.GCOO.
grain composition, other=.GCOTH.
grain composition, peloids=.GCOP.
grain composition, peloids, phosphatic=.GCOPP.
grain composition, polycrystalline quartz fragments=-QPC-
grain composition, quartz-dominant=.GCOQ.
grain composition, quartz >95%=-Q95-
grain composition, quartz >75%<95%=-Q75-
grain composition, quartz fragments, polycrystalline=-QPC-
grain composition, quartz fragments, strained=-QST-
grain composition, quartz and feldspar subequal=.GCOQF.
grain composition, quartz, feldspar, & lithics subequal=.GCOQFL.
grain composition, schist rock fragments=.GCOLMS.
grain composition, sedimentary rock fragments=.GCOLS.
grain composition, strained quartz fragments=-QST-
grain composition, tuffaceous=.GCOLIVT.
grain composition, volcanic fragments=.GCOLIV.
grain composition, volcanic fragments, andesite=.GCOLIVA.
grain composition, volcanic fragments, basalt=.GCOLIVB.
grain composition, volcanic fragments, siliceous=.GCOLIVS.
grain composition, volcanic fragments, tuffaceous=.GCOLIVT.

grain composition, rock fragments, andesite=.GCOLIVA.
grain composition, rock fragments, basalt=.GCOLIVB.
grain composition, rock fragments, carbonate=.GCOLSC.
grain composition, rock fragments, chert=.GCOLSH.
grain composition, rock fragments, dacite-latite=-GCDL-
grain composition, rock fragments, igneous=.GCOLI.
grain composition, rock fragments, gneiss=.GCOLMG.

grain composition, rock fragments, granitic=.GCOLIG.
grain composition, rock fragments, marble=.GCOLMM.
grain composition, rock fragments, metamorphic=.GCOLM.
grain composition, rock fragments, metaquartzite=.GCOLMQ.
grain composition, rock fragments, metavolcanic=.GCOLMV.
grain composition, rock fragments, mudrock=.GCOLSM.
grain composition, rock fragments, mylonite=.GCOLMY.
grain composition, rock fragments, rhyolite=-GCVR-
grain composition, rock fragments, schist=.GCOLMS.
grain composition, rock fragments, sedimentary=.GCOLS.
grain composition, rock fragments, tuffaceous=.GCOLIVT.
grain composition, rock fragments, volcanic=.GCOLIV.
grain composition, rock fragments, volcanic, andesite=.GCOLIVA.
grain composition, rock fragments, volcanic, basalt=.GCOLIVB.
grain composition, rock fragments, volcanic, siliceous=.GCOLIVS.
grain composition, rock fragments, volcanic, tuffaceous=.GCOLIVT.

grain composition, skeletal fragments=.GCOK.
grain composition, skeletal fragments, algal material=.GCOKA.
grain composition, skeletal fragments, brachiopods=.GCOKBR.
grain composition, skeletal fragments, bryozoans=.GCOKBZ.
grain composition, skeletal fragments, corals=.GCOKC.
grain composition, skeletal fragments, fusulinids=.GCOKF.
grain composition, skeletal fragments, mollusks=.GCOKM.
grain composition, skeletal fragments, pelmatozoans=.GCOKP.
grain composition, skeletal fragments, trilobite fragments=.GCOKT.

grain composition, unspecified=.GCOU.
grain composition, variable=.GCOV.

grain flattening resulting from metamorphism=.SFMGF.
grain lenticulation resulting from metamorphism=.SFMGL.
grain flattening resulting from penetrative deformation=.SDFPGF.
grain lenticulation resulting from penetrative deformation=.SDFPGL.

grain rock (non-carbonate sedimentary rocks)=.GRK.
grain rock (carbonate sedimentary rocks)=.GRO.

grain rock, conglomerate=.GRKC.
grain rock, conglomerate, boulder=.GRKCB.
grain rock, conglomerate, cobble-boulder=.GRKCCB.
grain rock, conglomerate, pebble-boulder=.GRKCPB.
grain rock, conglomerate, cobble=.GRKCC.
grain rock, conglomerate, pebble-cobble=.GRKCPC.
grain rock, conglomerate, granule-cobble=.GRKCGC.
grain rock, conglomerate, pebble=.GRKCP.
grain rock, conglomerate, granule-pebble=.GRKCGP.
grain rock, conglomerate, granule=.GRKCG.
grain rock, conglomerate, matrix-rich=.GRKCX.
grain rock, conglomerate, matrix-rich, clayey=.GRKCXCL.
grain rock, conglomerate, matrix-rich, silty=.GRKCXML.
grain rock, conglomerate, sandy=.GRKCS.
grain rock, conglomerate, sandy pebble-cobble=.GRKCSPC.
grain rock, conglomerate, sandy pebble=.GRKCSP.
grain rock, conglomerate, sandy granule-pebble=.GRKCGPS.
grain rock, conglomerate, sandy granule=.GRKCSG.
grain rock, conglomerate, silty=.GRKCXML.

grain rock, sandstone=.GRKSS.
grain rock, sandstone, conglomeratic=.GRKSSC.
grain rock, sandstone, granule-bearing=.GRKSSCG.
grain rock, sandstone, matrix-rich=.GRKSSX.
grain rock, sandstone, matrix-rich, clayey=.GRKSSXCL.
grain rock, sandstone, matrix-rich, silty=.GRKSSXML.

grain rock, sandstone, pebbly granule=.GRKSSCGP.
grain rock, sandstone, pebbly=.GRKSSCP.
grain rock, sandstone, pebbly & cobbly=.GRKSSCPC.
grain rock, sandstone, cobbly=.GRKSSCC.
grain rock, sandstone, cobbly & bouldery=.GRKSSCCB.
grain rock, sandstone, bouldery=.GRKSSCB.

grain rock, siltstone=.GRKML.
grain rock, siltstone, sandy=.GRKMLS.
grain rock, siltstone, sandy conglomeratic=.GRKMLSC.
grain rock, siltstone, sandy granule-bearing=.GRKMLSCG.
grain rock, siltstone, sandy granule-pebble=.GRKMLSCGP.
grain rock, siltstone, sandy granule-cobble=.GRKMLSCGC.
grain rock, siltstone, sandy pebble-cobble=.GRKMLSCPC.
grain rock, siltstone, conglomeratic=.GRKMLC.
grain rock, siltstone, granule-bearing=.GRKMLCG.
grain rock, siltstone, pebbly granule-bearing=.GRKMLCGP.
grain rock, siltstone, pebbly=.GRKMLCP.
grain rock, siltstone, pebbly & cobbly=.GRKMLCPC.
grain rock, siltstone, cobbly=.GRKMLCC.
grain rock, siltstone, cobbly & bouldery=.GRKMLCB.

grain rock, variable lithologies=.GRKV.

grain shape (igneous), groundmass anhedral=.GMSA.
grain shape (igneous), groundmass euhedral=.GMSU.
grain shape (igneous), groundmass subhedral=.GMSS.
grain shape (igneous), groundmass variable=.GMSV.
grain shape (igneous), phenocrysts anhedral=.PHSA.
grain shape (igneous), phenocrysts euhedral=.PHSU.
grain shape (igneous), phenocrysts subhedral=.PHSS.
grain shape (igneous), phenocrysts diffuse=.PHSF.
grain shape (igneous), phenocrysts variable=.PHSV.

grain shape (sedimentary and surficial), angular=.GSHA.
grain shape (sedimentary and surficial), angular to subangular=.GSHAG.
grain shape (sedimentary and surficial), angular to subrounded=.GSHAD.
grain shape (sedimentary and surficial), angular to rounded=.GSHAR.
grain shape (sedimentary and surficial), rounded=.GSHR.
grain shape (sedimentary and surficial), subangular=.GSHG.
grain shape (sedimentary and surficial), subangular to subrounded=.GSHGD.
grain shape (sedimentary and surficial), subangular to rounded=.GSHGR.
grain shape (sedimentary and surficial), subrounded=.GSHD.
grain shape (sedimentary and surficial), subrounded to rounded=.GSHDR.
grain shape (sedimentary and surficial), variable=.GSHV.
grain shape (sedimentary and surficial), uncertain due to overgrowths=.GSHUG.
grain shape (sedimentary and surficial), uncertain due to recrystallization=.GSHUX.

grain-size reduction, brittle, resulting from penetrative deformation=.SDFPGRB.
grain-size reduction, ductile, resulting from penetrative deformation=.SDFPGRD.
grain-size reduction, brittle, resulting from metamorphism=.SFMGRB.
grain-size reduction, ductile resulting from metamorphism=.SFMGRD.

grain size (igneous), groundmass, =.GMI.
grain size (igneous), groundmass aphanitic=.GMIA.
grain size (igneous), groundmass aphanitic to fine=.GMIAF.
grain size (igneous), groundmass fine=.GMIF.
grain size (igneous), groundmass fine to medium=.GMIFM.
grain size (igneous), groundmass fine to coarse=.GMIFC.
grain size (igneous), groundmass medium=.GMIM.
grain size (igneous), groundmass medium to coarse=.GMIMC.
grain size (igneous), groundmass coarse=.GMIC.
grain size (igneous), groundmass coarse to very coarse=.GMICVC.
grain size (igneous), groundmass very coarse=.GMIVC.

grain size (igneous), groundmass grain size variable=.GMIV.

grain size (igneous), phenocrysts=.PHZ.
grain size (igneous), phenocrysts, coarse=.PHZC.
grain size (igneous), phenocrysts, fine=.PHZF.
grain size (igneous), phenocrysts, fine to medium=.PHZFM.
grain size (igneous), phenocrysts, mediumPHM.
grain size (igneous), phenocrysts, medium to coarse=.PHZMC.
grain size (igneous), phenocrysts, variable=.PHZV.

grain size, groundmass (metamorphic)=.GZM.
grain size (metamorphic) groundmass, aphanitic=.GZMGA.
grain size (metamorphic) groundmass, aphanitic to fine=.GZMGAF.
grain size (metamorphic) groundmass, coarse=.GZMGC.
grain size (metamorphic) groundmass, coarse to very coarse=.GZMGCVC.
grain size (metamorphic) groundmass, fine=.GZMGF.
grain size (metamorphic) groundmass, fine to medium=.GZMGFM.
grain size (metamorphic) groundmass, fine to coarse=.GZMGFC.
grain size (metamorphic) groundmass, medium=.GZMGM.
grain size (metamorphic) groundmass, medium to coarse=.GZMGMC.
grain size (metamorphic) groundmass, very coarse=.GZMGVC.
grain size (metamorphic) groundmass, grain size variable=.GZMGV.

grain size (metamorphic) porphyroblasts=.GZMP.
grain size (metamorphic) porphyroblasts, fine=.GZMPF.
grain size (metamorphic) porphyroblasts, medium=.GZMPM.
grain size (metamorphic) porphyroblasts, medium to coarse=.GZMPMC.
grain size (metamorphic) porphyroblasts, coarse=.GZMPC.
grain size (metamorphic) porphyroblasts, very coarse=.GZMPVC.
grain size (metamorphic) porphyroblasts, variable=.GZMPV.

grain size (sedimentary), sand size and finer=.GSZS.
grain size (sedimentary), sand size and finer, clay=.GSZCL.
grain size (sedimentary), sand size and finer, sand=.GSZS.
grain size (sedimentary), sand size and finer, sand, coarse to very coarse=.GSZSCVC.
grain size (sedimentary), sand size and finer, sand, coarse=.GSZSC.
grain size (sedimentary), sand size and finer, sand, fine=.GSZSF.
grain size (sedimentary), sand size and finer, sand, fine to coarse=.GSZSFC.
grain size (sedimentary), sand size and finer, sand, fine to medium=.GSZSFM.
grain size (sedimentary), sand size and finer, sand, fine to very coarse=.GSZSFVC.
grain size (sedimentary), sand size and finer, sand, medium=.GSZSM.
grain size (sedimentary), sand size and finer, sand, medium to coarse=.GSZSMC.
grain size (sedimentary), sand size and finer, sand, medium to very coarse=.GSZSMVC.
grain size (sedimentary), sand size and finer, sand, very coarse=.GSZSVC.
grain size (sedimentary), sand size and finer, sand, very fine=.GSZSVF.
grain size (sedimentary), sand size and finer, sand, very fine to coarse=.GSZSVFC.
grain size (sedimentary), sand size and finer, sand, very fine to fine=.GSZSVFF.
grain size (sedimentary), sand size and finer, sand, very fine to medium=.GSZSVFM.
grain size (sedimentary), sand size and finer, sand, very fine to very coarse=.GSZSVFVC.
grain size (sedimentary), sand size and finer, silt=.GSZML.
grain size (sedimentary), sand size and finer, uncertain due to deformation=.GSZUD.
grain size (sedimentary), sand size and finer, uncertain due to grain overgrowths=.GSZUG.
grain size (sedimentary), sand size and finer, uncertain due to recrystallization=.GSZUX.
grain size (sedimentary), sand size and finer, variable=.GSZV.

granitic rock, composition heterogeneous=.GRNH.
granitic rock, composition quartz-deficient=.GRNQD.
granitic rock, composition quartz-poor=.GRNQP.
granitic rock, composition quartz-rich=.GRNQR.
granitic rock, composition unspecified=.GRNU.
granitic rock, composition variable=.GRKV.

granitic, generic=.GRN.
granitic gneiss (protolith unspecified)=.MMGGG

granitic rock intermingled within mapped geologic unit=-GRR-

granoblastic=.SFMFG.
granodiorite=.GDR.

granule conglomerate=.GRKCG.
granule-pebble conglomerate=.GRKCGP.

gravelly deposit=.SGDG.
gravel (surficial deposit)=.GVL.
gravel, boulder (surficial deposit)=.GVLB.
gravel, cobble (surficial deposit)=.GVLC.
gravel, cobble-boulder (surficial deposit)=.GVLCB.
gravel, granule (surficial deposit)=.GVLG.
gravel, granule-pebble (surficial deposit)=.GVLGP.
gravel, pebble (surficial deposit)=.GVLP.
gravel, pebble-boulder (surficial deposit)=.GVLPB.
gravel, pebble-cobble (surficial deposit)=.GVLPC.
gravel, sandy (surficial deposit)=.GVLS.
gravel, sandy cobble (surficial deposit)=.GVLSC.
gravel, sandy granule (surficial deposit)=.GVLSG.
gravel, sandy granule pebble (surficial deposit)=.GVLSGP.
gravel, sandy pebble (surficial deposit)=.GVLSP.
gravel, sandy pebble cobble (surficial deposit)=.GVLSPC.
gravel, muddy (surficial deposit)=.GVLM.

gravel and mud interbedded (surficial deposit)=-GMI-
gravel bar and bedform element of fluvial deposit=.GBB.
gravel dominant over sand (surficial deposit)=.SGDGD.

gravel-bed fluvial deposit=.GBD.
gravel-bed fluvial deposit, braided=.GBDB.
gravel-bed fluvial deposit, braided, with sediment-gravity flow deposits=.GBDBG.
gravel-bed fluvial deposit, braided, shallow=.GBDBS.
gravel-bed fluvial deposit, braided, deep=.GBDBD.
gravel-bed fluvial deposit, meandering=.MNDG.
gravel-bed fluvial deposit, wandering=.GBDW.

gravity-driven deposit of hillslopes, catastrophic slide-breccia (bedrock)=-CSB-
gravity-driven deposit of hillslopes, debris-flow (bedrock)=-GFLD-
gravity-driven deposit of hillslopes, gravity-controlled deposit=.HSPGC.
gravity-driven deposit of hillslopes, gravity-flow (bedrock)=.HSPGF.
gravity-driven deposit of hillslopes, gravity-slide (bedrock)=.HSPGS.
gravity-driven deposit of hillslopes, rock-avalanche (bedrock)=-GFLR-
gravity-driven deposit of hillslopes, talus=-TLS-
gravity-driven deposit of hillslopes, unspecified (bedrock)=.HSPU.

gravity-slide deposit (surficial)=.SURSG.

greenschist facies, lower =.MGDGL.
greenschist facies, upper =.MGDGL.
greenstone (metaigneous rock)=.MIGE.

greisenization (fluorine metasomatism), local=.ALRLG.
greisenization (fluorine metasomatism), pervasive=.ALRPG.

groundmass grain shape, anhedral=.GMSA.
groundmass grain shape, euhedral=.GMSU.
groundmass grain shape, subhedral=.GMSS.
groundmass grain shape, idioblastic (metamorphic)=.MGSI.
groundmass grain shape, xenoblastic (metamorphic)=.MGSX.
groundmass grain shape, variable=.GMSV.

groundmass grain size, aphanitic (igneous)=.GMIA.

groundmass grain size, aphanitic to fine (igneous)=.GMIAF.
groundmass grain size, coarse (igneous)=.GMIC.
groundmass grain size, coarse to very coarse (igneous)=.GMICVC.
groundmass grain size, fine (igneous)=.GMIF.
groundmass grain size, fine to medium (igneous)=.GMIFM.
groundmass grain size, fine to coarse (igneous)=.GMIFC.
groundmass grain size, medium (igneous)=.GMIM.
groundmass grain size, medium to coarse (igneous)=.GMIMC.
groundmass grain size, very coarse (igneous)=.GMIVC.
groundmass grain size, grain size variable (igneous)=.GMIV.

groundmass grain size, aphanitic (metamorphic)=.GZMGA.
groundmass grain size, aphanitic to fine (metamorphic)=.GZMGAF.
groundmass grain size, coarse (metamorphic)=.GZMGC.
groundmass grain size, coarse to very coarse (metamorphic)=.GZMGCVC.
groundmass grain size, fine (metamorphic)=.GZMGF.
groundmass grain size, fine to medium (metamorphic)=.GZMGFM.
groundmass grain size, fine to coarse (metamorphic)=.GZMGFC.
groundmass grain size, medium (metamorphic)=.GZMGM.
groundmass grain size, medium to coarse (metamorphic)=.GZMGMC.
groundmass grain size, very coarse (metamorphic)=.GZMGVC.
groundmass grain size, grain size variable (metamorphic)=.GZMGV.

Hallian West Coast foraminiferal stage=.WCFH.
Hemphillian land-mammal age=.LMAH.

high-strain rocks=.SDRH.
high-strain rocks, cataclastic rock=.SDRHC.
high-strain rocks, foliated rock=.SDRHF.
high-strain rocks, gneissose rock=.SDRHG.
high-strain rocks, mylonitic rock=.SDRHM.

hillslope deposit (bedrock)=.HSPW.
hillslope deposit (bedrock), colluvial deposit=.HSPWC.
hillslope deposit (bedrock), slopewash deposit=.HSPWS.

Holocene=.CZOQH.
Holocene, early=.CZOQHE.
Holocene, late=.CZOQHL.
Holocene, middle=.CZOQHM.

hornblende=.MCHH.
hornblende-pyroxene=.MCHHP.
hornfels (metasedimentary)=.MSDF.
hornfels (metaigneous)=.MIGH.
hillslope deposit (surficial deposit)=.SURH.
hillslope deposit (bedrock)=.HSP.
hummocky ground=.SMOPH.
hypabyssal=.IGNIH.
hypabyssal intrusive type unspecified=.IGNIHU.

idioblastic=.MGSI.

igneous=.IGN.
igneous rock, unspecified=.IGNUN.

igneous emplacement structures, cumulate layering=.SFEC.
igneous emplacement structures, flow banding=.SFEB.
igneous emplacement structures, flow foliation=.SFEFF.
igneous emplacement structures, gneissose compositional layering=.SFEG.
igneous emplacement structures, inclusions locally=.SFEIL.
igneous emplacement structures, inclusion-rich=.SFEIR.
igneous emplacement structures, igneous rock intermingled with country rock=.SFER.
igneous emplacement structures, massive fabric=.SFEFM.

igneous emplacement structures, migmatitic injection structures=.SFEM.
igneous emplacement structures, schlieren=.SFES.

ilmenite=.MACI.
impure=.SEDCI.
inactive deposit=-IAD-

inclusions, locally developed in igneous rock=.SFEIL.
inclusions, mafic, in igneous rock=.INCM.
inclusion-rich igneous rock=.SFEIR.

induration=.IND.
induration, indurated=.INDI.
induration, indurated to cemented=.INDIE.
induration, cemented=.INDE.
induration, consolidated=.INDC.
induration, consolidated to cemented=.INDCE.
induration, consolidated to indurated=.INDCI.
induration, crystalline=.INDY.
induration, variable=.INDV.

inner shelf=.CTMSI.
intergranular cataclasis, resulting from metamorphic=.SFMCI.
intergranular cataclasis, resulting from penetrative deformation=.SDFPCI.
intermontane geographic setting=.IMT.

intrusive=.IGNI.
intrusive rock (unmapped) intermingled with sedimentary rock=.INSIR.

intrusive-relations age basis=.INR.
intrusive-relations age basis, age is certain=.INRC.
intrusive-relations age basis, age is uncertain=.INRU.

Irvingtonian land-mammal age=.LMAI.

isotopic-age determination=.ISO.
isotopic-age determination is emplacement age=.ISOE.
isotopic-age determination is not emplacement age=.ISONE.
isotopic-age determination is uncertain=.ISOIU.
isotopic-age determination is from outside map area=.ISOAO.
isotopic-age determination is from inside map area=.ISOAI.
isotopic-age determination is from other workers=.ISOW.

isotopic-age determination is U-Pb (isochron age)=.ISOUPI.
isotopic-age determination is U-Pb (is not isochron age)=.ISOUPN.
isotopic-age determination is U-Pb from zircon=.ISOUPZ.
isotopic-age determination is U-Pb from sphene=.ISOUPS.
isotopic-age determination is U-Pb from monazite=.ISOUPM.
isotopic-age determination is U-Pb from other=.ISOUPO.
isotopic-age determination is Rb-Sr (isochron age)=.ISORSI.
isotopic-age determination is Rb-Sr (is not isochron age)=.ISORSNI.
isotopic-age determination is Rb-Sr from biotite=.ISORSB.
isotopic-age determination is Rb-Sr from glauconite=.ISORSG.
isotopic-age determination is Rb-Sr from K-spar=.ISORSK.
isotopic-age determination is Rb-Sr from muscovite=.ISORSM.
isotopic-age determination is Rb-Sr from plagioclase=.ISORSP.
isotopic-age determination is Rb-Sr from plagioclase=.ISORSP.
isotopic-age determination is Rb-Sr from whole rock=.ISORSW.
isotopic-age determination is K-Ar (conventional)=.ISOKAC.
isotopic-age determination is K-Ar (incremental)=.ISOKAI.
isotopic-age determination is K-Ar (40-39)=.ISOKAFT.
isotopic-age determination is K-Ar from biotite=.ISOKAB.
isotopic-age determination is K-Ar from muscovite=.ISOKAM.
isotopic-age determination is K-Ar from hornblende=.ISOKAH.

isotopic-age determination is K-Ar from sanidine=.ISOKAS.
isotopic-age determination is K-Ar from K-spar=.ISOKAK.
isotopic-age determination is K-Ar from glauconite=.ISOKAG.
isotopic-age determination is K-Ar from whole rock=.ISOKAW.

isotopic-age determination from sedimentary unit=.ISOS.
isotopic-age determination from sedimentary unit, glauconite=.ISOSG.
isotopic-age determination from sedimentary unit, cathodoluminescence=.ISOSL.
isotopic-age determination from sedimentary unit, paleomagnetism=.ISOSP.
isotopic-age determination from sedimentary unit, fission track=.ISOSF.
isotopic-age determination from sedimentary unit, C14=.ISOSC.
isotopic-age determination from sedimentary unit, Sr age from fossil shells=.ISOSS.
isotopic-age determination from sedimentary unit, amino-acid racimitization=.ISOSA.
isotopic-age determination from sedimentary unit, U-Th=.ISOSU.
isotopic-age determination from sedimentary unit, U-Th, from bone=.ISOSUB.
isotopic-age determination from sedimentary unit, U-Th, from petrocalcite=.ISOSUP.

isotopic-age determination from interbedded volcanic deposit=.ISOV.
isotopic-age determination from interbedded volcanic deposit, basalt flow=.ISOVB.
isotopic-age determination from interbedded volcanic deposit, basalt flow, K-Ar determination=.ISOVBK.
isotopic-age determination from interbedded volcanic deposit, basalt flow, Ar-Ar determination=.ISOVBA.
isotopic-age determination from interbedded volcanic deposit, ash-flow tuff=.ISOVF.
isotopic-age determination from interbedded volcanic deposit, ash-flow tuff, K-Ar determination=.ISOVFK.
isotopic-age determination from interbedded volcanic deposit, ash-flow tuff, Ar-Ar determination=.ISOVFA.
isotopic-age determination from interbedded volcanic deposit, air-fall tuff=.ISOVA.
isotopic-age determination from interbedded volcanic deposit, air-fall tuff, K-Ar determination=.ISOVAK.
isotopic-age determination from interbedded volcanic deposit, air-fall tuff, Ar-Ar determination=.ISOVAA.
isotopic-age determination from interbedded volcanic deposit, air-fall tuff, tephrochronology=.ISOVAT.

isotopic-age determination from clasts in sedimentary unit=.ISOC.
isotopic-age determination from clasts in sedimentary unit, K-Ar determination=.ISOCK.
isotopic-age determination from clasts in sedimentary unit, Ar-Ar determination=.ISOCA.
isotopic-age determination from clasts in sedimentary unit, U-Pb determination=.ISOCU.

jadeite=.MMMJ.
jasperoid alteration=-JAS-
jointed=.SDFNJ.
jotunite=.JOT.

Jurassic=.MZOJ.
Jurassic, early=.MZOJE.
Jurassic, late=.MZOJL.

K-Ar isotopic-age determination (conventional)=.ISOKAC.
K-Ar isotopic-age determination (incremental)=.ISOKAI.
K-Ar isotopic-age determination (40-39)=.ISOKAFT.
K-Ar isotopic-age determination from biotite=.ISOKAB.
K-Ar isotopic-age determination from muscovite=.ISOKAM.
K-Ar isotopic-age determination from hornblende=.ISOKAH.
K-Ar isotopic-age determination from sanidine=.ISOKAS.
K-Ar isotopic-age determination from K-spar=.ISOKAK.
K-Ar isotopic-age determination from glauconite=.ISOKAG.
K-Ar isotopic-age determination from whole rock=.ISOKAW.

karst collapse structures (carbonate rocks)=.SPDK.
kyanite=.MMMK.

lahar=.SEDVL.

lake deposit (bedrock)=.LAC.
lake deposit (surficial)=.SURL.
lake deposit, bar=-LAKB-
lake deposit, carbonate flat=-LAKC-
lake deposit, delta=-LAKD-

lake deposit, fresh water=-LAKH-
lake deposit, interdeltaic=-LAKI-
lake deposit, lake floor=-LAKF-
lake deposit, marginal lake (bedrock)=.LACM.
lake deposit, marginal lake (surficial)=.SURLM.
lake deposit, mud flat=-LAKM-
lake deposit, open lake=.LACO.
lake deposit, open lake (surficial)=.SURLO.
lake deposit, saline=-LAKL-
lake deposit, shore=-LAKS-

laminated sand-sheet element of fluvial deposit=.LSS.

lamination, algal=.SDSLA.
lamination, algal, laterally linked columnar heads=.SDSLAL.
lamination, convolute=.SDSLC.
lamination, cross=.SDSLX.
lamination, cross, hummocky=.SDSLXH.
lamination, cross, planar=.SDSLXP.
lamination, cross, trough=.SDSLXT.
lamination, cryptalgal=.SDSLAC.
lamination, flat=.SDSLF.
lamination, flat to cross=.SDSLFX.
lamination, ripple=.SDSLR.
lamination, ripple, climbing=.SDSLRC.

lamination, geologic structures resulting from penetrative deformation,=.SDFPFL.
lamprophyres=.LPH.

land-mammal age=.LMA.
land-mammal age, Arikareean=.LMAA.
land-mammal age, Arikareean=.LMAA.
land-mammal age, Barstovian=.LMAB.
land-mammal age, Blancan =.LMAL.
land-mammal age, Bridgerian=.LMAG.
land-mammal age, Chadronian=.LMAN.
land-mammal age, Chadronian=.LMAN.
land-mammal age, Clarendonian =.LMAC.
land-mammal age, Clarkforkian=.LMAK.
land-mammal age, Clarkforkian=.LMAK.
land-mammal age, Duchesnean=.LMAD.
land-mammal age, Hemphillian=.LMAH.
land-mammal age, Irvingtonian=.LMAI.
land-mammal age, Orellan=.LMAO.
land-mammal age, Puercan=.LMAP.
land-mammal age, Rancholabrean=.LMAR.
land-mammal age, Tiffanian=.LMAF.
land-mammal age, Torrejonian=.LMAT.
land-mammal age, Uintan=.LMAU.
land-mammal age, Wasatchian=.LMAS.
land-mammal age, Whitneyan=.LMAW.

landslide deposit=.SURSL.
landslide character unspecified=-CHUN-
landslide, displaced block=-DBL-
landslide, displaced block with internal stratigraphy intact=-DBLS-
landslide, displaced rubble=-DRUB-
landslide, displaced rubble and blocks=-DRB-

lateral-accretion element of fluvial deposit (transverse bars)=.LAF.
laterally linked columnar algal lamination=.SDSLAL.
latite=.LAT.
latite, quartzose=.LATQ.
laumontite, zeolitic alteration=-LAU-

lava dome=.IGNXM.
lava flow=.IGNXF.
lava flows and flow breccia=.IGNXFB.
lava flows and sedimentary rock=.IGNXFS.
lawsonite (metamorphic mineral)=.MMML.
light-colored=.COLL.

lignite seams interbedded with other sedimentary rock=-IOML-

lime boundstone=.BSTL.
lime grainrock=.GROL.
lime grainstone=.GROLG.
lime mudrock=.MROL.
lime packstone=.GROLP.
lime mudstone=.MROLM.
lime wackestone=.MROLW.

limestone unmapped within mapped geologic unit=-LMST-

limestone=.SEDCCNL.
limestone and dolomite, heterogeneous=.SEDCHNL.
limestone and dolomite marble, heterogeneous=.SEDCHML.
limestone, dolomitic=.SEDCCNLD.
limestone, heterogeneous=.SEDCCNLH.
limestone marble=.SEDCCML.
limestone marble, dolomitic=.SEDCCMLD.
limestone marble, heterogeneous=.SEDCCMLH.

lineation, generic (interpretation not determined)=.SOUL.
lineation resulting from metamorphism=.SFML.
lineation resulting from penetrative deformation=.SDFPL.
lineation resulting from igneous emplacement (moderately lineated)=.SFEFL.
lineation resulting from igneous emplacement (slightly lineated)=.SFEFLS.
lineation resulting from igneous emplacement (well lineated)=.SFEFLM.
lineation resulting from igneous emplacement=.SFEFLW.

local mineral veins=.MINOV.
Luisian West Coast foraminiferal age=.WCFL.

magnetite (metamorphic mineral)=.MMMM.

magnetic chron C1=.PMC01.
magnetic chron C2=.PMC02.
magnetic chron C2A=.PMC02A.
magnetic chron C3 =.PMC03.
magnetic chron C3A=.PMC03A.
magnetic chron C3B=.PMC03B.
magnetic chron C4 =.PMC04.
magnetic chron C4A =.PMC04A.
magnetic chron C5 =.PMC05.
magnetic chron C5A=.PMC05A.
magnetic chron C5B=.PMC05B.
magnetic chron C5C=.PMC05C.
magnetic chron C5D=.PMC05D.
magnetic chron C5E=.PMC05E.
magnetic chron C6 =.PMC06.
magnetic chron C6A=.PMC06A.
magnetic chron C6B=.PMC06B.
magnetic chron C6C=.PMC06C.
magnetic chron C7=.PMC07.
magnetic chron C7A=.PMC07.
magnetic chron C8=.PMC08.
magnetic chron C9=.PMC09.
magnetic chron C10=.PMC10.

magnetic chron C11=.PMC11.
magnetic chron C12=.PMC12.
magnetic chron C13=.PMC13.
magnetic chron C15=.PMC15.
magnetic chron C16=.PMC16.
magnetic chron C17=.PMC17.
magnetic chron C17=.PMC17.
magnetic chron C18=.PMC18.
magnetic chron C19=.PMC19.
magnetic chron C20=.PMC20.
magnetic chron C21=.PMC21.
magnetic chron C22=.PMC22.
magnetic chron C23=.PMC23.
magnetic chron C24=.PMC24.
magnetic chron C25=.PMC25.
magnetic chron C26=.PMC26.
magnetic chron C27=.PMC27.
magnetic chron C28=.PMC28.
magnetic chron C29=.PMC29.
magnetic chron C30=.PMC30.
magnetic chron C31=.PMC31.
magnetic chron C32=.PMC32.
magnetic chron C33=.PMC33.
magnetic chron C34=.PMC34.

mangerite=.MAN.

marble, undifferentiated=.MSDM.
marble, dolomite=.SEDCDMD.
marble, dolomite, calcareous=.SEDCDMDC.
marble, dolomite, heterogeneous=.SEDCDMDH.
marble, heterogeneous limestone and dolomite=.SEDCHML.
marble, heterogeneous dolomite and limestone=.SEDCHMD.
marble, limestone=.SEDCCML.
marble, limestone, dolomitic=.SEDCCMLD.
marble, limestone, heterogeneous=.SEDCCMLH.

marl unmapped within mapped geologic unit=-MRL-

marine=.MAR.

massive, blocky outcrop geomorphology=.OGMMB.
massive, rounded outcrop geomorphology=.OGMMR.

matrix <25%=.CMX25.
matrix >25% but <50%=.CMX50.
matrix >50% but <75%=.CMX75.
matrix >75%=.CMX76.

matrix-clast relations=.CMX.
matrix-clast relations, clast support dominant over matrix support=.CMXCM.
matrix-clast relations, matrix support dominant over clast support=.CMXMC.
matrix-clast relations, clast support and matrix support subequal=.CMXQ.

matrix-supported fabric=.CMXMS.
matrix-supported fabric, clay matrix=-MCL-
matrix-supported fabric, mud matrix=-MMD-
matrix-supported fabric, silty matrix=-MSL-
matrix-supported fabric, sand matrix=-MSD-
matrix-supported fabric, sandy granule matrix=-MSG-
matrix-supported fabric, sandy granule-pebble matrix=-MSGP-
matrix-supported fabric, granule-pebble matrix=-MGP-
matrix-supported fabric, pebble matrix=-MPB-
matrix-supported fabric, pebble-cobble matrix=-MPC-

matrix-supported sedimentary rock=.MXS.
matrix-supported sedimentary rock, conglomerate=.MXSC.
matrix-supported sedimentary rock, conglomerate, clay-supported=.MXSCCL.
matrix-supported sedimentary rock, conglomerate, mud-supported=.MXSCM.
matrix-supported sedimentary rock, conglomerate, muddy sand-supported=.MXSCMS.
matrix-supported sedimentary rock, conglomerate, sand-supported=.MXSCS.
matrix-supported sedimentary rock, conglomerate, sandy granule-supported=.MXSCSG.
matrix-supported sedimentary rock, conglomerate, sandy granule-pebble-supported=.MXSCSGP.
matrix-supported sedimentary rock, sandstone=.MXSSS.
matrix-supported sedimentary rock, sandstone, clay-supported=.MXSSSCL.
matrix-supported sedimentary rock, sandstone, mud-supported=.MXSSSD.
matrix-supported sedimentary rock, sandstone, silt-supported=.MXSSSML.

meandering channel fluvial deposit=.MND.
meandering channel fluvial deposit, gravel bed=.MNDG.
meandering channel fluvial deposit, gravel-sand bed=.MNDGS.
meandering channel fluvial deposit, sandy=.MNDS.
meandering channel fluvial deposit, sandy, ephemeral=.MNDSE.
meandering channel fluvial deposit, fine-grained=.MNDF.

medium colored=.COLM.
medium crystalline recrystallized fabric, carbonate rocks=.RXFM.
medium to coarsely crystalline recrystallized fabric, carbonate rocks=.RXFMC.
medium sand=.SNDM.
medium to coarse sand=.SNDMC.
medium to very coarse sand=.SNDMVC.

melange assemblage=.TECM.

metaigneous metamorphic rock=.MIG.
metachert=.MSDHM.
metaconglomerate=.MSDOM.
metagraywacke=.MSDWM.
metamudstone=.MSDUM.
metaquartzite=.MSDQM.
metasandstone=.MSDTM.
metasiltstone=.MSDLM.

metamorphic age=.AMM.
metamorphic age, age known=.AMMK.
metamorphic age, age known, certain=.AMMKC.
metamorphic age, age known, likely but not certain=.AMMKL.
metamorphic age, age known, questionable=.AMMKQ.
metamorphic age, age unknown=.AMMU.
metamorphic age, Archean=.MPRCA.
metamorphic age, Archean, early=.MPRCAE.
metamorphic age, Archean, late=.MPRCAL.
metamorphic age, Archean, middle=.MPRCAM.
metamorphic age, Cambrian=.MPZOC.
metamorphic age, Cambrian, early=.MPZOCE.
metamorphic age, Cambrian, late=.MPZOCL.
metamorphic age, Cenozoic=.MCZO.
metamorphic age, Cretaceous=.MMZOK.
metamorphic age, Cretaceous, early=.MMZOKE.
metamorphic age, Cretaceous, late=.MMZOKL.
metamorphic age, Devonian=.MPZOD.
metamorphic age, Devonian, early=.MPZODE.
metamorphic age, Devonian, late=.MPZODL.
metamorphic age, Eocene=.MCZOTE.
metamorphic age, Eocene, early=.MCZOTEE.
metamorphic age, Eocene, late=.MCZOTEL.
metamorphic age, Eocene, middle=.MCZOTEM.
metamorphic age, Holocene=.MCZOQH.

metamorphic age, Holocene, early=.MCZOQHE.
metamorphic age, Holocene, late=.MCZOQHL.
metamorphic age, Holocene, middle=.MCZOQHM.
metamorphic age, Jurassic=.MMZOJ.
metamorphic age, Jurassic, early=.MMZOJE.
metamorphic age, Jurassic, late=.MMZOJL.
metamorphic age, Mesozoic=.MMZO.
metamorphic age, Mesozoic, early=-MMZOE-
metamorphic age, Mesozoic, late=-MMZOL-
metamorphic age, Mesozoic, middle=-MMZOM-
metamorphic age, Miocene=.MCZOTM.
metamorphic age, Miocene, early=.MCZOTME.
metamorphic age, Miocene, late=.MCZOTML.
metamorphic age, Miocene, middle=.MCZOTMM.
metamorphic age, Mississippian=.MPZOM.
metamorphic age, Mississippian, early=.MPZOME.
metamorphic age, Mississippian, late=.MPZOML.
metamorphic age, Modern=.MCZOQHD.
metamorphic age, Neogene=-MNGN-
metamorphic age, Oligocene=.MCZOTO.
metamorphic age, Oligocene, early=.MCZOTOE.
metamorphic age, Oligocene, late=.MCZOTOL.
metamorphic age, Ordovician=.MPZOO.
metamorphic age, Ordovician, early=.MPZOOE.
metamorphic age, Ordovician, late=.MPZOOL.
metamorphic age, Paleocene=.MCZOTA.
metamorphic age, Paleocene, early=.MCZOTAE.
metamorphic age, Paleocene, late=.MCZOTAL.
metamorphic age, Paleogene=-MPGN-
metamorphic age, Paleozoic=.MPZO.
metamorphic age, Paleozoic, early=-MPZOE-
metamorphic age, Paleozoic, late=-MPZOL-
metamorphic age, Paleozoic, middle=-MPZOM-
metamorphic age, Pennsylvanian=.MPZOP.
metamorphic age, Pennsylvanian, early=.MPZOPE.
metamorphic age, Pennsylvanian, late=.MPZOPL.
metamorphic age, Permian=.MPZOR.
metamorphic age, Permian early=.MPZORE.
metamorphic age, Permian, late=.MPZORL.
metamorphic age, Pleistocene=.MCZOQP.
metamorphic age, Pleistocene, early=.MCZOQPE.
metamorphic age, Pleistocene, late=.MCZOQPL.
metamorphic age, Pleistocene, middle=.MCZOQPM.
metamorphic age, Pliocene=.MCZOTP.
metamorphic age, Pliocene, early=.MCZOTPE.
metamorphic age, Pliocene, late=.MCZOTPL.
metamorphic age, Precambrian=.MPRC.
metamorphic age, Proterozoic=.MPRCP.
metamorphic age, Proterozoic, early=.MPRCPE.
metamorphic age, Proterozoic, late=.MPRCPL.
metamorphic age, Proterozoic, middle=.MPRCPM.
metamorphic age, Quaternary=.MCZOQ.
metamorphic age, Silurian=.MPZOS.
metamorphic age, Silurian, early=.MPZOSE.
metamorphic age, Silurian, late=.MPZOSL.
metamorphic age, Tertiary=.MCZOT.
metamorphic age, Tertiary, early=-MCZOTE-
metamorphic age, Tertiary, late=-MCZOTL-
metamorphic age, Tertiary, middle=-MCZOTM-
metamorphic age, Triassic=.MMZOT.
metamorphic age, Triassic, early=.MMZOTE.
metamorphic age, Triassic, late=.MMZOTL.

metamorphic age, limiting-age determined=.AMML.

metamorphic age, lower limiting age determined=.AMMLL.
metamorphic age, lower limiting age determined, post-Neogene=-AMMLLN-
metamorphic age, lower limiting age determined, post-Paleogene=-AMMLLP-
metamorphic age, lower limiting age determined, post-Holocene, middle=.AMMLLTPMH.
metamorphic age, lower limiting age determined, post-Holocene, early=.AMMLLTPEH.
metamorphic age, lower limiting age determined, post-Pleistocene=.AMMLLTP.
metamorphic age, lower limiting age determined, post-Pleistocene, middle=.AMMLLTMP.
metamorphic age, lower limiting age determined, post-Pleistocene, early=.AMMLLTEP.
metamorphic age, lower limiting age determined, post-Tertiary (post-late Pliocene)=.AMMLLT.
metamorphic age, lower limiting age determined, post-Pliocene, early=.AMMLLMMEP.
metamorphic age, lower limiting age determined, post-Miocene=.AMMLLMM.
metamorphic age, lower limiting age determined, post- Miocene, middle=.AMMLLMOMM.
metamorphic age, lower limiting age determined, post-Miocene, early=.AMMLLMOEM.
metamorphic age, lower limiting age determined, post-Oligocene=.AMMLLMO.
metamorphic age, lower limiting age determined, post-Oligocene, early=.AMMLLMEEO.
metamorphic age, lower limiting age determined, post-Eocene=.AMMLLME.
metamorphic age, lower limiting age determined, post- Eocene, middle=.AMMLLMAME.
metamorphic age, lower limiting age determined, post-Eocene, early=.AMMLLMAEO.
metamorphic age, lower limiting age determined, post-Paleocene=.AMMLLMA.
metamorphic age, lower limiting age determined, post-Paleocene, early=.AMMLLMEA.
metamorphic age, lower limiting age determined, post-Mesozoic=.AMMLLM.
metamorphic age, lower limiting age determined, post-Cretaceous, early=.AMMLLPJEK.
metamorphic age, lower limiting age determined, post-Jurassic=.AMMLLPJ.
metamorphic age, lower limiting age determined, post-Jurassic, early=.AMMLLPTEJ.
metamorphic age, lower limiting age determined, post-Triassic=.AMMLLPT.
metamorphic age, lower limiting age determined, post-Triassic, early=.AMMLLPET.
metamorphic age, lower limiting age determined, post-Paleozoic=.AMMLLP.
metamorphic age, lower limiting age determined, post-Permian, early=.AMMLLRPER.
metamorphic age, lower limiting age determined, post-Pennsylvanian=.AMMLLRP.
metamorphic age, lower limiting age determined, post-Pennsylvanian, early=.AMMLLRMEP.
metamorphic age, lower limiting age determined, post-Mississippian=.AMMLLRM.
metamorphic age, lower limiting age determined, post-Mississippian, early=.AMMLLRDEM.
metamorphic age, lower limiting age determined, post-Devonian=.AMMLLRD.
metamorphic age, lower limiting age determined, post-Devonian, early=.AMMLLRSED.
metamorphic age, lower limiting age determined, post-Silurian=.AMMLLRS.
metamorphic age, lower limiting age determined, post-Silurian, early=.AMMLLROES.
metamorphic age, lower limiting age determined, post-Ordovician=.AMMLLRO.
metamorphic age, lower limiting age determined, post-Ordovician, early=.AMMLLRCEO.
metamorphic age, lower limiting age determined, post-Cambrian=.AMMLLRC.
metamorphic age, lower limiting age determined, post-Cambrian, early=.AMMLLREC.
metamorphic age, lower limiting age determined, post-Proterozoic=.AMMLLR.
metamorphic age, lower limiting age determined, post-Proterozoic, middle=.AMMLLAMR.
metamorphic age, lower limiting age determined, post-Proterozoic, early=.AMMLLAER.
metamorphic age, lower limiting age determined, post-Archean=.AMMLLA.

metamorphic age, upper limiting-age determined=.AMMLU.
metamorphic age, upper limiting age determined, pre-Cambrian, late=.AMMLUMOLC.
metamorphic age, upper limiting age determined, pre-Cenozoic=.AMMLUC.
metamorphic age, upper limiting age determined, pre-Cretaceous=.AMMLUCK.
metamorphic age, upper limiting age determined, pre-Cretaceous, late=.AMMLUCLK.
metamorphic age, upper limiting age determined, pre-Devonian=.AMMLUMD.
metamorphic age, upper limiting age determined, pre-Devonian, late=.AMMLUMMLD.
metamorphic age, upper limiting age determined, pre-Eocene=.AMMLUQE.
metamorphic age, upper limiting age determined, pre- Eocene, late=.AMMLUQOLE.
metamorphic age, upper limiting age determined, pre-Eocene, middle=.AMMLUQOME.
metamorphic age, upper limiting age determined, pre-Holocene=.AMMLUH.
metamorphic age, upper limiting age determined, pre-Holocene, late=.AMMLULH.)
metamorphic age, upper limiting age determined, pre-Holocene, middle=.AMMLUMH.
metamorphic age, upper limiting age determined, pre-Jurassic=.AMMLUCJ.
metamorphic age, upper limiting age determined, pre-Jurassic, late=.AMMLUCKLJ.
metamorphic age, upper limiting age determined, pre-Mesozoic=.AMMLUM.
metamorphic age, upper limiting age determined, pre-Miocene=.AMMLUQM.
metamorphic age, upper limiting age determined, pre- Miocene, late=.AMMLUQPML.
metamorphic age, upper limiting age determined, pre-Miocene, middle=.AMMLUQPMM.

metamorphic age, upper limiting age determined, pre-Mississippian=.AMMLUMM.
metamorphic age, upper limiting age determined, pre-Mississippian, late=.AMMLUMPLM.
metamorphic age, upper limiting age determined, pre-Modern=.AMMLUD.
metamorphic age, upper limiting age determined, pre-Oligocene=.AMMLUQO.
metamorphic age, upper limiting age determined, pre-Oligocene, late=.AMMLUQMLO.
metamorphic age, upper limiting age determined, pre-Ordovician=.AMMLUMO.
metamorphic age, upper limiting age determined, pre-Ordovician, late=.AMMLUMSLO.
metamorphic age, upper limiting age determined, pre-Paleocene, late=.AMMLUQELA.
metamorphic age, upper limiting age determined, pre-Paleozoic=.AMMLUP.
metamorphic age, upper limiting age determined, pre-Pennsylvanian=.AMMLUMP.
metamorphic age, upper limiting age determined, pre-Pennsylvanian, late=.AMMLUMRLP.
metamorphic age, upper limiting age determined, pre-Permian=.AMMLUMR.
metamorphic age, upper limiting age determined, pre-Permian, late=.AMMLUMLR.
metamorphic age, upper limiting age determined, pre-Pleistocene, late=.AMMLUHLP.
metamorphic age, upper limiting age determined, pre-Pleistocene, middle=.AMMLUHMP.
metamorphic age, upper limiting age determined, pre-Pliocene=.AMMLUQP.
metamorphic age, upper limiting age determined, pre-Pliocene, late=.AMMLUQLP.
metamorphic age, upper limiting age determined, pre-Proterozoic=.AMMLUR.
metamorphic age, upper limiting age determined, pre-Proterozoic, late=.AMMLUPLP.
metamorphic age, upper limiting age determined, pre-Proterozoic, middle=.AMMLUPMP.
metamorphic age, upper limiting age determined, pre-Quaternary=.AMMLUQ.
metamorphic age, upper limiting age determined, pre-Silurian=.AMMLUMS.
metamorphic age, upper limiting age determined, pre-Silurian, late=.AMMLUMDLD.
metamorphic age, upper limiting age determined, pre-Triassic, late=.AMMLUCJLT.

metamorphic fabric, blastoporphyritic=.SFMFT.
metamorphic fabric, brittle=.SFMFB.
metamorphic fabric, brittle-ductile=.SFMFBD.
metamorphic fabric, ductile=.SFMFD.
metamorphic fabric, cataclastic=.SFMOC.
metamorphic fabric, foliated=.SFMO.
metamorphic fabric, gneissic foliation=.SFMOG.
metamorphic fabric, granoblastic=.SFMFG.
metamorphic fabric, massive=.SFMFM.
metamorphic fabric, mineral overgrowths=.SFMV.
metamorphic fabric, mylonitic=.SFMOM.
metamorphic fabric, poikiloblastic=.SFMFK.
metamorphic fabric, porphyroblastic=.SFMFP.
metamorphic fabric, schistose=.SFMOS.

metamorphic grade=.MGD.
metamorphic grade, amphibolite facies, lower=.MGDAL.
metamorphic grade, amphibolite facies, upper=.MGDAU.
metamorphic grade, blueschist facies=.MGDB.
metamorphic grade, greenschist facies, lower=.MGDGL.
metamorphic grade, greenschist facies, upper=.MGDGU.
metamorphic grade, prehnite-pumpellyite facies, lower=.MGDPP.
metamorphic grade, pyroxene-hornfels facies=.MGDPY.
metamorphic grade, zeolite facies=.MGDZ.

metamorphic history, metamorphosed under low-strain conditions=.MDFL.
metamorphic history, metamorphosed under high-strain conditions=.MDFH.
metamorphic history, metamorphosed under brittle conditions=.MDFB.
metamorphic history, metamorphosed under brittle-ductile conditions.MDFBD.
metamorphic history, metamorphosed under ductile conditions=.MDFD.
metamorphic history, metamorphosed during pluton emplacement=.MDFP.
metamorphic history, metamorphosed within shear zone=.MDFS.
metamorphic history, metamorphosed within fault zone=.MDFF.
metamorphic history, metamorphosed within normal-slip fault zone=.MDFFN.
metamorphic history, metamorphosed within strike-slip fault zone=.MDFFS.
metamorphic history, metamorphosed within thrust-slip fault zone=.MDFFT.
metamorphic history, metamorphosed beneath thrust fault=.MDFFTB.
metamorphic history, metamorphosed above thrust fault=.MDFFTA.
metamorphic history, metamorphosed within extensional strain field=.MDFE.

metamorphic history, metamorphosed within contractional strain field=.MDFC.
metamorphic history, metamorphosed within transtensional strain field=.MDFT.
metamorphic history, metamorphosed under plutonic conditions=.MDFRP.
metamorphic history, more than one metamorphism=.MDFM.
metamorphic history, more than one metamorphism, prograde followed by retrograde=.MDFME.
metamorphic history, more than one metamorphism, retrograde followed by prograde=.MDFMO.
metamorphic history, more than one metamorphism, regional followed by contact=.MDFMR.
metamorphic history, more than one metamorphism, regional followed by strain-dominant=.MDFMS.
metamorphic history, metamorphism synchronous with deformation=.MDFX.
metamorphic history, metamorphism synchronous with folding=.MDFXO.
metamorphic history, metamorphism synchronous with faulting=.MDFXF.

metamorphic mineral, actinolite=.MMMAC.
metamorphic mineral, albite=.MMMAL.
metamorphic mineral, andalusite=.MMMA.
metamorphic mineral, biotite=.MMMB.
metamorphic mineral, calcite=.MMMCA.
metamorphic mineral, chlorite=.MMMCH.
metamorphic mineral, clinozoisite=.MMMC.
metamorphic mineral, cordierite=.MMMCO.
metamorphic mineral, corundum=.MMMCR.
metamorphic mineral, diopside=.MMMDI.
metamorphic mineral, dolomite=.MMMD.
metamorphic mineral, epidote=.MMME.
metamorphic mineral, forsterite=.MMMF.
metamorphic mineral, garnet=.MMMG.
metamorphic mineral, hornblende=.MMMH.
metamorphic mineral, jadeite=.MMMJ.
metamorphic mineral, kyanite=.MMMK.
metamorphic mineral, lawsonite=.MMML.
metamorphic mineral, magnetite=.MMMM.
metamorphic mineral, microcline=.MMMMI.
metamorphic mineral, muscovite=.MMMMU.
metamorphic mineral, orthoclase=.MMMO.
metamorphic mineral, piemontite=.MMMPI.
metamorphic mineral, prehnite=.MMMPR.
metamorphic mineral, pumpellyite=.MMMP.
metamorphic mineral, pyroxene=.MMMPX.
metamorphic mineral, rutile=.MMMR.
metamorphic mineral, scapolite=.MMMSC.
metamorphic mineral, sericite=.MMMSE.
metamorphic mineral, sillimanite=.MMMSI.
metamorphic mineral, staurolite=.MMMST.
metamorphic mineral, stilpnomelane=.MMMS.
metamorphic mineral, talc=.MMMTA.
metamorphic mineral, tourmaline=.MMMT.
metamorphic mineral, tremolite=.MMMTR.
metamorphic mineral, wollastonite=.MMMW.
metamorphic mineral, zoisite=.MMMZ.

metamophic mineral is groundmass component=-GMS-
metamophic mineral is porphyroblast=-PBL-
metamophic mineral is porphyroclast=-PCL-

metamorphic protolith, basalt=.PLIIVB.
metamorphic protolith, calcareous mudrock=.PLISSMC.
metamorphic protolith, carbonate rock=.PLISC.
metamorphic protolith, conglomerate=.PLISSC.
metamorphic protolith, conglomerate, sandy=.PLISSCS.
metamorphic protolith, dioritic=.PLIIPD.
metamorphic protolith, dolomite=.PLISCD.
metamorphic protolith, dolomite, calcareous=.PLISCDC.
metamorphic protolith, granitic=.PLIIPG.
metamorphic protolith, granitic, equigranular=.PLIIPGE.

metamorphic protolith, granitic, leucocratic=.PLIIPGL.
metamorphic protolith, granitic, mafic =.PLIIPGM.
metamorphic protolith, granitic, porphyritic =.PLIIPGP.
metamorphic protolith, igneous rock=.PLII.
metamorphic protolith, lava=.PLIIVL.
metamorphic protolith, limestone=.PLISCL.
metamorphic protolith, limestone, cherty=.PLISCLC.
metamorphic protolith, limestone, dolomitic=.PLISCLD.
metamorphic protolith, limestone, sandy=.PLISCLS.
metamorphic protolith, limestone, silty=.PLISCLM.
metamorphic protolith, marine=.PLISM.
metamorphic protolith, metamorphic rock=.PLIM.
metamorphic protolith, mudrock=.PLISSM.
metamorphic protolith, mudrock, calcareous=.PLISSMC.
metamorphic protolith, mudrock, siliceous=.PLISSMS.
metamorphic protolith, nonmarine=.PLISN.
metamorphic protolith, plutonic=.PLIIP.
metamorphic protolith, pyroclastic rocks=.PLIIVP.
metamorphic protolith, quartzite=.PLISSQ.
metamorphic protolith, sandstone=.PLISSS.
metamorphic protolith, sandstone, conglomeratic=.PLISSSC.
metamorphic protolith, sandstone, muddy=.PLISSSM.
metamorphic protolith, sandstone, pebbly=.PLISSSCP.
metamorphic protolith, sedimentary rock=.PLIS.
metamorphic protolith, sedimentary rock, marine=.PLISM.
metamorphic protolith, sedimentary rock, nonmarine=.PLISN.
metamorphic protolith, mudrock=.PLISSM.
metamorphic protolith, shale=.PLISSH.
metamorphic protolith, siliciclastic sedimentary rock=.PLISS.
metamorphic protolith, siltstone=.PLISSL.
metamorphic protolith unknown=.PLIUK.
metamorphic protolith unspecified=.PLIUN.
metamorphic protolith, volcanic=.PLIIV.
metamorphic protolith, volcanic, basalt=.PLIIVB.
metamorphic protolith, volcanic, lava=.PLIIVL.
metamorphic protolith, volcanic, felsic=.PLIIVF.
metamorphic protolith, volcanic, mafic=.PLIIVM.
metamorphic protolith, volcanic, pyroclastic rocks=.PLIIVP.
metamorphic protolith, volcanic, quartz-poor=.PLIIVQP.
metamorphic protolith, volcanic, quartz-rich=.PLIIVQR.

metamorphic recrystallization, highly recrystallized=.SFMRH.
metamorphic recrystallization, moderately recrystallized=.SFMRM.
metamorphic recrystallization, moderately to highly recrystallized=.SFMRMH.
metamorphic recrystallization, slightly recrystallized=.SFMRS.
metamorphic recrystallization, slightly to moderately recrystallized=.SFMRSM.

metamorphic rock=.MET.
metamorphic rock, contact metamorphism=.METC.

metamorphic rock, generic=.MMG.
metamorphic rock, generic, calcsilicate rock=.MMGC.
metamorphic rock, generic, gneiss, augen=.MMGGA.
metamorphic rock, generic, gneiss, banded=.MMGGB.
metamorphic rock, generic, gneiss, granitic=.MMGGG
metamorphic rock, generic, gneiss, laminated=.MMGGL.
metamorphic rock, generic, gneiss, layered=.MMGGLY.
metamorphic rock, generic, gneiss, quartzofeldspathic=.MMGGQF.
metamorphic rock, generic, hornfels=.MMGH.
metamorphic rock, generic, phyllite=.MMGP.
metamorphic rock, generic, phyllonite=.MMGPH.
metamorphic rock, generic, schist=.MMGS.

metamorphic rock, grain size, groundmass=.GZM.

metamorphic rock, grain size, groundmass, aphanitic=.GZMGA.
metamorphic rock, grain size, groundmass, aphanitic to fine=.GZMGAF.
metamorphic rock, grain size, groundmass, coarse=.GZMGC.
metamorphic rock, grain size, groundmass, coarse to very coarse=.GZMGCVC.
metamorphic rock, grain size, groundmass, fine=.GZMGF.
metamorphic rock, grain size, groundmass, fine to medium=.GZMGFM.
metamorphic rock, grain size, groundmass, fine to coarse=.GZMGFC.
metamorphic rock, grain size, groundmass, medium=.GZMGM.
metamorphic rock, grain size, groundmass, medium to coarse=.GZMGMC.
metamorphic rock, grain size, groundmass, very coarse=.GZMGVC.
metamorphic rock, grain size, groundmass, grain size variable=.GZMGV.

metamorphic rock, grain size, porphyroblasts=.GZMP.
metamorphic rock, grain size, porphyroblasts, fine=.GZMPF.
metamorphic rock, grain size, porphyroblasts, medium=.GZMPM.
metamorphic rock, grain size, porphyroblasts, medium to coarse=.GZMPMC.
metamorphic rock, grain size, porphyroblasts, coarse=.GZMPC.
metamorphic rock, grain size, porphyroblasts, very coarse=.GZMPVC.
metamorphic rock, grain size, porphyroblasts, variable=.GZMPV.

metamorphic rock, metaigneous, amphibolite=.MIGA.
metamorphic rock, metaigneous, augen gneiss=.MIGGA.
metamorphic rock, metaigneous, banded gneiss=.MIGGB.
metamorphic rock, metaigneous, gneiss=.MIGG.
metamorphic rock, metaigneous, gneiss, laminated=.MIGGL.
metamorphic rock, metaigneous, gneissose granitic rock=.MIGRG.
metamorphic rock, metaigneous, greenstone=.MIGE.
metamorphic rock, metaigneous, hornfels=.MIGH.
metamorphic rock, metaigneous, metaplutonic=.MIGPM.
metamorphic rock, metaigneous, metatuff=.MIGTM.
metamorphic rock, metaigneous, metavolcanic=.MIGVM.
metamorphic rock, metaigneous, orthogneiss=.MIGGO.
metamorphic rock, metaigneous, serpentinite=.MIGSP.

metamorphic rock, metasedimentary=.MSD.
metamorphic rock, metasedimentary, argillite=.MSDA.
metamorphic rock, metasedimentary, banded gneiss=.MSDBG.
metamorphic rock, metasedimentary, calcsilicate=.MSDC.
metamorphic rock, metasedimentary, gneiss=.MSDG.
metamorphic rock, metasedimentary, hornfels=.MSDF.
metamorphic rock, metasedimentary, marble=.MSDM.
metamorphic rock, metasedimentary, marble, dolomite=.SEDCDMD.
metamorphic rock, metasedimentary, marble, dolomite, calcareous=.SEDCDMDC.
metamorphic rock, metasedimentary, marble, dolomite, heterogeneous=.SEDCDMDH.
metamorphic rock, metasedimentary, marble, heterogeneous limestone and dolomite=.SEDCHML.
metamorphic rock, metasedimentary, marble, heterogeneous dolomite and limestone=.SEDCHMD.
metamorphic rock, metasedimentary, marble, limestone=.SEDCCML.
metamorphic rock, metasedimentary, marble, limestone, dolomitic=.SEDCCMLD.
metamorphic rock, metasedimentary, marble, limestone, heterogeneous=.SEDCCMLH.
metamorphic rock, metasedimentary, metachert=.MSDHM.
metamorphic rock, metasedimentary, metaconglomerate=.MSDOM.
metamorphic rock, metasedimentary, metagraywacke=.MSDWM.
metamorphic rock, metasedimentary, metamudstone=.MSDUM.
metamorphic rock, metasedimentary, metaquartzite=.MSDQM.
metamorphic rock, metasedimentary, metasandstone=.MSDTM.
metamorphic rock, metasedimentary, metasiltstone=.MSDLM.
metamorphic rock, metasedimentary, paragneiss=.MSDPG.
metamorphic rock, metasedimentary, phyllite=.MSDY.
metamorphic rock, metasedimentary, schist=.MSDS.
metamorphic rock, metasedimentary, slate=.SLA

metamorphic rock, polymetamorphic=.MPM.
metamorphic rock, polymetamorphic, amphibolite=.MPMA.
metamorphic rock, polymetamorphic, banded gneiss=.MPMGB.

metamorphic rock, polymetamorphic, augen gneiss=.MPMGA.
metamorphic rock, polymetamorphic, calcsilicate=.MPMC.
metamorphic rock, polymetamorphic, cataclasite=.MPMCA.
metamorphic rock, polymetamorphic, gneiss=.MPMG.
metamorphic rock, polymetamorphic, hornfels=.MPMH.
metamorphic rock, polymetamorphic, marble=.MPMM.
metamorphic rock, polymetamorphic, metaquartzite=.MPMQ.
metamorphic rock, polymetamorphic, mylonite=.MPMY.
metamorphic rock, polymetamorphic, orthogneiss=.MPMGO.
metamorphic rock, polymetamorphic, paragneiss=.MPMGP.
metamorphic rock, polymetamorphic, phyllite=.MPMP.
metamorphic rock, polymetamorphic, phyllonite=.MPMPH.
metamorphic rock, polymetamorphic, schist=.MPMS.
metamorphic rock, polymetamorphic, serpentinite=.MPMSP.
metamorphic rock, polymetamorphic, slate=.MPMSL.

metamorphic rock, protolith unspecified=.METU.
metamorphic rock, protolith unspecified, calcsilicate rock=.MMGC.
metamorphic rock, protolith unspecified, gneiss, augen=.MMGGA.
metamorphic rock, protolith unspecified, gneiss, banded=.MMGGB.
metamorphic rock, protolith unspecified, gneiss, granitic=.MMGGG
metamorphic rock, protolith unspecified, gneiss, laminated=.MMGGL.
metamorphic rock, protolith unspecified, gneiss, layered=.MMGGLY.
metamorphic rock, protolith unspecified, gneiss, quartzofeldspathic=.MMGGQF.
metamorphic rock, protolith unspecified, hornfels=.MMGH.
metamorphic rock, protolith unspecified, phyllite=.MMGP.
metamorphic rock, protolith unspecified, phyllonite=.MMGPH.
metamorphic rock, protolith unspecified, schist=.MMGS.

metamorphic rock, regional metamorphism=.METR.

metamorphic rock, strain-dominated=.METS.
metamorphic rock, strain-dominated, gneiss, cataclastic =.METSGC.
metamorphic rock, strain-dominated, gneiss, mylonitic =.METSGM.
metamorphic rock, strain-dominated, phyllonite=.METSP.

metamorphic style, contact=.METC.
metamorphic style, regional=.METR.
metamorphic style, strain dominated=.METS.
metamorphic style, unspecified=.METU.

metamorphism, retrograde, polygon contains information about=.RTO.
metamorphism, retrograde, documented=.RTOY
metamorphism, retrograde, multiple episodes=.RTOM
metamorphism, retrograde, none=.RTON
metamorphism, retrograde, probable=.RTOP
metamorphism, retrograde, unknown=.RTOUN

metachert=.MSDHM.
metagraywacke=.MSDWM.
metamudstone=.MSDUM.
metaplutonic=.MIGPM.
metaquartzite=.MSDQM.
metasandstone=.MSDTM.
metasedimentary metamorphic rock=.MSD.
metasiltstone=.MSDLM.
metatuff=.MIGTM.
metavolcanic=.MIGVM.

Mesozoic=.MZO.

mica fish resulting from penetrative deformation=.SDFPTM.
microcline (metamorphic mineral)=.MMMMI.

microtectonite features=.SDFPT.
microtectonite features, foliation fish=.SDFPTF.
microtectonite features, mica fish=.SDFPTM.
microtectonite features, pressure shadows=.SDFPTP.
microtectonite features, S-C fabrics=.SDFPTS.
microtectonite features, winged porphyroclasts=.SDFPTW.

migmatitic layering (metamorphic rocks)=.SFMYM.
milling resulting from penetrative deformation=.SDFPX.

mineral, igneous, accessory, allanite=.MACAL.
mineral, igneous, accessory, apatite=.MACAP.
mineral, igneous, accessory, clinozoisite=.MACCL.
mineral, igneous, accessory, epidote=.MACE.
mineral, igneous, accessory, fluorite=.MACF.
mineral, igneous, accessory, ilmenite=.MACI.
mineral, igneous, accessory, magnetite=.MACMG.
mineral, igneous, accessory, monazite=.MACMO.
mineral, igneous, accessory, opaque minerals=.MACO.
mineral, igneous, accessory, sphene=.MACS.
mineral, igneous, accessory, zircon=.MACZ.

mineral, igneous, characterizing=.MCH.
mineral, igneous, characterizing, biotite=.MCHB.
mineral, igneous, characterizing, biotite-hornblende=.MCHBH.
mineral, igneous, characterizing, biotite-muscovite=.MCHBM.
mineral, igneous, characterizing, epidote=.MCE.
mineral, igneous, characterizing, hornblende=.MCHH.
mineral, igneous, characterizing, hornblende-biotite=.MCHHB.
mineral, igneous, characterizing, hornblende-pyroxene=.MCHHP.
mineral, igneous, characterizing, muscovite=.MCHM.
mineral, igneous, characterizing, muscovite-biotite=.MCHMB.
mineral, igneous, characterizing, muscovite-garnet=.MCHMG.
mineral, igneous, characterizing, pyroxene=.MCHPX.
mineral, igneous, characterizing, pyroxene-hornblende=.MCHPH.

mineral, metamorphic, actinolite=.MMMAC.
mineral, metamorphic, albite=.MMMAL.
mineral, metamorphic, andalusite=.MMMA.
mineral, metamorphic, biotite=.MMMB.
mineral, metamorphic, calcite=.MMMCA.
mineral, metamorphic, chlorite=.MMMCH.
mineral, metamorphic, clinozoisite=.MMMC.
mineral, metamorphic, cordierite=.MMMCO.
mineral, metamorphic, corundum=.MMMCR.
mineral, metamorphic, diopside=.MMMDI.
mineral, metamorphic, dolomite=.MMMD.
mineral, metamorphic, epidote=.MMME.
mineral, metamorphic, forsterite=.MMMF.
mineral, metamorphic, garnet=.MMMG.
mineral, metamorphic, homblende=.MMMH.
mineral, metamorphic, jadeite=.MMMJ.
mineral, metamorphic, kyanite=.MMMK.
mineral, metamorphic, lawsonite=.MMML.
mineral, metamorphic, magnetite=.MMMM.
mineral, metamorphic, microcline=.MMMMI.
mineral, metamorphic, muscovite=.MMMMU.
mineral, metamorphic, orthoclase=.MMMO.
mineral, metamorphic, piemontite=.MMMPI.
mineral, metamorphic, prehnite=.MMMPR.
mineral, metamorphic, pumpellyite=.MMMP.
mineral, metamorphic, rutile=.MMMR.
mineral, metamorphic, scapolite=.MMMSC.
mineral, metamorphic, sericite=.MMMSE.

mineral, metamorphic, sillimanite=.MMMSI.
mineral, metamorphic, staurolite=.MMMST.
mineral, metamorphic, stilpnomelane=.MMMS.
mineral, metamorphic, talc=.MMMTA.
mineral, metamorphic, tourmaline=.MMMT.
mineral, metamorphic, tremolite=.MMMTR.
mineral, metamorphic, wollastonite=.MMMW.
mineral, metamorphic, zoisite=.MMMZ.

mineral overgrowths resulting from metamorphism=.SFMV.

mineral, phenocrysts, amphibole=.PHMAM.
mineral, phenocrysts, biotite=.PHMB.
mineral, phenocrysts, hornblende=.PHMH.
mineral, phenocrysts, muscovite=.PHMM.
mineral, phenocrysts, olivine=.PHMO.
mineral, phenocrysts, orthopyroxene=.PHMPO.
mineral, phenocrysts, plagioclase=.PHMPL.
mineral, phenocrysts, potassium feldspar=.PHMKS.
mineral, phenocrysts, pyroxene=.PHMPY.
mineral, phenocrysts, quartz=.PHMQ.

mineralized contact=.MINOMC.
mineralized rock=.MIN.
mineralized rock, mineralization type=.MINT.
mineralized rock, mineralization type, carbonate mineralization=.MINTC.
mineralized rock, mineralization type, carbonate mineralization, copper carbonate=-CCU-
mineralized rock, mineralization type, carbonate mineralization, lead carbonate=-CPB-
mineralized rock, mineralization type, carbonate mineralization, zinc carbonate=-CZN-
mineralized rock, mineralization type, oxide mineralization=.MINTO.
mineralized rock, mineralization type, oxide mineralization, iron oxide=-OFE-
mineralized rock, mineralization type, native-metal mineralization=.MINTN.
mineralized rock, mineralization type, native-metal mineralization, copper=-NCU-
mineralized rock, mineralization type, native-metal mineralization, gold=-NAU-
mineralized rock, mineralization type, native-metal mineralization, silver=-NAG-
mineralized rock, mineralization type, siliceous mineralization=.MINTSI.
mineralized rock, mineralization type, siliceous mineralization, jasperoid=-JAS-
mineralized rock, mineralization type, siliceous mineralization, opal=-OPAL-
mineralized rock, mineralization type, siliceous mineralization, quartz=-QUAR-
mineralized rock, mineralization type, sulphide mineralization=.MINTS.
mineralized rock, mineralization type, sulphide mineralization, iron sulphide=-SFE-
mineralized rock, mineralization type, sulphide mineralization, lead sulphide=-SPB-
mineralized rock, mineralization type, sulphide mineralization, mercury sulphide=-SHG-
mineralized rock, mineralization type, unspecified mineralization=.MINTU.

mineralized rock, miscellaneous mineral information=.MINM.
mineralized rock, miscellaneous mineral information, prospects occur in polygon=.MINMP.
mineralized rock, mineralization unspecified=.MINU.

mineralized rock, outcrop occurrence=.MINO.
mineralized rock, outcrop occurrence, boxwork mineralization=.MINOB.
mineralized rock, outcrop occurrence, disseminated mineral traces=.MINOD.
mineralized rock, outcrop occurrence, local veins=.MINOV.
mineralized rock, outcrop occurrence, mineralized contact=.MINOMC.
mineralized rock, outcrop occurrence, oxidized rock=.MINOO.
mineralized rock, outcrop occurrence, placer=.MINOP.
mineralized rock, outcrop occurrence, skarn=.MINOS.
mineralized rock, outcrop occurrence, unspecified=.MINOU.

Miocene=.CZOTM.
Miocene, early=.CZOTME.
Miocene, late=.CZOTML.
Mississippian=.PZOM.
Mississippian, early=.PZOME.

Mississippian, late=.PZOML.
Modern=.CZOQHD.

modern wash=.ALLMW.
modern wash, active=.SURAWA.
modern wash, intermittent=.SURAWI.
modern wash, older=.SURAWO.

Mohnian West Coast foraminiferal age=.WCFM.
monazite=.MACMO.
monzodiorite=.MZD.
monzogranite=.MGR.
monzonite=.MZN.
monzonite, quartz-bearing=.MZNQ.

morainal deposit=-MOR-
morainal ridges=.SMOPM.
mountain-margin geographic setting=.MTM.

mud (surficial deposit)=.CLMM.
mud, gravelly (surficial deposit)=.CLMMG.
mud, sandy (surficial deposit)=.CLMMS.
mud, silty (surficial deposit)=.CLMMML.
mud cracks=.SDSK.
muddy gravel=.GVLM.
muddy silt=.SLTMLM.

mudrock (non-carbonate sedimentary rocks)=.MRK.
mudrock (carbonate sedimentary rocks)=.MRO.
mudrock and grainrock, mixed=.MGM.
mudrock and grainrock mixed, grainrock dominant over mudrock=.MGMGD.
mudrock and grainrock mixed, mudrock dominant over grainrock=.MGMMD.
mudrock, variable lithologies=.MRKV.

mudstone, silty=.MRKMML.
mudstone, sandy=.MRKMS.
mudstone, conglomeratic=.MRKMC.
mudstone, pebbly=.MRKMCP.
mudstone, pebbly & cobbly=.MRKMCPC.
mudstone, cobbly=.MRKMCC.
mudstone, cobbly & bouldery=.MRKMCCB.
mudstone, bouldery=.MRKMCB.

mud-supported fabric, carbonate rocks=.ORFM.

muscovite (metamorphic)=.MMMMU.
muscovite (igneous characterizing mineral)=.MCHM.
muscovite, grain composition=.GCOAM.
muscovite-biotite (igneous characterizing minerals)=.MCHMB.
muscovite-garnet (igneous characterizing minerals)=.MCHMG.

mylonite, metamorphic=.METSGM.
mylonitic fabric, metamorphic=.SFMOM.
mylonitic fabric, strain dominated rock=
mylonitic gneiss=.HSRMG.
mylonitic rock, generic=.SDRHM.

Narizian West Coast foraminiferal age=.WCFN.

native-metal mineralization=.MINTN.
native-metal mineralization, copper=-NCU-
native-metal mineralization, gold=-NAU-
native-metal mineralization, silver=-NAG-

Neogene=-NGN-
nonmarine=.NMA.
non-calcic soil=.SSONC.
norite=.NOR.

Oligocene=.CZOTO.
Oligocene, early=.CZOTOE.
Oligocene, late=.CZOTOL.

olistostrome=.TECO.
opal alteration (silicification)=-OPAL-
opaque minerals=.MACO.

Ordovician=.PZOO.
Ordovician, early=.PZOOE.
Ordovician, late=.PZOOL.

Orellan land-mammal age=.LMAO.

organic material interbedded with surficial deposit=-IOM-
organic material interbedded with sedimentary deposit, peat=-IOMP-
organic material interbedded with sedimentary deposit, lignite seams=-IOML-
organic supported fabric, carbonate rocks=.ORFO.

orthoclase (metamorphic)=.MMMO.
orthogneiss=.MIGGO.

outcrop geomorphology=.OGM.
outcrop geomorphology, blocky=.OGMB.
outcrop geomorphology, cliff forming=.OGMC.
outcrop geomorphology, fissil=.OGMF.
outcrop geomorphology, ledgeforming=.OGML.
outcrop geomorphology, ledgeforming and slopeforming, interlayered=.OGMI.
outcrop geomorphology, massive, blocky=.OGMMB.
outcrop geomorphology, massive, rounded=.OGMMR.
outcrop geomorphology, recessive=.OGMR.
outcrop geomorphology, regolith developed on outcrop=.OGMH.
outcrop geomorphology, rib-forming=.OGMG.
outcrop geomorphology, rounded=.OGMD.
outcrop geomorphology, rounded and blocky=.OGMRB.
outcrop geomorphology, slopeforming=.OGMS.
outcrop geomorphology, weathered, slightly=.OGMWSL.
outcrop geomorphology, weathered, substantially=.OGMWSU.
outcrop geomorphology, weathered, strongly=.OGMWST.

outer shelf=.CTMSO.

outwash-plain deposit (surficial)=-OUT-
outwash-plain deposit (bedrock)=-OWP-
overbank-fines element of fluvial deposit=.OBF.

oxide mineralization=.MINTO.
oxide mineralization, iron oxide=-OFE-
oxidized rock=.MINOO.

paleocurrent indicators=.PCI.
paleocurrent indicators, azimuth and direction, out of the east=.PCIDE.
paleocurrent indicators, azimuth and direction, out of the north=.PCIDN.
paleocurrent indicators, azimuth and direction, out of the northeast=.PCIDNE.
paleocurrent indicators, azimuth and direction, out of the northwest=.PCIDNW.
paleocurrent indicators, azimuth and direction, out of the south=.PCIDS.
paleocurrent indicators, azimuth and direction, out of the southeast=.PCIDSE.
paleocurrent indicators, azimuth and direction, out of the southwest=.PCIDSW.
paleocurrent indicators, azimuth and direction, out of the west=.PCIDW.

paleocurrent indicators, azimuth and direction=.PCID.
paleocurrent indicators, azimuth only=.PCIA.
paleocurrent indicators, azimuth only, direction E-W=.PCIAE.
paleocurrent indicators, azimuth only, direction N-S=.PCIAN.
paleocurrent indicators, azimuth only, direction NE-SW=.PCIANE.
paleocurrent indicators, azimuth only, direction NW-SE=.PCIANW.
paleocurrent indicators, channel geometry= .IDKC.
paleocurrent indicators, clast imbrications= .IDKIM.
paleocurrent indicators, cross lamination= .IDKXL.

Paleogene=-PGN-

paleomagnetism age basis=.PMG.
paleomagnetism age basis, age is certain=.PMGC.
paleomagnetism age basis, age is uncertain=.PMGU.
paleosols interbedded with other sedimentary materials=-IPS-

Paleozoic=.PZO.
Paleozoic, early =-PZOE-
Paleozoic, late =-PZOL-
Paleozoic, middle=-PZOI-

paragneiss=.MSDPG.
peat interbedded with other sedimentary materials=-IOMP-

pebble conglomerate=.GRKCP.
pebble-boulder conglomerate=.GRKCPB.
pebble-cobble conglomerate=.GRKCPC.
pebble gravel=.GVLP.
pebble-cobble gravel=.GVLPC.
pebbly cobbly sand=.SNDGPC.
pebbly sand=.SNDGP.
pebbly sandstone=.GRKSSCP.

pediment-veneer deposit=.SURAP.
pegmatite=.IGNIPKP.

pedogenic soil or regolith (mappable surficial unit)=.RPS.

pedogenic soil, calcic soil=.SSOC.
pedogenic soil, calcic soil, stage 1 K horizon=.SSOK1.
pedogenic soil, calcic soil, stage 2 K horizon=.SSOK2.
pedogenic soil, calcic soil, stage 3 K horizon=.SSOK3.
pedogenic soil, calcic soil, stage 4 K horizon=.SSOK4.
pedogenic soil, calcic soil, stage 5 K horizon=.SSOK5.
pedogenic soil, calcic soil, stage 6 K horizon=.SSOK6.

pedogenic soil, non-calcic soil=.SSONC.
pedogenic soil, non-calcic soil, weak A horizon soil=.SSOAW.
pedogenic soil, non-calcic soil, A/C-horizon soil=.SSOAC.
pedogenic soil, non-calcic soil, A/Bw/C-horizon-bearing soil=.SSOABW.
pedogenic soil, non-calcic soil, A/C/Bcambic soil=.SSOBC.
pedogenic soil, non-calcic soil, moderate Bt soil=.SSOBTM.
pedogenic soil, non-calcic soil, strong Bt soil=.BTS

pedogenic soil, non-calcic soil, soil development weak=.SSOW.
pedogenic soil, non-calcic soil, soil development moderate=.SSOM.
pedogenic soil, non-calcic soil, soil development strong=.SSOS.

pedogenic soil, silicic soil=.SSOSI.
pedogenic soil, silicic soil, duripan soil=.SSOSID.
pedogenic soil, silicic soil, silcrete=.SSOSIDS.

pedogenic soil, soil development moderate=.SSOM.

pedogenic soil, soil development weak=.SSOW.
pedogenic soil, soil development strong=.SSOS.

pedogenic-soil development, polygon-age basis=.SOD.
pedogenic-soil development, polygon-age basis, age is certain=.SODC.
pedogenic-soil development, polygon-age basis age is uncertain=.SODU.

penetrative deformation=.SDFP.
penetrative deformation, cataclasis, intergranular=.SDFPCI.
penetrative deformation, cleavage, slaty=.SDFPKS.
penetrative deformation, fabric, brittle=.SDFPFB.
penetrative deformation, fabric, brittle-ductile=.SDFPFBD.
penetrative deformation, fabric, ductile=.SDFPFD.
penetrative deformation, fabric, laminated=.SDFPFL.
penetrative deformation, foliation=.SDFPO.
penetrative deformation, foliation, weak=-PFOLW-
penetrative deformation, foliation, weak to moderate=-PFOLWM-
penetrative deformation, foliation, moderate=-PFOLM-
penetrative deformation, foliation, moderate to strong=-PFOLMS-
penetrative deformation, foliation, strong=-PFOLS-

penetrative deformation, foliation, cataclastic=.SDFPOC.
penetrative deformation, foliation, gneissose=.SDFPOG.
penetrative deformation, foliation, mylonitic=.SDFPOM.
penetrative deformation, grain flattening=.SDFPGF.
penetrative deformation, grain lenticulation=.SDFPGL.
penetrative deformation, grain-size reduction, brittle=.SDFPGRB.
penetrative deformation, grain-size reduction, ductile=.SDFPGRD.
penetrative deformation, lineation=.SDFPL.
penetrative deformation, microtectonite features=.SDFPT.
penetrative deformation, microtectonite features, foliation fish=.SDFPTF.
penetrative deformation, microtectonite features, mica fish=.SDFPTM.
penetrative deformation, microtectonite features, pressure shadows=.SDFPTP.
penetrative deformation, microtectonite features, S-C fabrics=.SDFPTS.
penetrative deformation, microtectonite features, winged porphyroclasts=.SDFPTW.
penetrative deformation, milling=.SDFPX.
penetrative deformation, mylonitic seams=.SDFPM.
penetrative deformation, pseudotachylitic seams=.SDFPU.
penetrative deformation, S-C structures=.SDFPTS.
penetrative deformation, shear planes, local=.SDFPPL.

Pennsylvanian=.PZOP.
Pennsylvanian, early=.PZOPE.
Pennsylvanian, late=.PZOPL.
Penutian West Coast foraminiferal stage=.WCFP.

peridotite=.UMRP.
peritidal (inner shelf regime)=.CTMSIP.
peritidal (platform carbonate regime)=.PLAP.
peritidal (nearshore sediment regime)=.NSHP.

Permian=.PZOR.
Permian, early=.PZORE.
Permian, late=.PZORL.

phenocrysts, grain size coarse=.PHZC.
phenocrysts, grain size fine=.PHF.
phenocrysts, grain size fine to medium=.PHZFM.
phenocrysts, grain size medium=.PHM.
phenocrysts, grain size medium to coarse=.PHZMC.
phenocrysts, grain size variable=.PHZV.

phenocrysts, amphibole=.PHMAM.
phenocrysts, augite=.PHMAU.

phenocrysts, biotite=.PHMB.
phenocrysts, hornblende=.PHMH.
phenocrysts, muscovite=.PHMM.
phenocrysts, olivine=.PHMO.
phenocrysts, orthopyroxene=.PHMPO.
phenocrysts, plagioclase=.PHMPL.
phenocrysts, potassium feldspar=.PHMKS.
phenocrysts, pyroxene=.PHMPY.
phenocrysts, quartz=.PHMQ.
phenocrysts, with reaction rims=.PHMRR.
phenocrysts, rimmed=.PHMR.
phenocrysts, zoned=.PHMZ.

phyllite=.MSDY.
phyllonite (strain-dominated metamorphic rock)=.METSP.

piemontite (metamorphic mineral)=.MMMPI.
placer deposit=.MINOP.

planktonic foraminiferal zone=.PFZ.
planktonic foraminiferal zone N23=.PFZN23.
planktonic foraminiferal zone N22=.PFZN22.
planktonic foraminiferal zone N22=.PFZN22.
planktonic foraminiferal zone N21=.PFZN21.
planktonic foraminiferal zone N20=.PFZN20.
planktonic foraminiferal zone N19=.PFZN19.
planktonic foraminiferal zone N18=.PFZN18.
planktonic foraminiferal zone N17=.PFZN17.
planktonic foraminiferal zone N16=.PFZN16.
planktonic foraminiferal zone N15=.PFZN15.
planktonic foraminiferal zone N14=.PFZN14.
planktonic foraminiferal zone N13=.PFZN13.
planktonic foraminiferal zone N12=.PFZN12.
planktonic foraminiferal zone N11=.PFZN11.
planktonic foraminiferal zone N10=.PFZN10.
planktonic foraminiferal zone N09=.PFZN09.
planktonic foraminiferal zone N08=.PFZN08.
planktonic foraminiferal zone N07=.PFZN07.
planktonic foraminiferal zone N06=.PFZN06.
planktonic foraminiferal zone N05=.PFZN05.
planktonic foraminiferal zone N04=.PFZN04.
planktonic foraminiferal zone P22=.PFZP22.
planktonic foraminiferal zone P21=.PFZP21.
planktonic foraminiferal zone P20=.PFZP20.
planktonic foraminiferal zone P19=.PFZP19.
planktonic foraminiferal zone P18=.PFZP18.
planktonic foraminiferal zone P17=.PFZP17.
planktonic foraminiferal zone P16=.PFZP16.
planktonic foraminiferal zone P15=.PFZP15.
planktonic foraminiferal zone P14=.PFZP14.
planktonic foraminiferal zone P13=.PFZP13.
planktonic foraminiferal zone P12=.PFZP12.
planktonic foraminiferal zone P11=.PFZP11.
planktonic foraminiferal zone P10=.PFZP10.
planktonic foraminiferal zone P09=.PFZP09.
planktonic foraminiferal zone P08=.PFZP08.
planktonic foraminiferal zone P07=.PFZP07.
planktonic foraminiferal zone P06=.PFZP06.
planktonic foraminiferal zone P06=.PFZP06.
planktonic foraminiferal zone P05=.PFZP05.
planktonic foraminiferal zone P04=.PFZP04.
planktonic foraminiferal zone P03=.PFZP03.
planktonic foraminiferal zone P02=.PFZP02.
planktonic foraminiferal zone P01=.PFZP01.

playa deposit (surficial deposit)=.SURP.
playa geographic setting (bedrock)=.PLY.

Pleistocene=.CZOQP.
Pleistocene, early=.CZOQPE.
Pleistocene, late=.CZOQPL.
Pleistocene, middle=.CZOQPM.
Pliocene=.CZOTP.
Pliocene, early=.CZOTPE.
Pliocene, late=.CZOTPL.

pluton, hypabyssal=.IGNIHP.
pluton, plutonic=.IGNIPP.
plutonic=.IGNIP.
plutonic intrusive type unspecified=.IGNIPU.

polycrystalline quartz rock fragments=-QPC-

polymetamorphic rock=.MPM.
polymetamorphic rock, amphibolite=.MPMA.
polymetamorphic rock, augen gneiss=.MPMGA.
polymetamorphic rock, banded gneiss=.MPMGB.
polymetamorphic rock, calcsilicate=.MPMC.
polymetamorphic rock, cataclasite=.MPMCA.
polymetamorphic rock, gneiss=.MPMG.
polymetamorphic rock, hornfels=.MPMH.
polymetamorphic rock, marble=.MPMM.
polymetamorphic rock, metaquartzite=.MPMQ.
polymetamorphic rock, mylonite=.MPMY.
polymetamorphic rock, orthogneiss=.MPMGO.
polymetamorphic rock, paragneiss=.MPMGP.
polymetamorphic rock, phyllite=.MPMP.
polymetamorphic rock, phyllonite=.MPMPH.
polymetamorphic rock, schist=.MPMS.
polymetamorphic rock, serpentinite=.MPMSP.
polymetamorphic rock, slate=.MPMSL.

porphyritic texture, igneous rock=.TIGP.
porphyritic, locally, igneous rock=.TIGPL.

porphyroblast, coarse=.GZMPC.
porphyroblast, fine=.GZMPF.
porphyroblast, medium=.GZMPM.
porphyroblast, medium to coarse=.GZMPMC.
porphyroblast, very coarse=.GZMPVC.
porphyroblastic fabric (metamorphic)=.SFMFP.
porphyroclastic fabric (strain-dominated rocks)=.SDFPFP.
porphyroclastic fabric, locally (strain-dominated rocks)=.SDFPFPL.

Precambrian=.PRC.

prehnite (metamorphic mineral)=.MMMPR.
prehnite-pumpellyite facies=.MGDPP.
pressure shadows resulting from penetrative deformation=.SDFPTP.

protolith, basalt=.PLIIVB.
protolith, calcareous mudrock=.PLISSMC.
protolith, carbonate sedimentary rock=.PLISC.
protolith, conglomerate=.PLISSC.
protolith, conglomerate, sandy=.PLISSCS.
protolith, dioritic=.PLIIPD.
protolith, dolomite=.PLISCD.
protolith, granitic=.PLIIPG.

protolith, igneous rock=.PLII.
protolith, leucocratic granitoid=.PLIIPGL.
protolith, felsic volcanic=.PLIIVF.
protolith, limestone=.PLISCL.
protolith, limestone, cherty=.PLISCLC.
protolith, limestone, dolomitic=.PLISCLD.
protolith, limestone, sandy=.PLISCLS.
protolith, limestone, silty=.PLISCLM.
protolith, mafic granitoid=.PLIIPGM.
protolith, mafic volcanic=.PLIIVM.
protolith, marine=.PLISM.
protolith, metamorphic rock=.PLIM.
protolith, mudrock=.PLISSM.
protolith, mudrock, calcareous=.PLISSMC.
protolith, mudrock, siliceous=.PLISSMS.
protolith, nonmarine=.PLISN.
protolith, plutonic=.PLIIP.
protolith, quartzite=.PLISSQ.
protolith, sandstone=.PLISSS.
protolith, sandstone, conglomeratic=.PLISSSC.
protolith, sandstone, muddy=.PLISSSM.
protolith, sedimentary rock=.PLIS.
protolith, shale=.PLISSH.
protolith, siliciclastic sedimentary rock=.PLISS.
protolith, siltstone=.PLISSL.
protolith unknown=.PLIUK.
protolith unspecified=.PLIUN.
protolith, volcanic=.PLIIV.

provincial affinity (bedrock unit)=.PAF.
provincial affinity (bedrock unit), Chocolate Mountains type=.PAFC.
provincial affinity (bedrock unit), Little San Bernardino Mountains type=-.PAFML.
provincial affinity (bedrock unit), Mojave Desert type=.PAFM.
provincial affinity (bedrock unit), Peninsular Ranges type=.PAFP.
provincial affinity (bedrock unit), San Bernardino Mountains type=.PAFMB.
provincial affinity (bedrock unit), San Gabriel Mountains type=.PAFG.
provincial affinity (bedrock unit), San Jacinto Mountains type=.PAFPJ.
provincial affinity (bedrock unit), Santa Rosa Mountains type=.PAFPR.

pseudotachylite=.SDRFBCP.
pseudotachylitic seams resulting from penetrative deformation=.SDFPU.

published observation by other workers, basis for geologic-unit identification=-PUBW-
Puercan land-mammal age=.LMAP.
pumpellyite (metamorphic mineral)=.MMMP.

pyroclastic=.IGNP.

pyroxene (igneous characterizing mineral)=.MCHPX.
pyroxene-hornblende (igneous characterizing minerals)=.MCHPH.
pyroxene hornfels facies=.MGDPY.
pyroxenite=.UMRY.

quartz alteration (silicification)=-QUAR-
quartz diorite=.DIOQ.
quartz monzodiorite=.MZDQ.

Quaternary=.CZOQ.

Rancholabrean land-mammal age=.LMAR.

Rb-Sr isotopic-age determination (isochron age)=.ISORSI.
Rb-Sr isotopic-age determination (is not isochron age)=.ISORSNI.
Rb-Sr isotopic-age determination from biotite=.ISORSB.

Rb-Sr isotopic-age determination from glauconite=.ISORSG.
Rb-Sr isotopic-age determination from K-spar=.ISORSK.
Rb-Sr isotopic-age determination from muscovite=.ISORSM.
Rb-Sr isotopic-age determination from plagioclase=.ISORSP.
Rb-Sr isotopic-age determination from plagioclase=.ISORSP.
Rb-Sr isotopic-age determination from whole rock=.ISORSW.

recrystallized fabric (metamorphic)=.SFMR.
recrystallized fabric (metamorphic), highly recrystallized=.SFMRH.
recrystallized fabric (metamorphic), moderately recrystallized=.SFMRM.
recrystallized fabric (metamorphic), moderately to highly recrystallized=.SFMRMH.
recrystallized fabric (metamorphic), slightly recrystallized=.SFMRS.
recrystallized fabric (metamorphic), slightly to moderately recrystallized=.SFMRSM.

recrystallized fabric (carbonate rock)=.RXF.
recrystallized fabric (carbonate rock), coarsely crystalline=.RXFC.
recrystallized fabric (carbonate rock), finely crystalline=.RXFF.
recrystallized fabric (carbonate rock), fine to medium crystalline=.RXFFM.
recrystallized fabric (carbonate rock), fine to coarsely crystalline=.RXFFC.
recrystallized fabric (carbonate rock), medium crystalline=.RXFM.
recrystallized fabric (carbonate rock), medium to coarsely crystalline=.RXFMC.
recrystallized fabric (carbonate rock), sugary texture=.RXFS.
recrystallized fabric (carbonate rock), variable grain size=.RXFV.

recrystallized fabric (strain-dminated rock)=.SDFPFR.
recrystallized fabric (strain-dminated rock), slight=-RCRS-
recrystallized fabric (strain-dminated rock), slight to moderate=-RCRSM-
recrystallized fabric (strain-dminated rock), moderate=-RCRM-
recrystallized fabric (strain-dminated rock), moderate to high=-RCRMH-
recrystallized fabric (strain-dminated rock), high=-RCRH-

Refugian West Coast foraminiferal stage=.WCFF.

regional correlation, polygon-age basis=.RCO.
regional correlation, polygon-age basis, age is certain=.RCOC.
regional correlation, polygon-age basis age is uncertain=.RCOU.

regional metamorphic rock=.METR.

regolith or pedogenic soil (surficial unit)=.RPS.
regolith developed on outcrop (outcrop geomorphology)=.OGMH.
Relizian West Coast foraminiferal stage=.WCFR.
Repettian West Coast foraminiferal stage=.WCFT.
rhyodacite=.DACR.

retrograde metamorphism, polygon contains information about=.RTO.
retrograde metamorphism, documented=.RTOY
retrograde metamorphism, multiple episodes=.RTOM
retrograde metamorphism, none=.RTON
retrograde metamorphism, probable=.RTOP
retrograde metamorphism, unknown=.RTOUN

rhyolite=.RHY.
rhyolite, alkalic=.RHYA.

rock-avalanche ridges (surficial deposit)=.SMOPR.
rock-avalanche deposit (surficial deposit)=.SURSA.
rock-avalanche deposit (bedrock)=-GFLR-
rock-fall deposit (surficial deposit)=.SURSF.
rounded grain shape=.GSHR.

sackungen=.SURSS.

sand (surficial deposit)=.SND.

sand, very coarse (surficial deposit)=.SNDVFC.
sand, coarse to very coarse (surficial deposit)=.SNDCVC.
sand, coarse (surficial deposit)=.SNDC.
sand (surficial deposit)=.SND.
sand, medium to very coarse (surficial deposit)=.SNDMVC.
sand, medium to coarse (surficial deposit)=.SNDMC.
sand, medium (surficial deposit)=.SNDM.
sand, fine to very coarse (surficial deposit)=.SNDFVC.
sand, fine to coarse (surficial deposit)=.SNDFC.
sand, fine to medium (surficial deposit)=.SNDFM.
sand, fine (surficial deposit)=.SNDF.
sand, very fine to coarse (surficial deposit)=.SNDVFC.
sand, very fine to medium (surficial deposit)=.SNDVFM.
sand, very fine to fine (surficial deposit)=.SNDVFF.
sand, very fine (surficial deposit)=.SNDVF.

sand, silty (surficial deposit)=.SNDML.
sand, silty, medium to coarse (surficial deposit)=.SNDMLMC.
sand, silty, fine to coarse (surficial deposit)=.SNDMLFC.
sand, silty, very fine to coarse (surficial deposit)=.SNDMLVFC.
sand, silty, medium (surficial deposit)=.SNDMLM.
sand, silty, fine to medium (surficial deposit)=.SNDMLFM.
sand, silty, very fine to medium (surficial deposit)=.SNDMLVFM.
sand, silty, fine (surficial deposit)=.SNDMLF.
sand, silty, very fine to fine (surficial deposit)=.SNDMLVFF.
sand, silty, very fine (surficial deposit)=.SNDMLVF.
sand, silty fine (surficial deposit)=.SNDMLF.
sand, silty very fine (surficial deposit)=.SNDMLVF.

sand and mud interbedded (surficial deposit)=-SMI-

sand and gravel (surficial deposit)=.SGD.
sand and gravel, gravelly deposit (surficial deposit)=.SGDG.
sand and gravel, gravel dominant (surficial deposit)=.GVL.
sand and gravel, subequal mixture (surficial deposit)=.SGDQ.
sand and gravel, sand dominant over gravel (surficial deposit)=.SGDSD.

sand, gravelly (surficial deposit)=.SNDG.
sand, bouldery (surficial deposit)=.SNDGB.
sand, clay-bearing (surficial deposit)=.SNDCL.
sand, clay- and silt-bearing (surficial deposit)=.SNDCLML.
sand, cobbly and bouldery (surficial deposit)=.SNDGCB.
sand, cobbly (surficial deposit)=.SNDGC.
sand, cobbly and pebbly (surficial deposit)=.SNDGPC.
sand, cobbly pebble-granule (surficial deposit)=.SNDGCPG.
sand, granule-bearing (surficial deposit)=.SNDGGB.
sand, muddy (surficial deposit)=.SNDMY.
sand, pebbly (surficial deposit)=.SNDGP.
sand, pebbly granule-bearing (surficial deposit)=.SNDGPGB.

sandstone=.GRKSS.
sandstone, bouldery=.GRKSSCB.
sandstone, clay-bearing =.MXSSSCL.
sandstone, cobbly & bouldery=.GRKSSCCB.
sandstone, cobbly=.GRKSSCC.
sandstone, conglomeratic=.GRKSSC.
sandstone, granule-bearing=.GRKSSCG.
sandstone, matrix-rich=.GRKSSX.
sandstone, matrix-rich, clayey=.GRKSSXCL.
sandstone, matrix-rich, silty=.GRKSSXML.
sandstone, muddy=.MXSSSD.
sandstone, pebbly & cobbly=.GRKSSCPC.
sandstone, pebbly granule=.GRKSSCGP.
sandstone, pebbly=.GRKSSCP.

sandstone, silty=.GRKSSXML.

sandy carbonate=.SEDCIMS.
sandy carbonate, dolomitic=.SEDCIMSD.
sandy carbonate, limestone=.SEDCIMSL.
sandy conglomerate=.GRKCS.
sandy deposit (surficial deposit)=.SGDS.
sandy dolomite=.SEDCIMSD.
sandy limestone=.SEDCIMSL.
sandy-bedform element of fluvial deposit=.SBB.

Saucesian West Coast foraminiferal stage=.WCFS.

S-C structures resulting from penetrative deformation=.SDFPTS.
S-C structures resulting from metamorphism=.SFMSC.
scapolite=.MMMSC.
schist=.MSDS.
schistose foliation (metamorphic foliation)=.SFMOS.
scour-hollow element of fluvial deposit=.SCH.

scree slope=.SMOPS.

sediment-gravity flow element of fluvial deposit=.SGF.
sedimentary=.SED.

sedimentary environment, marine=.MAR.
sedimentary environment, nonmarine=.NMA.
sedimentary environment, unspecified=.SEUN.

sedimentary recrystallization=.RXF.
sedimentary recrystallization, coarsely crystalline=.RXFC.
sedimentary recrystallization, finely crystalline=.RXFF.
sedimentary recrystallization, fine to medium crystalline=.RXFFM.
sedimentary recrystallization, fine to coarsely crystalline=.RXFFC.
sedimentary recrystallization, medium crystalline=.RXFM.
sedimentary recrystallization, medium to coarsely crystalline=.RXFMC.
sedimentary recrystallization, sugary texture=.RXFS.
sedimentary recrystallization, variable grain size=.RXFV.

sedimentary rock, biogenic=.SEDB.
sedimentary rock, calclastic=.SEDL.
sedimentary rock, carbonate=.SEDC.
sedimentary rock, catastrophic=.SEDK.
sedimentary rock, chert=.SEDH.
sedimentary rock, evaporite=.SEDE.
sedimentary rock, siliciclastic=.SEDS.
sedimentary rock, volcaniclastic=.SEDV.
sedimentary rock, type unspecified=.SEDU.

sedimentary structure, bedding, amalgamated=.SDSBA.
sedimentary structure, bedding, channelate=.SDSBC.
sedimentary structure, bedding, graded=.SDSBG.
sedimentary structure, bedding, graded, inverse=.SDSBGI.
sedimentary structure, bedding, lenticular=.SDSBL.
sedimentary structure, bedding, non-parallel=.SBEDN
sedimentary structure, bedding, parallel=.SDSBP.
sedimentary structure, bioturbated=.SDSBT.
sedimentary structure, clast imbrication=.SDSCI.
sedimentary structure, fenestrate (origin unknown)=.SDSFS.
sedimentary structure, flaser structure=.SDSZ.
sedimentary structure, lamination, algal=.SDSLA.
sedimentary structure, lamination, algal, laterally linked columnar heads=.SDSLAL.
sedimentary structure, lamination, convolute=.SDSLC.
sedimentary structure, lamination, cross=.SDSLX.

sedimentary structure, lamination, cross, hummocky=.SDSLXH.
sedimentary structure, lamination, cross, planar=.SDSLXP.
sedimentary structure, lamination, cross, trough=.SDSLXT.
sedimentary structure, lamination, cryptalgal=.SDSLAC.
sedimentary structure, lamination, flat=.SDSLF.
sedimentary structure, lamination, flat to cross=.SDSLFX.
sedimentary structure, lamination, ripple=.SDSLR.
sedimentary structure, lamination, ripple, climbing=.SDSLRC.
sedimentary structure, massive=.SDSM.
sedimentary structure, massive to flat laminated=.SDSMFL.
sedimentary structure, massive to mottled=.SDSMT.
sedimentary structure, mottled=.SDST.
sedimentary structure, mud cracks=.SDSK.
sedimentary structure, pillow and ball=.SDSPB.
sedimentary structure, sole marks=.SDSSM.
sedimentary structure, variable=.SDSV.

seriate texture, igneous=.TIGS.
serpentinite, metaigneous=.MIGSP.

shale=.MRKS.
sheetflood fluvial deposit, sand bed, ephemeral, flashy=.SHF.

shelf, marine=.CTMS.

shelf, marine, inner shelf=.CTMSI.

shelf, marine, outer shelf=.CTMSO.

silicic soil=.SSOSI.

silicification, chalcedony=-CHAL-
silicification, jasperoid alteration=-JAS-
silicification, opal=-OPAL-
silicification, quartz=-QUAR-

siliceous mineralization=.MINTSI.
siliceous mineralization, jasperoid=-JAS-
siliceous mineralization, opal=-OPAL-
siliceous mineralization, quartz=-QUAR-

siliciclastic=.SEDS.
silicification, local=.ALRLSI.
silicification, pervasive=.ALRPSI.

sill, hypabyssal=.IGNIHS.
sill, plutonic=.IGNIPS.
sill, volcanic feeder=.IGNIVS.
sillimanite=.MMMSI.

silty deposit (surficial deposit)=.SLT.
silt (surficial deposit)=.SLTML.
silt, gravelly (surficial deposit)=.SLTMLG.
silt, muddy (surficial deposit)=.SLTMLM.
silt, sandy (surficial deposit)=.SLTMLS.

siltite=.SIT.

siltstone=.GRKML.
siltstone, sandy=.GRKMLS.
siltstone, sandy conglomeratic=.GRKMLSC.
siltstone, sandy granule-bearing=.GRKMLSCG.
siltstone, sandy granule-pebble=.GRKMLSCGP.
siltstone, sandy granule-cobble=.GRKMLSCGC.

siltstone, sandy pebble-cobble=.GRKMLSCPC.
siltstone, conglomeratic=.GRKMLC.
siltstone, granule-bearing=.GRKMLCG.
siltstone, pebbly granule-bearing=.GRKMLCGP.
siltstone, pebbly=.GRKMLCP.
siltstone, pebbly & cobbly=.GRKMLCPC.
siltstone, cobbly=.GRKMLCC.
siltstone, cobbly & bouldery=.GRKMLCB.

silty carbonate=.SEDCIMM.
silty dolomite=.SEDCIMMD.
silty limestone=.SEDCIMML.

silty clay (surficial deposit)=.CLMCLML.
silty deposit (surficial deposit)=.SLT.
silty mud (surficial deposit)=.CLMMML.
silty sand (surficial deposit)=.SNDML.
silty sand, medium to coarse (surficial deposit)=.SNDMLMC.
silty sand, fine to coarse (surficial deposit)=.SNDMLFC.
silty sand, very fine to coarse (surficial deposit)=.SNDMLVFC.
silty sand, medium (surficial deposit)=.SNDMLM.
silty sand, fine to medium (surficial deposit)=.SNDMLFM.
silty sand, very fine to medium (surficial deposit)=.SNDMLVFM.
silty sand, fine (surficial deposit)=.SNDMLF.
silty sand, very fine to fine (surficial deposit)=.SNDMLVFF.
silty sand, very fine (surficial deposit)=.SNDMLVF.
silty sand, fine (surficial deposit)=.SNDMLF.
silty sand, very fine (surficial deposit)=.SNDMLVF.

Silurian=.PZOS.
Silurian, early=.PZOSE.
Silurian, late=.PZOSL.

skarn, mineralized =.MINOS.

skeletal fragments (clast composition)=.CCOK.
skeletal fragments (clast composition), algal material=.CCOKA.
skeletal fragments (clast composition), brachiopods=.CCOKBR.
skeletal fragments (clast composition), bryozoans=.CCOKBZ.
skeletal fragments (clast composition), corals=.CCOKC.
skeletal fragments (clast composition), fusulinids=.CCOKF.
skeletal fragments (clast composition), mollusks=.CCOKM.
skeletal fragments (clast composition), pelmatozoans=.CCOKP.
skeletal fragments (clast composition), trilobite fragments=.CCOKT.

skeletal fragments (grain composition)=.GCOK.
skeletal fragments (grain composition), algal material=.GCOKA.
skeletal fragments (grain composition), brachiopods=.GCOKBR.
skeletal fragments (grain composition), bryozoans=.GCOKBZ.
skeletal fragments (grain composition), corals=.GCOKC.
skeletal fragments (grain composition), fusulinids=.GCOKF.
skeletal fragments (grain composition), mollusks=.GCOKM.
skeletal fragments (grain composition), pelmatozoans=.GCOKP.
skeletal fragments (grain composition), trilobite fragments=.GCOKT.

slate=.MSDE.
slaty cleavage resulting from penetrative deformation=.SDFPKS.
slaty cleavage resulting from metamorphism=.SFMK.

slope-failure deposit=.SURS.
slope-failure deposit, unspecified=.SFUN.
slopeforming=.OGMS.
slope-wash deposit (surficial)=.SURHS.
slope-wash deposit (bedrock)=.HSPWS.

soil development, moderate=.SSOM.
soil development, weak=.SSOW.
soil development, strong=.SSOS.

sorting=.GSO.
sorting, moderate=.GSOM.
sorting, moderate to well=.GSOMW.
sorting, poor=.GSOP.
sorting, poor to moderate=.GSOPM.
sorting, poor to well=.GSOPW.
sorting, variable=.GSOVAR.
sorting, well=.GSOW.

sphene (igneous)=.MACS.

stage I K horizon=.SSOK1.
stage II K horizon=.SSOK2.
stage III K horizon=.SSOK3.
stage IV K horizon=.SSOK4.
stage V K horizon=.SSOK5.
stage VI K horizon=.SSOK6.

stained rock=.STA root
stained rock, local=.STAL root
stained rock, local, reddish=.STALR.
stained rock, local, greenish =.STALG.
stained rock, local, yellowish =.STALY.
stained rock, local, pinkish=.STALP.
stained rock, local, yellowish-orange=.STALYO.

staurolite=.MMMST.
stilpnomelane=.MMMS.
stock, hypabyssal=.IGNIHO.
stock, plutonic=.IGNIPO.
stock, volcanic feeder=.IGNIVO.

strain-dominated metamorphic rock=.METS.

strain-dominated rock, brittle fault rocks, breccia series=.SDRFBB.
strain-dominated rock, brittle fault rocks, breccia series, megabreccia=.SDRFBBM.
strain-dominated rock, brittle fault rocks, breccia series, breccia=.SDRFBBB.
strain-dominated rock, brittle fault rocks, breccia series, microbreccia=.SDRFBBI.
strain-dominated rock, brittle fault rocks, breccia series, fault gouge=.SDRFBBG.

strain-dominated rock, brittle fault rocks, cataclasite series=.SDRFBC.
strain-dominated rock, brittle fault rocks, cataclasite series, cataclasite=.SDRFBCC.
strain-dominated rock, brittle fault rocks, cataclasite series, ultracataclasite=.SDRFBCU.
strain-dominated rock, brittle fault rocks, cataclasite series, pseudotachylite=.SDRFBCP.

strain-dominated rock, crushed and (or) sheared rock=.SDRC.
strain-dominated rock, crushed and (or) sheared rock, crushed rock=.SDRCC.
strain-dominated rock, crushed and (or) sheared rock, discrete crush zones=.SDRCCD.
strain-dominated rock, crushed and (or) sheared rock, pervasively crushed rock=.SDRCCP.
strain-dominated rock, crushed and (or) sheared rock, sheared rock=.SDRCS.
strain-dominated rock, crushed and (or) sheared rock, discrete shear zones=.SDRCSD.
strain-dominated rock, crushed and (or) sheared rock, pervasively sheared rock=.SDRCSP.
strain-dominated rock, crushed and (or) sheared rock, brecciated rock, generic=.SDRCB.

strain-dominated rock, deformed beneath thrust fault=-DFMTB-
strain-dominated rock, deformed under low-strain conditions=.DEFL.
strain-dominated rock, deformed under high-strain conditions=.DEFH.
strain-dominated rock, deformed under brittle conditions=.DEFB.
strain-dominated rock, deformed under brittle-ductile conditions=.DEFBD.

strain-dominated rock, deformed under ductile conditions=.DEFD.
strain-dominated rock, deformed under plutonic conditions=.DEFP.
strain-dominated rock, deformed within strike-slip fault zone=.DEFFS.
strain-dominated rock, deformed within thrust-slip fault zone=.DEFFT.
strain-dominated rock, deformed within normal-slip fault zone=.DEFFN.
strain-dominated rock, deformed within contractional strain field=.DEFC.
strain-dominated rock, deformed within extensional strain field=.DEFE.

strain-dominated rock, ductile fault rocks=.SDRFD.
strain-dominated rock, ductile fault rocks, protomylonite=.SDRFDP.
strain-dominated rock, ductile fault rocks, mylonite=.SDRFDM.
strain-dominated rock, ductile fault rocks, ultramylonite=.SDRFDU.

strain-dominated rock, fault rock=.SDRF.
strain-dominated rock, fault rock, brittle=.SDRFB.
strain-dominated rock, fault rock, brittle fault rocks breccia series=.SDRFBB.
strain-dominated rock, fault rock, brittle fault rocks breccia series, breccia=.SDRFBBB.
strain-dominated rock, fault rock, brittle fault rocks breccia series, fault gouge=.SDRFBBG.
strain-dominated rock, fault rock, brittle fault rocks breccia series, megabreccia=.SDRFBBM.
strain-dominated rock, fault rock, brittle fault rocks breccia series, microbreccia=.SDRFBBI.
strain-dominated rock, fault rock, ductile=.SDRFD.
strain-dominated rock, fault rock, ductile, mylonite=.SDRFDM.
strain-dominated rock, fault rock, ductile, protomylonite=.SDRFDP.
strain-dominated rock, fault rock, ductile, ultramylonite=.SDRFDU.

strain-dominated rock, high-strain rock=.SDRH.
strain-dominated rock, high-strain rock, cataclastic rock=.SDRHC.
strain-dominated rock, high-strain rock, foliated rock=.SDRHF.
strain-dominated rock, high-strain rock, gneissose=.SDRHG.
strain-dominated rock, high-strain rock, mylonitic rock=.SDRHM.

strain-dominated rock, intruded under low-strain conditions=.DEFIL.
strain-dominated rock, intruded under high-strain conditions=.DEFIH.
strain-dominated rock, intruded under brittle conditions=.DEFIB.
strain-dominated rock, intruded under brittle-ductile conditions=.DEFIBD.
strain-dominated rock, intruded under ductile conditions=.DEFID.

strain-dominated rock, microtectonite feature=.SDFPT.
strain-dominated rock, microtectonite feature, foliation fish=.SDFPTF.
strain-dominated rock, microtectonite feature, mica fish=.SDFPTM.
strain-dominated rock, microtectonite feature, pressure shadows=.SDFPTP.
strain-dominated rock, microtectonite feature, S-C fabrics=.SDFPTS.
strain-dominated rock, microtectonite feature, winged porphyroclasts=.SDFPTW.

strain-dominated rock, parent rock unspecified=.PRKU.
strain-dominated rock, parent rock igneous=.PRKI.
strain-dominated rock, parent rock plutonic=-PRP-
strain-dominated rock, parent rock volcanic=-PRV-
strain-dominated rock, parent rock metamorphic=.PRKM.
strain-dominated rock, parent rock metaigneous=-PRMI-
strain-dominated rock, parent rock metasedimentary=-PRMS-
strain-dominated rock, parent rock polymetamorphic=-PRPM-
strain-dominated rock, parent rock sedimentary=.PRKS.
strain-dominated metamorphic rock=.METS.
strain-dominated rock, recrystallized under plutonic conditions=.DEFRP.
strain-dominated rock, unspecified=.SDRU.

strained-quartz rock fragments=-QST-

stratigraphic classification of map units=.RSC.
stratigraphic classification of map units, bedrock=.RSCB.
stratigraphic classification of map units, bedrock unit, formal=.RSCBF.
stratigraphic classification of map units, bedrock unit, formal, formation-rank unit=.RSCBFF.

stratigraphic classification of map units, bedrock unit, formal, sedimentary Formation=.RSCBFFS.
stratigraphic classification of map units, bedrock unit, formal, Member=.RSCBFFSM.
stratigraphic classification of map units, bedrock unit, formal, Tongue=.RSCBFFST.
stratigraphic classification of map units, bedrock unit, formal, Lentil=.RSCBFFSL.
stratigraphic classification of map units, bedrock unit, formal, facies=.RSCBFFSF.
stratigraphic classification of map units, bedrock unit, formal, catastrophic Formation=.RSCBFFC.
stratigraphic classification of map units, bedrock unit, formal, metamorphic Formation=.RSCBFFM.
stratigraphic classification of map units, bedrock unit, formal, plutonic Formation=.RSCBFFP.
stratigraphic classification of map units, bedrock unit, formal, tectonic Formation=.RSCBFFT.
stratigraphic classification of map units, bedrock unit, formal, volcanic Formation=.RSCBFFV.

stratigraphic classification of map units, bedrock unit, formal, Group=.RSCBFG.
stratigraphic classification of map units, bedrock unit, formal, Formation=.RSCBFGF.
stratigraphic classification of map units, bedrock unit, formal, Member=.RSCBFGFM.
stratigraphic classification of map units, bedrock unit, formal, Tongue=.RSCBFGFT.
stratigraphic classification of map units, bedrock unit, formal, Lentil=.RSCBFGFL.
stratigraphic classification of map units, bedrock unit, formal, facies=.RSCBFGFF.

stratigraphic classification of map units, bedrock unit, formal, Supergroup=.RSCBFS.
stratigraphic classification of map units, bedrock unit, formal, Group=.RSCBFSG.
stratigraphic classification of map units, bedrock unit, formal, Formation=.RSCBFSGF.
stratigraphic classification of map units, bedrock unit, formal, Member=.RSCBFSGFM.
stratigraphic classification of map units, bedrock unit, formal, Tongue=.RSCBFSGFT.
stratigraphic classification of map units, bedrock unit, formal, Lentil=.RSCBFSGFL.
stratigraphic classification of map units, bedrock unit, formal, facies=.RSCBFSGFF.

stratigraphic classification of map units, bedrock unit, formal unit with informal subunit=.RSCBFI.
formal unit with informal subunit, formation-rank unit=.RSCBFIF.
formal unit with informal subunit, formation-rank unit, sedimentary Formation=.RSCBFIFS.
formal unit with informal subunit, formation-rank unit, member=.RSCBFIFSM.
formal unit with informal subunit, formation-rank unit, =.RSCBFIFST.
formal unit with informal subunit, formation-rank unit, lentil=.RSCBFIFSL.
formal unit with informal subunit, formation-rank unit, facies=.RSCBFIFSF.

stratigraphic classification of map units, bedrock unit, informal=.RSCBI.
stratigraphic classification of map units, bedrock unit, informal, formation-rank unit=.RSCBIF.
stratigraphic classification of map units, bedrock unit, informal, sedimentary formation=.RSCBIFS.
stratigraphic classification of map units, bedrock unit, informal, member=.RSCBIFSM.
stratigraphic classification of map units, bedrock unit, informal, tongue=.RSCBIFST.
stratigraphic classification of map units, bedrock unit, informal, lentil=.RSCBIFSL.
stratigraphic classification of map units, bedrock unit, informal, facies=.RSCBIFSF.

stratigraphic classification of map units, bedrock unit, informal, catastrophic formation=.RSCBIFC.
stratigraphic classification of map units, bedrock unit, informal, metamorphic formation=.RSCBIFM.
stratigraphic classification of map units, bedrock unit, informal, plutonic formation=.RSCBIFP.
stratigraphic classification of map units, bedrock unit, informal, tectonic formation=.RSCBIFT.
stratigraphic classification of map units, bedrock unit, informal, volcanic formation=.RSCBIFV.

stratigraphic classification of map units, surficial unit=.RSCS.
stratigraphic classification of map units, surficial unit, informal=.RSCSI.

stratigraphic classification of map units, alluvial unit=.RSCSIA.
stratigraphic classification of map units, alluvial-fan deposits=.RSCSIAF.
stratigraphic classification of map units, alluvial-fan deposits, modern=.RSCSIAFM.
stratigraphic classification of map units, alluvial-fan deposits, young=.RSCSIAFY.
stratigraphic classification of map units, alluvial-fan deposits, old=.RSCSIAFO.
stratigraphic classification of map units, alluvial-fan deposits, very old=.RSCSIAFV.

stratigraphic classification of map units, alluvial-valley deposits=.RSCSIAV.
stratigraphic classification of map units, alluvial-valley deposits, modem=.RSCSIAVM.
stratigraphic classification of map units, alluvial-valley deposits, young=.RSCSIAVY.
stratigraphic classification of map units, alluvial-valley deposits, old=.RSCSIAVO.
stratigraphic classification of map units, alluvial-valley deposits, very old=.RSCSIAVV.

stratigraphic classification of map units, wash deposits=.RSCSIAW.
stratigraphic classification of map units, modern wash deposits=.RSCSIAWM.
stratigraphic classification of map units, modern-wash deposits, active=.RSCSIAWMA.
stratigraphic classification of map units, modern-wash deposits, intermittently active=.RSCSIAWMI.
stratigraphic classification of map units, modern-wash deposits, older=.RSCSIAWMO.
stratigraphic classification of map units, wash deposits, young=.RSCSIAWY.
stratigraphic classification of map units, wash deposits, old=.RSCSIAWO.
stratigraphic classification of map units, wash deposits, very old=.RSCSIAWV.

stratigraphic classification of map units, pediment veneer units=.RSCSIAP.
stratigraphic classification of map units, pediment-veneer deposits, modern=.RSCSIAPM.
stratigraphic classification of map units, pediment-veneer deposits, young=.RSCSIAPY.
stratigraphic classification of map units, pediment-veneer deposits, old=.RSCSIAPO.
stratigraphic classification of map units, pediment-veneer deposits, very old=.RSCSIAPV.

stratigraphic classification of map units, eolian unit=.RSCSIE.
stratigraphic classification of map units, eolian deposits, modern=.RSCSIEM.
stratigraphic classification of map units, eolian deposits, young=.RSCSIEY.
stratigraphic classification of map units, eolian deposits, old=.RSCSIEO.
stratigraphic classification of map units, eolian deposits, very old=.RSCSIEV.

stratigraphic classification of map units, glacial unit=.RSCSIG.
stratigraphic classification of map units, glacial deposits, modern=.RSCSIGM.
stratigraphic classification of map units, glacial deposits, young=.RSCSIGY.
stratigraphic classification of map units, glacial deposits, old=.RSCSIGO.
stratigraphic classification of map units, glacial deposits, very old=.RSCSIGV.

stratigraphic classification of map units, hillslope unit=.RSCSIH.
stratigraphic classification of map units, hillslope deposits, talus=.RSCSIHT.
stratigraphic classification of map units, hillslope deposits, talus, modem=.RSCSIHTM.
stratigraphic classification of map units, hillslope deposits, talus, young=.RSCSIHTY.
stratigraphic classification of map units, hillslope deposits, talus, old=.RSCSIHTO.
stratigraphic classification of map units, hillslope deposits, talus, very old=.RSCSIHTV.

stratigraphic classification of map units, colluvium unit=.RSCSIHC.
stratigraphic classification of map units, colluvium deposits, modern=.RSCSIHCM.
stratigraphic classification of map units, colluvium deposits, young=.RSCSIHCY.
stratigraphic classification of map units, colluvium deposits, old=.RSCSIHCO.
stratigraphic classification of map units, colluvium deposits, very old=.RSCSIHCV.

stratigraphic classification of map units, slope-wash unit=.RSCSIHS.
stratigraphic classification of map units, slope-wash deposits, modern=.RSCSIHSM.
stratigraphic classification of map units, slope-wash deposits, young=.RSCSIHSY.
stratigraphic classification of map units, slope-wash deposits, old=.RSCSIHSO.
stratigraphic classification of map units, slope-wash deposits, very old=.RSCSIHSV.

stratigraphic classification of map units, lacustrine unit=.RSCSIL.
stratigraphic classification of map units, lacustrine deposits, modern=.RSCSILM.
stratigraphic classification of map units, lacustrine deposits, young=.RSCSILY.
stratigraphic classification of map units, lacustrine deposits, old=.RSCSILO.
stratigraphic classification of map units, lacustrine deposits, very old=.RSCSILV.

stratigraphic classification of map units, marine unit=.RSCSIM.
stratigraphic classification of map units, marine deposits, modern=.RSCSIMM.
stratigraphic classification of map units, marine deposits, young=.RSCSIMY.
stratigraphic classification of map units, marine deposits, old=.RSCSIMO.
stratigraphic classification of map units, marine deposits, very old=.RSCSIMV.

stratigraphic classification of map units, playa unit=.RSCSIP.
stratigraphic classification of map units, playa deposits, modern=.RSCSIPM.
stratigraphic classification of map units, playa deposits, young=.RSCSIPY.
stratigraphic classification of map units, playa deposits, old=.RSCSIPO.
stratigraphic classification of map units, playa deposits, very old=.RSCSIPV.

stratigraphic classification of map units, regolith or pedogenic-soil unit=.RSCSIR.
stratigraphic classification of map units, regolith or pedogenic-soil deposits, modern=.RSCSIRM.
stratigraphic classification of map units, regolith or pedogenic-soil deposits, young=.RSCSIRY.
stratigraphic classification of map units, regolith or pedogenic-soil deposits, old=.RSCSIRO.
stratigraphic classification of map units, regolith or pedogenic-soil deposits, very old=.RSCSIRV.

stratigraphic classification of map units, slope-failure unit=.RSCSIS.
stratigraphic classification of map units, slope-failure deposits, modern=.RSCSISM.
stratigraphic classification of map units, slope-failure deposits, young=.RSCSISY.
stratigraphic classification of map units, slope-failure deposits, old=.RSCSISO.
stratigraphic classification of map units, slope-failure deposits, very old=.RSCSISV.

stratigraphic classification of map units, surficial unit, undifferentiated=.RSCSIU.
stratigraphic classification of map units, surficial deposits, undifferentiated, modern=.RSCSIUM.
stratigraphic classification of map units, surficial deposits, undifferentiated, young=.RSCSIUY.
stratigraphic classification of map units, surficial deposits, undifferentiated, old=.RSCSIUO.
stratigraphic classification of map units, surficial deposits, undifferentiated, very old=.RSCSIUV.

stratigraphic relations, polygon-age basis=.SRL.
stratigraphic relations, polygon-age basis, age is certain=.SRLC.
stratigraphic relations, polygon-age basis, age is uncertain=.SRLU.

stringers (calcite fillings in carbonate rocks)=.SPDCS.

structure, deformational, nonpenetrative, boudinage=.SDFPB.
structure, deformational, nonpenetrative, brecciated fabric or structure=.SDFNB.
structure, deformational, nonpenetrative, discrete cataclastic seams=.SDFNCSD.
structure, deformational, nonpenetrative, fractured=.SDFNR.
structure, deformational, nonpenetrative, open fractures=.SDFNRO.
structure, deformational, nonpenetrative, partly closed fractures=.SDFNRCP.
structure, deformational, nonpenetrative, closed fractures=.SDFNRC.
structure, deformational, nonpenetrative, oriented fractures=-FRAO-
structure, deformational, nonpenetrative, random fractures=-FRAR-
structure, deformational, nonpenetrative, jointed=.SDFNJ.
structure, deformational, nonpenetrative, mullions=.SDFNM.

structure, deformational, penetrative, boudinage=.SDFPB.
structure, deformational, penetrative, cataclasis, intergranular=.SDFPCI.
structure, deformational, penetrative, cataclastic foliation=.SDFPOC.
structure, deformational, penetrative, cleavage, slaty=.SDFPKS.
structure, deformational, penetrative, brittle fabric=.SDFPGRB.
structure, deformational, penetrative, ductile fabric=.SDFPGRD.
structure, deformational, penetrative, layered=.SDFPY.
structure, deformational, penetrative, gneissose foliation=.SDFPOG.
structure, deformational, penetrative, grain flattening=.SDFPGF.
structure, deformational, penetrative, grain lenticulation=.SDFPGL.
structure, deformational, penetrative, grain-size reduction, brittle=.SDFPGRB.
structure, deformational, penetrative, grain-size reduction, ductile=.SDFPGRD.
structure, deformational, penetrative, lineation=.SDFPL.
structure, deformational, penetrative, milled=.SDFPX.
structure, deformational, penetrative, mylonitic foliation=.SDFPOM.
structure, deformational, penetrative, pseudotachylitic foliation=.SDFPU.
structure, deformational, penetrative, S-C structures=.SDFPTS.

structure, depositional, algal laminated=.SDSLA.
structure, depositional, bedding, amalgamated=.SDSBA.
structure, depositional, bedding, channelate=.SDSBC.
structure, depositional, bedding, graded=.SDSBG.
structure, depositional, bedding, graded, inverse=.SDSBGI.
structure, depositional, bedding, lenticular=.SDSBL.
structure, depositional, bioturbated=.SDSBT.
structure, depositional, clast imbrication=.SDSCI.
structure, depositional, convolute lamination=.SDSLC.
structure, depositional, cross lamination=.SDSLX.

structure, depositional, cross lamination, hummocky=.SDSLXH.
structure, depositional, cross lamination, planar=.SDSLXP.
structure, depositional, cross lamination, trough=.SDSLXT.
structure, depositional, cryptalgal lamination=.SDSLAC.
structure, depositional, fenestrate (origin unknown)=.SDSFS.=
structure, depositional, flaser structure=.SDSZ.
structure, depositional, flat laminated=.SDSLF.
structure, depositional, flat laminated to cross laminated=.SDSLFX.
structure, depositional, graded bedding=.SDSBG.
structure, depositional, graded bedding, inverse=.SDSBGI.
structure, depositional, laterally linked columnar algal lamination=.SDSLAL.
structure, depositional, lenticular bedding=.SDSBL.
structure, depositional, massive=.SDSM.
structure, depositional, massive to flat laminated=.SDSMFL.
structure, depositional, massive to mottled=.SDSMT.
structure, depositional, mottled=.SDST.
structure, depositional, mud cracks=.SDSK.
structure, depositional, parallel bedding=.SDSBP.
structure, depositional, pillow and ball=.SDSPB.
structure, depositional, ripple lamination=.SDSLR.
structure, depositional, ripple lamination, climbing=.SDSLRC.
structure, depositional, sole marks=.SDSSM.
structure, depositional, variable=.SDSV.

structure, igneous, cumulate layering=.SFEC.
structure, igneous, flow banded=.SFEB.
structure, igneous, flow foliation=.SFEFF.
structure, igneous, gneissose (compositional layering)=.SFEG.
structure, igneous, inclusions locally=.SFEIL.
structure, igneous, inclusion-rich=.SFEIR.
structure, igneous, igneous rock intermingled with country rock=.SFER.
structure, igneous, massive fabric=.SFEFM.
structure, igneous, migmatitic injection structures=.SFEM.
structure, igneous, schlieren=.SFES.

structure, metamorphic, gneissic foliation=.SFMOG.
structure, metamorphic, lineated=.SFML.
structure, metamorphic, migmatitic layering=.SFMYM.
structure, metamorphic, mullions=.SFMMU.
structure, metamorphic, schistose foliation=.SFMOS.
structure, metamorphic, S-C structures=.SFMSC.
structure, metamorphic, slaty cleavage=.SFMK.
structure, metamorphic, variable=.SMTV.

structure, post-depositional=.SPD.
structure, post-depositional, blebs, carbonate rocks=.SPDCB.
structure, post-depositional, calcite fillings, post depositional feature, carbonate rocks=.SPDC.
structure, post-depositional, de-watering structure=.SDWS.
structure, post-depositional, fractures, post depositional feature, carbonate rocks=.SPDCF.
structure, post-depositional, fenestrae, post depositional feature, carbonate rocks=.SPDF.
structure, post-depositional, karst collapse structures, post depositional feature, carbonate rocks=.SPDK.
structure, post-depositional, dissolution breccia, post depositional feature, carbonate rocks=.SPDB.
structure, post-depositional, stringers, post depositional feature, carbonate rocks=.SPDCS.
structure, post-depositional, tepee structures, post depositional feature, carbonate rocks=.SPDT.
structure, post-depositional, vugs, post depositional feature, carbonate rocks=.SPDCV.

subangular grain shape=.GSHG.
subangular to subrounded grain shape=.GSHGD.
subangular to rounded grain shape=.GSHGR.
subrounded grain shape=.GSHD.
subrounded to rounded grain shape=.GSHDR.

subtidal (platform-carbonate regime)=.PLAB.
subtidal (inner-shelf regime)=.CTMSIS.

subtidal (outer-shelf regime)=.CTMSOS.
subtidal (shelf)=.CTMSS.
subtidal deposit (surficial deposit)=.SURMS.

sugary dolomite=.RXFS.
sugary texture=.RXFS.

sulphide mineralization=.MINTS.
sulphide mineralization, iron sulphide=-SFE-
sulphide mineralization, lead sulphide=-SPB-
sulphide mineralization, mercury sulphide=-SHG-

surface armor=.SAR.
surface armor, no pavement=.SARN.
surface armor, slight pavement=.SARS.
surface armor, moderate pavement=.SARM.
surface armor, hard pavement slightly degraded=.SARHSD.
surface armor, degraded relict pavement=.SARDRP.

surface dissection=.SDI.
surface dissection, none=.SDIN.
surface dissection, non-dissected to slightly dissected=.SDINS.
surface dissection, slight=.SDIS.
surface dissection, slight to moderate=.SDISM.
surface dissection, moderate=.SDIM.
surface dissection, moderate to well=.SDIMW.
surface dissection, well=.SDIW.

surface morphology=.SMO.
surface morphology largely degraded=.SMOD.
surface morphology largely preserved=.SMOP.
surface morphology largely preserved, alluvial-flat setting=.SMOPA.
surface morphology largely preserved, anastomosing channels=.SMOPC.
surface morphology largely preserved, bar and swale=.SMOPB.
surface morphology largely preserved, debris-flow lobe=.SMOPD.
surface morphology largely preserved, eolian dunes=.SMOPE.
surface morphology largely preserved, hillslope sediment veneer=.SMOPV.
surface morphology largely preserved, hummocky ground=.SMOPH.
surface morphology largely preserved, morainal ridges=.SMOPM.
surface morphology largely preserved, rock-avalanche ridges=.SMOPR.
surface morphology largely preserved, talus cone=.SMOPT.
surface morphology largely preserved, scree slope=.SMOPS.

surface soil=.SSO.
surface soil, no pedogenic soil=.SSON.
surface soil, soil degraded=.SSOD.

surface soil, calcic soil, stage I K horizon=.SSOK1.
surface soil, calcic soil, stage II K horizon=.SSOK2.

surface soil, calcic soil, stage III K horizon=.SSOK3.
surface soil, calcic soil, stage IV K horizon=.SSOK4.
surface soil, calcic soil, stage V K horizon=.SSOK5.
surface soil, calcic soil, stage VI K horizon=.SSOK6.

surface soil, non-calcic soil=.SSONC.
surface soil, non-calcic soil, weak A horizon soil=.SSOAW.
surface soil, non-calcic soil, A/C-horizon soil=.SSOAC.
surface soil, non-calcic soil, A/Bw/C-horizon soil=.SSOABW.
surface soil, non-calcic soil, A/C/Bcambic soil=.SSOBC.
surface soil, non-calcic soil, moderate Bt soil=.SSOBTM.
surface soil, non-calcic soil, strong Bt soil=.SSOBTS.

surface soil, non-calcic soil, soil development weak=.SSOW.

surface soil, non-calcic soil, soil development moderate=.SSOM.
surface soil, non-calcic soil, soil development strong=.SSOS.

surface soil, silicic soil=.SSOSI.
surface soil, silicic soil, duripan soil=.SSOSID.
surface soil, silicic soil, silcrete=.SSOSIDS.

surface varnish=.SVR.
surface varnish, moderate=.SVRM.
surface varnish, none=.SVRN.
surface varnish, slight=.SVRS.
surface varnish, strong=.SVRT.

surficial deposit=.SUR.

surficial deposit, alluvial=.SURA.
surficial deposit, alluvial, alluvial-fan=.SURAF.
surficial deposit, alluvial, alluvial-valley=.SURAA.
surficial deposit, alluvial, modern wash=.ALLMW.
surficial deposit, alluvial, modern wash, active=.SURAWA.
surficial deposit, alluvial, modern wash, intermittent=.SURAWI.
surficial deposit, alluvial, modern wash, older=.SURAWO.
surficial deposit, alluvial, pediment veneer=.SURAP.

surficial deposit, eolian=.SURE.
surficial deposit, eolian, dune deposit=.SURED.
surficial deposit, eolian, sheet deposit=.SURES.
surficial deposit, eolian, unspecified=.SUREU.

surficial deposit, glacial=.SURG.
surficial deposit, glacial, alpine deposit=.SURGA.
surficial deposit, glacial, continental deposit=.SURGC.
surficial deposit, glacial, morainal deposit=-MOR-
surficial deposit, glacial, outwash deposit=-OUT-
surficial deposit, glacial, unspecified deposit=.SURGU.

surficial deposit, hillslope=.SURH.
surficial deposit, hillslope, colluvium deposit=.SURHC.
surficial deposit, hillslope, slopewash deposit=.SURHS.
surficial deposit, hillslope, talis deposit=.SURHT.
surficial deposit, hillslope, unspecified deposit=.HILUN.

surficial deposit, lacustrine=.SURL.
surficial deposit, lacustrine, bar=-LAKB-
surficial deposit, lacustrine, carbonate flat=-LAKC-
surficial deposit, lacustrine, delta=-LAKD-
surficial deposit, lacustrine, fresh water=-LAKH-
surficial deposit, lacustrine, interdeltaic=-LAKI-
surficial deposit, lacustrine, lake floor=-LAKF-
surficial deposit, lacustrine, marginal lake=.SURLM.
surficial deposit, lacustrine, mud flat=-LAKM-
surficial deposit, lacustrine, open lake=.SURLO.
surficial deposit, lacustrine, saline=-LAKL-
surficial deposit, lacustrine, shore=-LAKS-

surficial deposit, marine=.SURM.
surficial deposit, marine, estuarine deposit=.SURME.
surficial deposit, marine, beach deposit=.SURMB.
surficial deposit, marine, salt marsh deposit=.SURMM.
surficial deposit, marine, tidal-channel deposit=.SURMT.
surficial deposit, marine, bay deposit=.SURMY.
surficial deposit, marine, subtidal deposit=.SURMS.

surficial deposit, playa=.SURP.

surficial deposit, playa, fluvial deposit=.SURPF.
surficial deposit, playa, lacustrine deposit=.SURPL.
surficial deposit, playa, lacustrine, lake bar deposit=-LAKB-
surficial deposit, playa, lacustrine, lake floor deposit=-LKF-
surficial deposit, playa, lacustrine, lake shore deposit=-LAKS-
surficial deposit, playa, sheetwash deposit=.SURPS.

surficial deposit, slope failure=.SURS.
surficial deposit, slope failure, debris flow deposit=.SURSD.
surficial deposit, slope failure, displaced block=-DBL-
surficial deposit, slope failure, displaced block with internal stratigraphy intact=-DBLS-
surficial deposit, slope failure, displaced rubble=-DRUB-
surficial deposit, slope failure, displaced rubble and blocks=-DRB-
surficial deposit, slope failure, character unspecified=-CHUN-
surficial deposit, slope failure, landslide deposit=.SURSL.
surficial deposit, slope failure, gravity slide deposit=.SURSG.
surficial deposit, slope failure, rock avalanche deposit=.SURSA.
surficial deposit, slope failure, rock fall deposit=.SURSF.
surficial deposit, slope failure, sackungen deposit=.SURSS.
surficial deposit, slope failure, displaced rubble=-DRUB-

surficial deposit, weathered or modified parent material=.SURW.
surficial deposit, weathered or modified parent material, regolith/pedogenic soil=.RPS.

surficial deposit, unspecified=.SSUN.

SURFICIAL DEPOSIT, SAND AND GRAVEL DEPOSITS=.SGD.
surficial deposit, gravelly deposit=.SGDG.
surficial deposit, gravel=.GVL.
surficial deposit, gravel, boulder =.GVLB.
surficial deposit, gravel, cobble-boulder =.GVLCB.
surficial deposit, gravel, pebble-boulder =.GVLPB.
surficial deposit, gravel, cobble =.GVLC.
surficial deposit, gravel, pebble-cobble=.GVLPC.
surficial deposit, gravel, pebble=.GVLP.
surficial deposit, gravel, granule-pebble=.GVLGP.
surficial deposit, gravel, granule=.GVLG.
surficial deposit, gravel, muddy=.GVLM.
surficial deposit, gravel, sandy=.GVLS.
surficial deposit, gravel, gravel, sandy cobble=.GVLSC.
surficial deposit, gravel, sandy granule=.GVLSG.
surficial deposit, gravel, sandy granule pebble=.GVLSGP.
surficial deposit, gravel, sandy pebble=.GVLSP.
surficial deposit, gravel, gravel, sandy pebble cobble=.GVLSPC.
surficial deposit, gravel and mud interbedded=-GMI-

surficial deposit, gravel dominant over sand=.SGDGD.
surficial deposit, sand and gravel, subequal mixture=.SGDQ.
surficial deposit, sand and gravel, sand dominant=.SGDSD.
surficial deposit, sand having gravel component=-SGC-
surficial deposit, sand layers and gravel layers interbedded=-SGI-
surficial deposit, sand and mud interbedded=-SMI-

surficial deposit, sand, bouldery=.SNDGB.
surficial deposit, sand, clay-bearing=.SNDCL.
surficial deposit, sand, clay- and silt-bearing=.SNDCLML.
surficial deposit, sand, cobbly and bouldery=.SNDGCB.
surficial deposit, sand, cobbly=.SNDGC.
surficial deposit, sand, cobbly and pebbly=.SNDGPC.
surficial deposit, sand, cobbly pebble-granule=.SNDGCPG.
surficial deposit, sand, granule-bearing=.SNDGGB.
surficial deposit, sand, gravelly=.SNDG.
surficial deposit, sand, muddy=.SNDMY.
surficial deposit, sand, pebbly=.SNDGP.

surficial deposit, sand, pebbly granule-bearing=.SNDGPGB.

surficial deposit, sandy deposit=.SGDS.
surficial deposit, sand=.SND.
surficial deposit, sand, very coarse=.SNDVFC.
surficial deposit, sand, coarse to very coarse=.SNDCVC.
surficial deposit, sand, coarse=.SNDC.
surficial deposit, sand, medium to very coarse=.SNDMVC.
surficial deposit, sand, medium to coarse=.SNDMC.
surficial deposit, sand, medium=.SNDM.
surficial deposit, sand, fine to very coarse=.SNDFVC.
surficial deposit, sand, fine to coarse=.SNDFC.
surficial deposit, sand, fine to medium=.SNDFM.
surficial deposit, sand, fine=.SNDF.
surficial deposit, sand, very fine to coarse=.SNDVFC.
surficial deposit, sand, very fine to medium=.SNDVFM.
surficial deposit, sand, very fine to fine=.SNDVFF.
surficial deposit, sand, very fine=.SNDVF.
surficial deposit, sand=.SND.

surficial deposit, sand, silty=.SNDML.
surficial deposit, sand, silty, medium to coarse=.SNDMLMC.
surficial deposit, sand, silty, fine to coarse=.SNDMLFC.
surficial deposit, sand, silty, very fine to coarse=.SNDMLVFC.
surficial deposit, sand, silty, medium=.SNDMLM.
surficial deposit, sand, silty, fine to medium=.SNDMLFM.
surficial deposit, sand, silty, very fine to medium=.SNDMLVFM.
surficial deposit, sand, silty, fine=.SNDMLF.
surficial deposit, sand, silty, very fine to fine=.SNDMLVFF.
surficial deposit, sand, silty, very fine=.SNDMLVF.
surficial deposit, sand, silty, fine=.SNDMLF.
surficial deposit, sand, silty, very fine=.SNDMLVF.

SURFICIAL DEPOSIT, SILTY DEPOSITS=.SLT.
surficial deposit, silt=.SLTML.
surficial deposit, silt, gravelly=.SLTMLG.
surficial deposit, silt, muddy=.SLTMLM.
surficial deposit, silt, sandy=.SLTMLS.

SURFICIAL DEPOSIT, CLAY AND MUD DEPOSITS=.CLM.
surficial deposit, clay=.CLMCL.
surficial deposit, clay, gravelly=.CLMCLG.
surficial deposit, clay, sandy=.CLMCLS.
surficial deposit, clay, silty=.CLMCLML.
surficial deposit, clay=.CLMCL.
surficial deposit, clay and mud=.CLM.
surficial deposit, mud, gravelly=.CLMMG.
surficial deposit, mud, sandy=.CLMMS.
surficial deposit, mud, silty=.CLMMML.
surficial deposit, mud=.CLMM.

surficial deposit, sand, silt, and clay, interbedded=-SSC-

syenite=.SYN.
syenite, quartz=.SYNQ.
syenogranite=.SGR.

talc=.MMMTA.
talus cone=.SMOPT.
talus deposit=.SURHT.

tectonic rock assemblage=.TEC.
tectonic rock assemblage, broken formation=.TECB.
tectonic rock assemblage, fault-bound rock body=.TECB.

tectonic rock assemblage, melange assemblage=.TECM.
tectonic rock assemblage, olistostrome=.TECO.
tectonic rock assemblage, unspecified=.TECU.

tepee structures (dissolution features, carbonate rocks)=.SPDT.

tephrochronology, polygon-age basis=.TEP.
tephrochronology, polygon-age basis, age is certain=.TEPC.
tephrochronology, polygon-age basis, age is uncertain=.TEPU.

Tertiary=.CZOT.

texture, igneous, amygdaloidal=.TIGA.
texture, igneous, equigranular=.TIGE.
texture, igneous, granitic=.TIGG.
texture, igneous, porphyritic=.TIGP.
texture, igneous, porphyritic locally=.TIGPL.
texture, igneous, seriate=.TIGS.
texture, igneous, variable=.TIGV.

texture, recrystallized (carbonate rocks)=.RXF.
texture, recrystallized, sugary (carbonate rocks)=.RXFS.

Tiffanian land-mammal agE=.LMAF.
tonalite=.TON.
tonalite=.TOND.
Torrejonian land-mammal age=.LMAT.
tourmaline=.MMMT.

trachyte=.TRC.
trachyte, alkalic=.TRCA.
trachyte, quartzose=.TRCQ.
trachyte, quartzose, alkalic=.TRCQA.
tremolite=.MMMTR.
Triassic=.MZOT.
Triassic, early=.MZOTE.
Triassic, late=.MZOTL.
trilobite skeletal fragments=.GCOKT.
trondhjemite=.TRJ.
tuff=.IGNPT.
tuff, air-fall=.IGNPTFA.
tuff, air-fall, not reworked=-TNRW-
tuff, air-fall, reworked=-TRW-
tuff, ash-flow=.IGNPTFL.

Uintan land-mammal age=.LMAU.
Ulatizian West Coast foraminiferal stage=.WCFU.

ultramafic rocks=.UMR.
ultramafic rocks, dunite=.UMRN.
ultramafic rocks, peridotite=.UMRP.
ultramafic rocks, pyroxenite=.UMRY.
ultramafic rocks, occuring within mapped sedimentary unit=-UMF-
unpublished observation by other workers, basis for geologic-unit identification based=-PUBWU-

unconsolidated=.CONUCS.
unconsolidated to slightly consolidated=.CONUCS.

U-Pb isotopic-age determination (isochron age)=.ISOUPI.
U-Pb isotopic-age determination (is not isochron age)=.ISOUPN.
U-Pb isotopic-age determination from zircon=.ISOUPZ.
U-Pb isotopic-age determination from sphene=.ISOUPS.
U-Pb isotopic-age determination from monazite=.ISOUPM.
U-Pb isotopic-age determination from other=.ISOUPO.

unmapped rocks included in map unit=.URCS.
unmapped rocks included in map unit, igneous rock=.URCSI.
unmapped rocks included in map unit, igneous rock, granitic=.URCSIG.
unmapped rocks included in map unit, igneous rock, granitic, monzogranite=.URCSIGM.
unmapped rocks included in map unit, igneous rock, granitic, granodiorite=.URCSIGG.
unmapped rocks included in map unit, igneous rock, dioritic=.URCSID.
unmapped rocks included in map unit, metamorphic=.URCSM.
unmapped rocks included in map unit, metamorphic, metasedimentary=.URCSMS.
unmapped rocks included in map unit, metamorphic, metasedimentary, marble=.URCSMSM.
unmapped rocks included in map unit, metamorphic, metasedimentary, metaquartzite=.URCSMSQ.
unmapped rocks included in map unit, metamorphic, metasedimentary, metasandstone=.URCSMSS.
unmapped rocks included in map unit, metamorphic, metaigneous=.URCSMI.
unmapped rocks included in map unit, metaigneous, amphibolite=.URCSMIA.
unmapped rocks included in map unit, metaigneous, metavolcanic=.URCSMIV.
unmapped rocks included in map unit, metaigneous, metavolcanic, metabasalt=.URCSMIVB.
unmapped rocks included in map unit, strain dominated=.URCSD.
unmapped rocks included in map unit, strain dominated, cataclastic rock=.URCSDC.
unmapped rocks included in map unit, strain dominated, mylonitic rock=.URCSDM.
unmapped rocks included in map unit, strain dominated, sheared rock=.URCSDS.

unmapped rock occuring in map unit=.URC.

unmapped rock occuring in map unit, same age=.URCS.
unmapped rock occuring in map unit, same age, igneous=.URCSI
unmapped rock occuring in map unit, same age, igneous, granitic rock=.URCSIG.
unmapped rock occuring in map unit, same age, igneous, granodiorite=.URCSIGG.
unmapped rock occuring in map unit, same age, igneous, monzogranite=.URCSIGM.
unmapped rock occuring in map unit, same age, igneous, dioritic rock=.URCSID.
unmapped rock occuring in map unit, same age, metamorphic=.URCSM.
unmapped rock occuring in map unit, same age, metamorphic, metasedimentary=.URCSMS.
unmapped rock occuring in map unit, same age, metamorphic, marble=.URCSMSM.
unmapped rock occuring in map unit, same age, metamorphic, metaquartzite=.URCSMSQ.
unmapped rock occuring in map unit, same age, metamorphic, schist=.URCSMSS.
unmapped rock occuring in map unit, same age, metaigneous=.URCSMI.
unmapped rock occuring in map unit, same age, metaigneous, amphibolite=.URCSMIA.
unmapped rock occuring in map unit, same age, metaigneous, metavolcanic=.URCSMIV.
unmapped rock occuring in map unit, same age, metaigneous, greenstone (metabasalt)=.URCSMIVG.
unmapped rock occuring in map unit, same age, strain-dominated rock=.URCSD.
unmapped rock occuring in map unit, same age, strain-dominated rock, cataclastic=.URCSDC.
unmapped rock occuring in map unit, same age, strain-dominated rock, mylonitic=.URCSDM.
unmapped rock occuring in map unit, same age, strain-dominated rock, sheared=.URCSDS.

unmapped rock occuring in map unit, older=.URCO.
unmapped rock occuring in map unit, older, undifferentiated country rock=.URCOC.
unmapped rock occuring in map unit, older, igneous=.URCOI.
unmapped rock occuring in map unit, older, igneous, granitic=.URCOIG.
unmapped rock occuring in map unit, older, igneous, granitic, Lowe pluton=.URCOIGL.
unmapped rock occuring in map unit, older, igneous, granitic, monzogranite=.URCOIGM.
unmapped rock occuring in map unit, older, igneous, granitic, granodiorite=.URCOIGG.
unmapped rock occuring in map unit, older, igneous, granitic, dioritic rock=.URCOID.
unmapped rock occuring in map unit, older, metamorphic=.URCOM.
unmapped rock occuring in map unit, older, metasedimentary=.URCOMS.
unmapped rock occuring in map unit, older, metasedimentary, marble=.URCOMSM.
unmapped rock occuring in map unit, older, metasedimentary, metaquartzite=.URCOMSQ.
unmapped rock occuring in map unit, older, metasedimentary, schist=.URCOMSS.
unmapped rock occuring in map unit, older, metaigneous=.URCOMI.
unmapped rock occuring in map unit, older, metaigneous, amphibolite=.URCOMIA.
unmapped rock occuring in map unit, older, strain-dominated=.URCOD.
unmapped rock occuring in map unit, older, strain-dominated, cataclastic=.URCODC.
unmapped rock occuring in map unit, older, strain-dominated, mylonitic=.URCODM.
unmapped rock occuring in map unit, older, strain-dominated, sheared=.URCODS.

unmapped rock occuring in map unit, younger=.URCY.

unmapped rock occuring in map unit, younger, igneous rock=.URCYI.
unmapped rock occuring in map unit, younger, igneous rock, aplite dikes=.URCYIA.
unmapped rock occuring in map unit, younger, igneous rock, basalt dikes=.URCYIB.
unmapped rock occuring in map unit, younger, igneous rock, dioritic rock=.URCYID.
unmapped rock occuring in map unit, younger, igneous rock, granitic rock=.URCYIG.
unmapped rock occuring in map unit, younger, igneous rock, granitic rock, monzogranite=.URCYIGM.
unmapped rock occuring in map unit, younger, igneous rock, granitic rock, granodiorite=.URCYIGG.
unmapped rock occuring in map unit, younger, sedimentary rock=.URCYS.
unmapped rock occuring in map unit, younger, strain-dominated=.URCYD.
unmapped rock occuring in map unit, younger, strain-dominated, cataclastic=.URCYDC.
unmapped rock occuring in map unit, younger, strain-dominated, mylonitic=.URCYDM.
unmapped rock occuring in map unit, younger, strain-dominated, sheared=.URCYDS.

Venturian West Coast foraminiferal stage=.WCFV.

very coarse sand=.SNDVFC.
very fine sand=.SNDVF.
very fine to coarse sand=.SNDVFC.
very fine to fine sand=.SNDVFF.
very fine to medium sand=.SNDVFM.

volcanic ash beds interbedded with another deposit=-IVA-
volcanic ash beds interbedded with another deposit, air-fall tuff=-IVAA-
volcanic ash beds interbedded with another deposit, ash-flow tuff=-IVAS-
volcanic ash beds (unmapped) interbedded with sedimentary rocks=.INSVA.

volcanic feeder=.IGNIV.
volcanic feeder, dike=.IGNIVK.
volcanic feeder, sill=.IGNIVS.
volcanic feeder, stock=.IGNIVO.
volcanic feeder, body type unspecified=.IGNIVU.

volcanic bodies (unmapped) interbedded with another unit=-IVB-
volcanic bodies (unmapped) interbedded with another unit, andesite flows and (or) plugs=-IVBA-
volcanic bodies (unmapped) interbedded with another unit, basalt=-IVBB-
volcanic bodies (unmapped) interbedded with another unit, basalt flows=-IVBBF-
volcanic bodies (unmapped) interbedded with another unit, basalt plugs=-IVBBP-
volcanic bodies (unmapped) interbedded with another unit, dacite-latite flows and (or) plugs=-IVBD-
volcanic bodies (unmapped) interbedded with sedimentary rocks=.INSVF.

volcaniclastic sedimentary rock=.SEDV.
volcaniclastic rocks (unmapped) interbedded with other sedimentary rocks=.INSVC.

volcaniclastic rock, agglomerate=.SEDVA.
volcaniclastic rock, conglomerate, volcanic =.SEDVC.
volcaniclastic rock, conglomerate, volcanic, sandy =.SEDVCS.
volcaniclastic rock, lahar=.SEDVL.
volcaniclastic rock, sandstone, volcanic =.SEDVS.
volcaniclastic rock, sandstone, volcanic, conglomeratic=.SEDVSC.
volcaniclastic rock, sandstone, volcanic, silty =.SEDVSM.
volcaniclastic rock, siltstone, volcanic=.SEDVM.
volcaniclastic rock, siltstone, volcanic, sandy=.SEDVMS.

volcanic rock, alkalic rhyolite=.RHYA.
volcanic rock, andesite, quartzose=.ANDQ.
volcanic rock, basalt=.BSL.
volcanic rock, composition heterogeneous=.VOLH.
volcanic rock, composition quartz-poor, unspecified=.VOLQPU.
volcanic rock, composition quartz-poor, variable=.VOLQPV.
volcanic rock, composition quartz-poor=.VOLQP.
volcanic rock, composition quartz-rich, unspecified=.VOLQRU.
volcanic rock, composition quartz-rich, variable=.VOLQRV.
volcanic rock, composition quartz-rich=.VOLQR.
volcanic rock, composition unspecified=.VOLU.

volcanic rock, composition variable=.VOLV.

volcanic rock=.VOL.
volcanic rock, dacite=.DAC.
volcanic rock, latite, quartzose=.LATQ.
volcanic rock, latite=.LAT.
volcanic rock, rhyodacite=.DACR.
volcanic rock, rhyolite=.RHY.
volcanic rock, trachyte, alkalic=.TRCA.
volcanic rock, trachyte, quartzose alkalic=.TRCQA.
volcanic rock, trachyte, quartzose=.TRCQ.
volcanic rock, trachyte=.TRC.

volcanogenic depositional setting=.VOLG.
vugs (calcite fillings, carbonate rocks)=.SPDCV.

Wasatchian land-mammal age=.LMAS.
weathered or modified parent material=.SURW.
weathered, slightly=.OGMWSL.
weathered, substantially=.OGMWSU.
weathered, strongly=.OGMWST.

West coast foraminiferal stages=.WCF.
West coast foraminiferal stages, Bulitian=.WCFB.
West coast foraminiferal stages, Danian=.WCFA.
West coast foraminiferal stages, Delmontian=.WCFD.
West coast foraminiferal stages, Delmontian=.WCFD.
West coast foraminiferal stages, Hallian=.WCFH.
West coast foraminiferal stages, Luisian=.WCFL.
West coast foraminiferal stages, Mohnian=.WCFM.
West coast foraminiferal stages, Narizian=.WCFN.
West coast foraminiferal stages, Penutian=.WCFP.
West coast foraminiferal stages, Refugian=.WCFF.
West coast foraminiferal stages, Relizian=.WCFR.
West coast foraminiferal stages, Repettian=.WCFT.
West coast foraminiferal stages, Saucesian=.WCFS.
West coast foraminiferal stages, Ulatizian=.WCFU.
West coast foraminiferal stages, Venturian=.WCFV.
West coast foraminiferal stages, Wheelerian=.WCFW.
West coast foraminiferal stages, Ynezian=.WCFY.
West coast foraminiferal stages, Zemorrian=.WCFZ.
West coast foraminiferal stages, Zemorrian=.WCFZ.

Wheelerian West Coast foraminiferal stage=.WCFW.
Whitneyan land-mammal age=.LMAW.
winged porphyroclasts=.SDFPTW.
wollastonite=.MMMW.

xenoblastic=.MGSX.
xenoliths=.XEN.
xenoliths, local country rock=.XENL.
xenoliths, olivine=.XENO.
xenoliths, ultramafic=.XENU.

Ynezian West Coast foraminiferal stage=.WCFY.

Zemorrian West Coast foraminiferal stage=.WCFZ.
zeolite facies=.MGDZ.
zircon=.MACZ.
zoisite (metamorphic mineral)=.MMMZ.

POLYGON-ATTRIBUTE CODES (alphabetic listing by code)

Version 1.0

U.S. Geological Survey, Southern California Areal Mapping Project

-ACZOTE=alteration age, Tertiary, Early
-ACZOTL=alteration age, Tertiary, Late
-ACZOTM=alteration age, Tertiary, Middle
-ADMC=admixture to sedimentary deposit, colluvial admixture
-ADME=admixture to sedimentary deposit, eolian admixture
-AMMLLME=age of metamorphism, lower limit post-Mesozoic, early
-AMMLLML=age of metamorphism, lower limit post-Mesozoic, late
-AMMLLMM=age of metamorphism, lower limit post-Mesozoic, middle
-AMMLLN=age of metamorphism, lower limit post-Neogene
-AMMLLP=age of metamorphism, lower limit post-Paleogene
-AMMLUM=age of metamorphism, delimited to pre-Mesozoic
-AMMLUME=age of metamorphism, delimited to pre-Mesozoic, early
-AMMLUML=age of metamorphism, delimited to pre-Mesozoic, late
-AMMLUMM=age of metamorphism, delimited to pre-Mesozoic, middle
-AMMLUN=age of metamorphism, delimited to pre-Neogene
-AMMLUP=age of metamorphism, delimited to pre-Paleogene
-AMZOE=alteration age, Mesozoic, Early
-AMZOL=alteration age, Mesozoic, Late
-AMZOM=alteration age, Mesozoic, Middle
-ANGN-alteration age, Neogene
-APGN-alteration age, Paleogene
-APH=geologic-unit identification based on air-photo interpretation
-APZOE=alteration age, Paleozoic, Early
-APZOL=alteration age, Paleozoic, Late
-APZOM=alteration age, Paleozoic, Middle
.AAL=alteration age, polygon contains information about
.AALK=alteration age, known
.AALKC=alteration age, known, age certain
.AALKL=alteration age, known, age likely but not certain
.AALKQ=alteration age, known, age questionable
.AALL=alteration age, limiting age determined
.AALLL=alteration age, lower limiting age determined
.AALLLA=alteration age, lower limiting age determined, post-Archean
.AALLLAER=alteration age, lower limiting age determined, post-Proterozoic early
.AALLLAMR=alteration age, lower limiting age determined, post-Proterozoic, middle
.AALLLM=alteration age, lower limiting age determined, post-Mesozoic
.AALLLMA=alteration age, lower limiting age determined, post-Paleocene
.AALLLMAEO=alteration age, lower limiting age determined, post-Eocene early
.AALLLMAME=alteration age, lower limiting age determined, post- Eocene, middle
.AALLLME=alteration age, lower limiting age determined, post-Eocene
.AALLLMEA=alteration age, lower limiting age determined, post-Paleocene early
.AALLLMEEO=alteration age, lower limiting age determined, post-Oligocene early
.AALLLMM=alteration age, lower limiting age determined, post-Miocene
.AALLLMMEP=alteration age, lower limiting age determined, post-Pliocene early
.AALLLMO=alteration age, lower limiting age determined, post-Oligocene
.AALLLMOEM=alteration age, lower limiting age determined, post-Miocene early
.AALLLMOMM=alteration age, lower limiting age determined, post- Miocene, middle
.AALLLP=alteration age, lower limiting age determined, post-Paleozoic
.AALLLPET=alteration age, lower limiting age determined, post-Triassic early
.AALLLPJ=alteration age, lower limiting age determined, post-Jurassic
.AALLLPJEK=alteration age, lower limiting age determined, post-Cretaceous early
.AALLLPT=alteration age, lower limiting age determined, post-Triassic
.AALLLPTEJ=alteration age, lower limiting age determined, post-Jurassic early
.AALLLR=alteration age, lower limiting age determined, post-Proterozoic
.AALLLRC=alteration age, lower limiting age determined, post-Cambrian
.AALLLRCEO=alteration age, lower limiting age determined, post-Ordovician early
.AALLLRD=alteration age, lower limiting age determined, post-Devonian
.AALLLRDEM=alteration age, lower limiting age determined, post-Mississippian early

.AALLLREC=alteration age, lower limiting age determined, post-Cambrian early
.AALLLRM=alteration age, lower limiting age determined, post-Mississippian
.AALLLRMEP=alteration age, lower limiting age determined, post-Pennsylvanian early
.AALLLRO=alteration age, lower limiting age determined, post-Ordovician
.AALLLROES=alteration age, lower limiting age determined, post-Silurian early
.AALLLRP=alteration age, lower limiting age determined, post-Pennsylvanian
.AALLLRPER=alteration age, lower limiting age determined, post-Permian early
.AALLLRS=alteration age, lower limiting age determined, post-Silurian
.AALLLRSED=alteration age, lower limiting age determined, post-Devonian early
.AALLLT=alteration age, lower limiting age determined, post-Tertiary
.AALLLTEP=alteration age, lower limiting age determined, post-Pleistocene early
.AALLLTMP=alteration age, lower limiting age determined, post-Pleistocene, middle
.AALLLTP=alteration age, lower limiting age determined, post-Pleistocene
.AALLLTPEH=alteration age, lower limiting age determined, post-Holocene early
.AALLLTPMH=alteration age, lower limiting age determined, post-Holocene, middle
.AALLU=alteration age, limiting age determined, upper
.AALLUC=alteration age, upper limiting age determined, pre-Cenozoic
.AALLUCJ=alteration age, upper limiting age determined, pre-Jurassic
.AALLUCK=alteration age, upper limiting age determined, pre-Cretaceous
.AALLUCLJ=alteration age, upper limiting age determined, pre-Jurassic, late
.AALLUCLK=alteration age, upper limiting age determined, pre-Cretaceous, late
.AALLUCLT=alteration age, upper limiting age determined, pre-Triassic, late
.AALLUD=alteration age, upper limiting age determined, pre-Modern
.AALLUH=alteration age, upper limiting age determined, pre-Holocene
.AALLULH=alteration age, upper limiting age determined, pre-Holocene, late
.AALLULP=alteration age, upper limiting age determined, pre-Pleistocene, late
.AALLUM=alteration age, upper limiting age determined, pre-Mesozoic
.AALLUMD=alteration age, upper limiting age determined, pre-Devonian
.AALLUMH=alteration age, upper limiting age determined, pre-Holocene, middle
.AALLUMLC=alteration age, upper limiting age determined, pre-Cambrian, late
.AALLUMLD=alteration age, upper limiting age determined, pre-Devonian, late
.AALLUMLM=alteration age, upper limiting age determined, pre-Mississippian, late
.AALLUMLO=alteration age, upper limiting age determined, pre-Ordovician, late
.AALLUMLP=alteration age, upper limiting age determined, pre-Pennsylvanian, late
.AALLUMLR=alteration age, upper limiting age determined, pre-late Permian
.AALLUMLS=alteration age, upper limiting age determined, pre-Silurian, late
.AALLUMM=alteration age, upper limiting age determined, pre-Mississippian
.AALLUMO=alteration age, upper limiting age determined, pre-Ordovician
.AALLUMP=alteration age, upper limiting age determined, pre-Pennsylvanian
.AALLUMP=alteration age, upper limiting age determined, pre-Pleistocene, middle
.AALLUMR=alteration age, upper limiting age determined, pre-Permian
.AALLUMS=alteration age, upper limiting age determined, pre-Silurian
.AALLUP=alteration age, upper limiting age determined, pre-Paleozoic
.AALLUPLP=alteration age, upper limiting age determined, pre-Proterozoic, late
.AALLUPMP=alteration age, upper limiting age determined, pre-Proterozoic, middle
.AALLUQ=alteration age, upper limiting age determined, pre-Quaternary
.AALLUQE=alteration age, upper limiting age determined, pre-Eocene
.AALLUQLA=alteration age, upper limiting age determined, pre-Paleocene, late
.AALLUQLA=alteration age, upper limiting age determined, pre-Paleocene, late
.AALLUQLE=alteration age, upper limiting age determined, pre- Eocene, late
.AALLUQLM=alteration age, upper limiting age determined, pre- Miocene, late
.AALLUQLO=alteration age, upper limiting age determined, pre-Oligocene, late
.AALLUQLP=alteration age, upper limiting age determined, pre-Pliocene, late
.AALLUQM=alteration age, upper limiting age determined, pre-Miocene
.AALLUQME=alteration age, upper limiting age determined, pre-Eocene, middle
.AALLUQMM=alteration age, upper limiting age determined, pre-Miocene, middle
.AALLUQO=alteration age, upper limiting age determined, pre-Oligocene
.AALLUQP=alteration age, upper limiting age determined, pre-Pliocene
.AALLUR=alteration age, upper limiting age determined, pre-Proterozoic
.AALU=alteration age, unknown
.ACZO=alteration age, Cenozoic
.ACZOQ=alteration age, Quaternary
.ACZOQH=alteration age, Holocene
.ACZOQHD=alteration age, Modern

.ACZOQHE=alteration age, Holocene, early
.ACZOQHL=alteration age, Holocene, late
.ACZOQHM=alteration age, Holocene, middle
.ACZOQP=alteration age, Pleistocene
.ACZOQPE=alteration age, Pleistocene, early
.ACZOQPL=alteration age, Pleistocene, late
.ACZOQPM=alteration age, Pleistocene, middle
.ACZOT=alteration age, Tertiary
.ACZOTA=alteration age, Paleocene
.ACZOTAE=alteration age, Paleocene, early
.ACZOTAL=alteration age, Paleocene, late
.ACZOTE=alteration age, Eocene
.ACZOTEE=alteration age, Eocene, early
.ACZOTEL=alteration age, Eocene, late
.ACZOTEM=alteration age, Eocene, middle
.ACZOTM=alteration age, Miocene
.ACZOTME=alteration age, Miocene, early
.ACZOTML=alteration age, Miocene, late
.ACZOTMM=alteration age, Miocene, middle
.ACZOTO=alteration age, Oligocene
.ACZOTOE=alteration age, Oligocene, early
.ACZOTOL=alteration age, Oligocene, late
.ACZOTP=alteration age, Pliocene
.ACZOTPE=alteration age, Pliocene, early
.ACZOTPL=alteration age, Pliocene, late
.ADF=deformation age, polygon contains information about
.ADFK=deformation age known, all types of deformation
.ADFKB=deformation age known, brecciation or shearing
.ADFKBC=deformation age known, brecciation or shearing, age certain
.ADFKBL=deformation age known, brecciation or shearing, age likely but not certain
.ADFKBQ=deformation age known, brecciation or shearing, age questionable
.ADFKF=deformation age known, faulting
.ADFKFC=deformation age known, faulting, age certain
.ADFKFL=deformation age known, faulting, age likely but not certain
.ADFKO=deformation age known, folding
.ADFKOC=deformation age known, folding, age certain
.ADFKOL=deformation age known, folding, age likely but not certain
.ADFKOQ=deformation age known, folding, age questionable
.ADFKP=deformation age known, penetrative deformation
.ADFKPC=deformation age known, penetrative deformation, age certain
.ADFKPL=deformation age known, penetrative deformation, age likely but not certain
.ADFKPQ=deformation age known, penetrative deformation, age questionable
.ADFKQ=deformation age known, faulting, age questionable
.ADFKR=deformation age known, fracturing
.ADFKRC=deformation age known, fracturing, age certain
.ADFKRL=deformation age known, fracturing, age likely but not certain
.ADFKRQ=deformation age known, fracturing, age questionable
.ADFL=deformation age, limiting age determined
.ADFLL=deformation age, limiting age determined, lower
.ADFLLA=deformation age, lower limiting age determined, post-Archean
.ADFLLAER=deformation age, lower limiting age determined, post-early Proterozoic
.ADFLLAMR=deformation age, lower limiting age determined, post-middle Proterozoic
.ADFLLM=deformation age, lower limiting age determined, post-Mesozoic
.ADFLLMA=deformation age, lower limiting age determined, post-Paleocene
.ADFLLMAEO=deformation age, lower limiting age determined, post-early Eocene
.ADFLLMAME=deformation age, lower limiting age determined, post- middle Eocene
.ADFLLME=deformation age, lower limiting age determined, post-Eocene
.ADFLLMEA=deformation age, lower limiting age determined, post-early Paleocene
.ADFLLMEEO=deformation age, lower limiting age determined, post-early Oligocene
.ADFLLMM=deformation age, lower limiting age determined, post-Miocene
.ADFLLMMEP=deformation age, lower limiting age determined, post-early Pliocene
.ADFLLMO=deformation age, lower limiting age determined, post-Oligocene
.ADFLLMOEM=deformation age, lower limiting age determined, post-early Miocene
.ADFLLMOMM=deformation age, lower limiting age determined, post- middle Miocene

.ADFLLP=deformation age, lower limiting age determined, post-Paleozoic
.ADFLLPET=deformation age, lower limiting age determined, post-early Triassic
.ADFLLPJ=deformation age, lower limiting age determined, post-Jurassic
.ADFLLPJEK=deformation age, lower limiting age determined, post-early Cretaceous
.ADFLLPT=deformation age, lower limiting age determined, post-Triassic
.ADFLLPTEJ=deformation age, lower limiting age determined, post-early Jurassic
.ADFLLR=deformation age, lower limiting age determined, post-Proterozoic
.ADFLLRC=deformation age, lower limiting age determined, post-Cambrian
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.ADFLLREC=deformation age, lower limiting age determined, post-early Cambrian
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.ADFLLRMEP=deformation age, lower limiting age determined, post-early Pennsylvanian
.ADFLLRO=deformation age, lower limiting age determined, post-Ordovician
.ADFLLROES=deformation age, lower limiting age determined, post-early Silurian
.ADFLLRP=deformation age, lower limiting age determined, post-Pennsylvanian
.ADFLLRPER=deformation age, lower limiting age determined, post-early Permian
.ADFLLRS=deformation age, lower limiting age determined, post-Silurian
.ADFLLRSED=deformation age, lower limiting age determined, post-early Devonian
.ADFLLT=deformation age, lower limiting age determined, post-Tertiary
.ADFLLTEP=deformation age, lower limiting age determined, post-early Pleistocene
.ADFLLTMP=deformation age, lower limiting age determined, post-middle Pleistocene
.ADFLLTP=deformation age, lower limiting age determined, post-Pleistocene
.ADFLLTPEH=deformation age, lower limiting age determined, post-early Holocene
.ADFLLTPMH=deformation age, lower limiting age determined, post-middle Holocene
.ADFLU=deformation age, limiting age determined, upper
.ADFLUC=deformation age, upper limiting age determined, pre-Cenozoic
.ADFLUCJ=deformation age, upper limiting age determined, pre-Jurassic
.ADFLUCK=deformation age, upper limiting age determined, pre-Cretaceous
.ADFLUCLJ=deformation age, upper limiting age determined, pre-late Jurassic
.ADFLUCLK=deformation age, upper limiting age determined, pre-late Cretaceous
.ADFLUCLT=deformation age, upper limiting age determined, pre-late Triassic
.ADFLUD=deformation age, upper limiting age determined, pre-Modern
.ADFLUH=deformation age, upper limiting age determined, pre-Holocene
.ADFLULH=deformation age, upper limiting age determined, pre-late Holocene
.ADFLULP=deformation age, upper limiting age determined, pre-late Pleistocene
.ADFLUM=deformation age, upper limiting age determined, pre-Mesozoic
.ADFLUMD=deformation age, upper limiting age determined, pre-Devonian
.ADFLUMH=deformation age, upper limiting age determined, pre-middle Holocene
.ADFLUMLC=deformation age, upper limiting age determined, pre-late Cambrian
.ADFLUMLD=deformation age, upper limiting age determined, pre-late Devonian
.ADFLUMLM=deformation age, upper limiting age determined, pre-late Mississippian
.ADFLUMLO=deformation age, upper limiting age determined, pre-late Ordovician
.ADFLUMLP=deformation age, upper limiting age determined, pre-late Pennsylvanian
.ADFLUMLR=deformation age, upper limiting age determined, pre-late Permian
.ADFLUMLS=deformation age, upper limiting age determined, pre-late Silurian
.ADFLUMM=deformation age, upper limiting age determined, pre-Mississippian
.ADFLUMO=deformation age, upper limiting age determined, pre-Ordovician
.ADFLUMP=deformation age, upper limiting age determined, pre-middle Pleistocene
.ADFLUMP=deformation age, upper limiting age determined, pre-Pennsylvanian
.ADFLUMR=deformation age, upper limiting age determined, pre-Permian
.ADFLUMS=deformation age, upper limiting age determined, pre-Silurian
.ADFLUP=deformation age, upper limiting age determined, pre-Paleozoic
.ADFLUPLP=deformation age, upper limiting age determined, pre-late Proterozoic
.ADFLUPMP=deformation age, upper limiting age determined, pre-middle Proterozoic
.ADFLUQ=deformation age, upper limiting age determined, pre-Quaternary
.ADFLUQE=deformation age, upper limiting age determined, pre-Eocene
.ADFLUQLA=deformation age, upper limiting age determined, pre-late Paleocene
.ADFLUQLE=deformation age, upper limiting age determined, pre- late Eocene
.ADFLUQLM=deformation age, upper limiting age determined, pre- late Miocene
.ADFLUQLO=deformation age, upper limiting age determined, pre-late Oligocene
.ADFLUQLP=deformation age, upper limiting age determined, pre-late Pliocene
.ADFLUQM=deformation age, upper limiting age determined, pre-Miocene

.ADFLUQME=deformation age, upper limiting age determined, pre-middle Eocene
.ADFLUQMM=deformation age, upper limiting age determined, pre-middle Miocene
.ADFLUQO=deformation age, upper limiting age determined, pre-Oligocene
.ADFLUQP=deformation age, upper limiting age determined, pre-Pliocene
.ADFLUR=deformation age, upper limiting age determined, pre-Proterozoic
.AFD=alluvial-fan deposit (bedrock)
.AFDD=alluvial-fan deposit, debris flow dominant (bedrock)
.AFDL=fan-delta deposit (bedrock)
.AFDLF=fan-delta deposit, delta-front (bedrock)
.AFDLP=fan-delta deposit, delta-plain (bedrock)
.AFDQ=alluvial-fan deposit, stream flow & debris flow subequal (bedrock)
.AFDS=alluvial-fan deposit, stream flow dominant (bedrock)
.AGU=geologic age, unknown
.ALP=sedimentary origin, alluvial-plain geographic setting
.ALR=alteration, polygon contains information about
.ALRL=alteration, local
.ALRLA=alteration, local, albitization
.ALRLC=alteration, local, chloritic,
.ALRLD=alteration, local, dolomitization
.ALRLG=alteration, local, greisenization (fluorine metasomatism)
.ALRLK=alteration, local, kaolinization (clay alteration)
.ALRLSA=alteration, local, saussuritic (epidotization)
.ALRLSE=alteration, local, sericitic
.ALRLSI=alteration, local, silicification
.ALRLT=alteration, local, toumalinization (boron metasomatism)
.ALRLZ=alteration, local, zeolitic
.ALRP=alteration, pervasive
.ALRPA=alteration, pervasive, albitization
.ALRPC=alteration, pervasive, chloritic
.ALRPD=alteration, pervasive, dolomitization
.ALRPG=alteration, pervasive, greisenization (fluorine metasomatism)
.ALRPK=alteration, pervasive, kaolinization (clay alteration)
.ALRPSA=alteration, pervasive, saussuritic (epidotization)
.ALRPSE=alteration, pervasive, sericitic
.ALRPSI=alteration, pervasive, silicification
.ALRPT=alteration, pervasive, toumalinization (boron metasomatism)
.ALRPZ=alteration, pervasive, zeolitic
.ALVP=alluvial-plain setting
.AMM=age of metamorphism, polygon contains information about
.AMMK=age of metamorphism known
.AMMKC=age of metamorphism known, certain
.AMMKL=age of metamorphism known, likely but not certain
.AMMKQ=age of metamorphism known, questionable
.AMML=age of metamorphism, delimiting-age determined
.AMMLL=age of metamorphism, delimiting-age determined, lower
.AMMLLA=age of metamorphism, lower limiting age determined, post-Archean
.AMMLLAER=age of metamorphism, lower limiting age determined, post-early Proterozoic
.AMMLLAMR=age of metamorphism, lower limiting age determined, post-middle Proterozoic
.AMMLLM=age of metamorphism, lower limiting age determined, post-Mesozoic
.AMMLLMA=age of metamorphism, lower limiting age determined, post-Paleocene
.AMMLLMAEO=age of metamorphism, lower limiting age determined, post-early Eocene
.AMMLLMAME=age of metamorphism, lower limiting age determined, post- middle Eocene
.AMMLLME=age of metamorphism, lower limiting age determined, post-Eocene
.AMMLLMEA=age of metamorphism, lower limiting age determined, post-early Paleocene
.AMMLLMEEO=age of metamorphism, lower limiting age determined, post-early Oligocene
.AMMLLMM=age of metamorphism, lower limiting age determined, post-Miocene
.AMMLLMMEP=age of metamorphism, lower limiting age determined, post-early Pliocene
.AMMLLMO=age of metamorphism, lower limiting age determined, post-Oligocene
.AMMLLMOEM=age of metamorphism, lower limiting age determined, post-early Miocene
.AMMLLMOMM=age of metamorphism, lower limiting age determined, post- middle Miocene
.AMMLLP=age of metamorphism, lower limiting age determined, post-Paleozoic
.AMMLLPET=age of metamorphism, lower limiting age determined, post-early Triassic
.AMMLLPJ=age of metamorphism, lower limiting age determined, post-Jurassic
.AMMLLPJEK=age of metamorphism, lower limiting age determined, post-early Cretaceous

.AMMLLPT=age of metamorphism, lower limiting age determined, post-Triassic
.AMMLLPTEJ=age of metamorphism, lower limiting age determined, post-early Jurassic
.AMMLLR=age of metamorphism, lower limiting age determined, post-Proterozoic
.AMMLLRC=age of metamorphism, lower limiting age determined, post-Cambrian
.AMMLLRCEO=age of metamorphism, lower limiting age determined, post-early Ordovician
.AMMLLRD=age of metamorphism, lower limiting age determined, post-Devonian
.AMMLLRDEM=age of metamorphism, lower limiting age determined, post-early Mississippian
.AMMLLREC=age of metamorphism, lower limiting age determined, post-early Cambrian
.AMMLLRM=age of metamorphism, lower limiting age determined, post-Mississippian
.AMMLLRMEP=age of metamorphism, lower limiting age determined, post-early Pennsylvanian
.AMMLLRO=age of metamorphism, lower limiting age determined, post-Ordovician
.AMMLLROES=age of metamorphism, lower limiting age determined, post-early Silurian
.AMMLLRP=age of metamorphism, lower limiting age determined, post-Pennsylvanian
.AMMLLRPER=age of metamorphism, lower limiting age determined, post-early Permian
.AMMLLRS=age of metamorphism, lower limiting age determined, post-Silurian
.AMMLLRSED=age of metamorphism, lower limiting age determined, post-early Devonian
.AMMLLT=age of metamorphism, lower limiting age determined, post-Tertiary
.AMMLLTEP=age of metamorphism, lower limiting age determined, post-early Pleistocene
.AMMLLTMP=age of metamorphism, lower limiting age determined, post-middle Pleistocene
.AMMLLTP=age of metamorphism, lower limiting age determined, post-Pleistocene
.AMMLLTPEH=age of metamorphism, lower limiting age determined, post-early Holocene
.AMMLLTPMH=age of metamorphism, lower limiting age determined, post-middle Holocene
.AMMLU=age of metamorphism, delimiting-age determined, upper
.AMMLUC=age of metamorphism, upper limiting age determined, pre-Cenozoic
.AMMLUCJ=age of metamorphism, upper limiting age determined, pre-Jurassic
.AMMLUCJLT=age of metamorphism, upper limiting age determined, pre-late Triassic
.AMMLUCK=age of metamorphism, upper limiting age determined, pre-Cretaceous
.AMMLUCKLJ=age of metamorphism, upper limiting age determined, pre-late Jurassic
.AMMLUCLK=age of metamorphism, upper limiting age determined, pre-late Cretaceous
.AMMLUD=age of metamorphism, upper limiting age determined, pre-Modern
.AMMLUH=age of metamorphism, upper limiting age determined, pre-Holocene
.AMMLUHLP=age of metamorphism, upper limiting age determined, pre-late Pleistocene
.AMMLUHMP=age of metamorphism, upper limiting age determined, pre-middle Pleistocene
.AMMLULH=age of metamorphism, upper limiting age determined, pre-late Holocene
.AMMLUM=age of metamorphism, upper limiting age determined, pre-Mesozoic
.AMMLUMD=age of metamorphism, upper limiting age determined, pre-Devonian
.AMMLUMDLD=age of metamorphism, upper limiting age determined, pre-late Silurian
.AMMLUMH=age of metamorphism, upper limiting age determined, pre-middle Holocene
.AMMLUMLR=age of metamorphism, upper limiting age determined, pre-late Permian
.AMMLUMM=age of metamorphism, upper limiting age determined, pre-Mississippian
.AMMLUMMLD=age of metamorphism, upper limiting age determined, pre-late Devonian
.AMMLUMO=age of metamorphism, upper limiting age determined, pre-Ordovician
.AMMLUMOLC=age of metamorphism, upper limiting age determined, pre-late Cambrian
.AMMLUMP=age of metamorphism, upper limiting age determined, pre-Pennsylvanian
.AMMLUMPLM=age of metamorphism, upper limiting age determined, pre-late Mississippian
.AMMLUMR=age of metamorphism, upper limiting age determined, pre-Permian
.AMMLUMRLP=age of metamorphism, upper limiting age determined, pre-late Pennsylvanian
.AMMLUMS=age of metamorphism, upper limiting age determined, pre-Silurian
.AMMLUMSLO=age of metamorphism, upper limiting age determined, pre-late Ordovician
.AMMLUP=age of metamorphism, upper limiting age determined, pre-Paleozoic
.AMMLUPLP=age of metamorphism, upper limiting age determined, pre-late Proterozoic
.AMMLUPMP=age of metamorphism, upper limiting age determined, pre-middle Proterozoic
.AMMLUQ=age of metamorphism, upper limiting age determined, pre-Quaternary
.AMMLUQE=age of metamorphism, upper limiting age determined, pre-Eocene
.AMMLUQELA=age of metamorphism, upper limiting age determined, pre-late Paleocene
.AMMLUQLP=age of metamorphism, upper limiting age determined, pre-late Pliocene
.AMMLUQM=age of metamorphism, upper limiting age determined, pre-Miocene
.AMMLUQMLO=age of metamorphism, upper limiting age determined, pre-late Oligocene
.AMMLUQO=age of metamorphism, upper limiting age determined, pre-Oligocene
.AMMLUQOLE=age of metamorphism, upper limiting age determined, pre- late Eocene
.AMMLUQOME=age of metamorphism, upper limiting age determined, pre-middle Eocene
.AMMLUQP=age of metamorphism, upper limiting age determined, pre-Pliocene
.AMMLUQPML=age of metamorphism, upper limiting age determined, pre- late Miocene
.AMMLUQPMM=age of metamorphism, upper limiting age determined, pre-middle Miocene

.AMMLUR=age of metamorphism, upper limiting age determined, pre-Proterozoic
.AMMU=age of metamorphism unknown
.AMZO=alteration age, Mesozoic
.AMZOJ=alteration age, Jurassic
.AMZOJE=alteration age, Jurassic, early
.AMZOJL=alteration age, Jurassic, late
.AMZOK=alteration age, Cretaceous
.AMZOKE=alteration age, Cretaceous, early
.AMZOKL=alteration age, Cretaceous, late
.AMZOT=alteration age, Triassic
.AMZOTE=alteration age, Triassic, early
.AMZOTL=alteration age, Triassic, late
.ANA=anorthosite
.ANAD=anorthosite (deformed)
.AND=andesite
.ANDD=andesite (deformed)
.ANDQ=quartz andesite
.ANDQD=quartz andesite (deformed))
.APRC=alteration age, Precambrian
.APRCA=alteration age, Archean
.APRCAE=alteration age, Archean, early
.APRCAL=alteration age, Archean, late
.APRCAM=alteration age, Archean, middle
.APRCP=alteration age, Proterozoic
.APRCPE=alteration age, Proterozoic, early
.APRCPL=alteration age, Proterozoic, late
.APRCPM=alteration age, Proterozoic, middle
.APZO=alteration age, Paleozoic
.APZOC=alteration age, Cambrian
.APZOCE=alteration age, Cambrian, early
.APZOCL=alteration age, Cambrian, late
.APZOD=alteration age, Devonian
.APZODE=alteration age, Devonian, early
.APZODL=alteration age, Devonian, late
.APZOM=alteration age, Mississippian
.APZOME=alteration age, Mississippian, early
.APZOML=alteration age, Mississippian, late
.APZOO=alteration age, Ordovician
.APZOOE=alteration age, Ordovician, early
.APZOOL=alteration age, Ordovician, late
.APZOP=alteration age, Pennsylvanian
.APZOPE=alteration age, Pennsylvanian, early
.APZOPL=alteration age, Pennsylvanian, late
.APZOR=alteration age, Permian
.APZORE=alteration age, Permian, early
.APZORL=alteration age, Permian, late
.APZOS=alteration age, Silurian
.APZOSE=alteration age, Silurian, early
.APZOSL=alteration age, Silurian, late
.ARK=arkose (sedimentary rock, feldspar-rich)
.ARN=arenite (sedimentary rock, quartz sandstone)
.ASF=ash-flow tuff
.ASR=altered and stained rock

-BFC=deltaic deposit, bay-fill deposit, crevasse-splay deposit
-BFI=deltaic deposit, bay-fill deposit, interdistributary bay deposit
-BFL=deltaic deposit, bay-fill deposit, levee deposit
-BFM=deltaic deposit, bay-fill deposit, marsh deposit
-BIN=geologic-unit identification based on binocular identification
-BRC=brecciated rock (shattered rock)
-BRCC=brecciated carbonate rock (shattered rock)
-BRCG=brecciated granitic rock (shattered rock)
-BRCGM=brecciated granitic and metamorphic rock (shattered rock)
-BRCM=brecciated metamorphic rock (shattered rock)

-BRCMM=brecciated marble (shattered rock)
-BRCMMG=brecciated marble, gray (shattered rock)
-BRCMMW=brecciated marble, white (shattered rock)
-BRCS=brecciated sedimentary rock (shattered rock)
-BRCX=brecciated mixed rock (shattered rock)
-BSA=Bouma-sequence interval A
-BSAB=Bouma-sequence interval AB
-BSABC=Bouma-sequence interval ABC
-BSABCD=Bouma-sequence interval ABCD
-BSB=Bouma-sequence interval B
-BSBC=Bouma-sequence interval BC
-BSBCD=Bouma-sequence interval BCD
-BSC=Bouma-sequence interval C
-BSCD=Bouma-sequence interval CD
-BSD=Bouma-sequence interval D
-BUPI=carbonate shelf deposit, inorganic buildup
-BUPIO=carbonate shelf deposit, oolitic shoal
-BUPM=carbonate shelf deposit, mud buildup
-BUPO=carbonate shelf deposit, organic buildup
-BUPOB=carbonate shelf deposit, bioherm deposit
-BUPOR=carbonate shelf deposit, reef deposit
-BUPOS=carbonate shelf deposit, skeletal-sand shoal deposit
.BAS=basin deposit
.BASC=basin deposit, convergent-margin
.BASCF=basin deposit, convergent-margin, forearc
.BASCI=basin deposit, convergent-margin, interarc and backarc
.BASCR=basin deposit, convergent-margin, retroarc (foreland)
.BASCT=basin deposit, convergent-margin, trenches and subduction
.BASD=basin deposit, divergent-margin
.BASDA=basin deposit, divergent-margin, aulacogen (failed rifts)
.BASDC=basin deposit, divergent-margin, continental-margin basin
.BASDCA=basin deposit, divergent-margin, Atlantic type
.BASDCR=basin deposit, divergent-margin, Red Sea type
.BASDR=basin deposit, divergent-margin, rift basins
.BASDRA=basin deposit, divergent-margin, rift basins, rifted arch basin
.BASDRH=basin deposit, divergent-margin, rift basins, half-graben basin
.BASDRR=basin deposit, divergent-margin, rift basins, rim basin
.BASDRS=basin deposit, divergent-margin, rift basins, sag basin
.BASG=basin deposit, generic
.BASI=basin deposit, interior basins
.BASK=basin deposit, cratonic basins
.BASO=basin deposit, oceanic
.BASS=basin deposit, continental-collision and suturing type
.BASSH=basin deposit, continental-collision, hinterland foreland
.BASSI=basin deposit, continental-collision, intrasuture embayment
.BASSP=basin deposit, continental-collision, peripheral type
.BAST=basin deposit, transform- and transcurrent-fault type
.BASTB=basin deposit, transform-type, braided-fault
.BASTF=basin deposit, transform-type, fault-termination
.BASTP=basin deposit, transform-type, pull-apart
.BASTT=basin deposit, transform-type, transrotational
.BDRK=bound rock
.BED=bedding, polygon contains information about
.BEDC=bedding, crude
.BEDI=bedding, indistinct
.BEDK=bedding, thick
.BEDKKV=bedding, thick to very thick
.BEDKV=bedding, very thick
.BEDL=bedding, laminated
.BEDM=bedding, medium
.BEDMK=bedding, medium to thick
.BEDMKV=bedding, medium to very thick
.BEDN=bedding, non-bedded
.BEDT=bedding, thin

.BEDTK=bedding, thin to thick
.BEDTKV=bedding, thin to very thick
.BEDTM=bedding, thin to medium
.BEDV=bedding, thickness variable
.BEDX=bedding, cross
.BRD=fluvial deposit, braided-channel facies
.BRDA=fluvial deposit, anastomosed-channel facies
.BRDB=fluvial deposit, braided-channel facies, low sinuosity, with alternate bars
.BRDS=fluvial deposit, braided-channel facies, sand-bed
.BRDSD=fluvial deposit, braided-channel facies, sand-bed, deep, perenniel
.BRDSF=fluvial deposit, braided-channel facies, sand-bed, sheetflood, distal
.BRDSH=fluvial deposit, braided-channel facies, sand-bed, high-energy
.BRDSS=fluvial deposit, braided-channel facies, sand-bed, shallow, perenniel
.BRK=bedrock
.BSL=basalt
.BSLD=basalt, deformed
.BSTD=dolomitic boundstone
.BSTL=lime boundstone

-CALC=calcrete unmapped within mapped geologic unit
-CCU=mineralization, copper carbonate
-CEM=cement type, polygon contains information about
-CEMC=cemented sedimentary rock, calcite cement
-CEMCY=cemented sedimentary rock, clay cement
-CEMH=cemented sedimentary rock, hematite cement
-CEMS=cemented sedimentary rock, silica cement
-CEMZ=cemented sedimentary rock, zeolitic cement
-CHAL=chalcedony (siliceous alteration)
-CHUN=landslide character unspecified
-CIM=carbonate impurities, polygon contains information about
-CIMDG=carbonate impurities, graphite, disseminated
-CIMDP=carbonate impurities, pyrite, disseminated
-CIMF=carbonate impurities, fetid odor
-CIMGS=carbonate impurities, graphite streaks
-CLC=caliche
-CLCN=caliche, non-pedogenic
-CLCNF=caliche filaments, non-pedogenic
-CLCNN=caliche nodules, non-pedogenic
-CLCNR=caliche-filled fractures, non-pedogenic
-CLCNS=caliche seams, non-pedogenic
-CLCP=caliche, pedogenic
-CPB=mineralization, lead carbonate
-CSB=gravity-driven deposit, catastrophic slide-breccia deposit (bedrock)
-CZN=mineralization, zinc carbonate
.CAG=geologic-unit confidence
.CAGE=geologic-unit I.D. based on extrapolation
.CAGEC=geologic-unit I.D. based on extrapolation, I.D. certain
.CAGEL=geologic-unit I.D. based on extrapolation, I.D. likely but not confirmed
.CAGEU=geologic-unit I.D. based on extrapolation, I.D.uncertain
.CAGF=geologic-unit I.D. based on field observation
.CAGFC=geologic-unit I.D. based on field observation, I.D. certain
.CAGFL=geologic-unit I.D. based on field observation, I.D. likely but not confirmed
.CAGFU=geologic-unit I.D. based on field observation, I.D.uncertain
.CCO=clast composition, polygon contains information about
.CCOA=clast sources in sedimentary unit, polygon contains information about
.CCOAC=sedimentary unit has clasts of Catalina Schist
.CCOAM=sedimentary unit has clasts of Mojave Desert type
.CCOAP=sedimentary unit has clasts of Peninsular Ranges type
.CCOAT=sedimentary unit has clasts of Transverse Ranges type
.CCOATB=sedimentary unit has clasts of San Bernardino Mts type
.CCOATBB=sedimentary unit has clasts of San Bernardino Mts type (Bighorn/Arrastre Canyon type)
.CCOATC=sedimentary unit has clasts of Chocolate Mountain type
.CCOATG=sedimentary unit has clasts of San Gabriel Mts type
.CCOATGL=sedimentary unit has clasts of San Gabriel Mts type, Lowe-type plutonic rock

.CCOATGP=sedimentary unit has clasts of San Gabriel Mts type, Pelona-type schist
.CCOATL=sedimentary unit has clasts of Little San Bernardino Mts type
.CCOD=clast composition, strain-dominated rock fragments
.CCODC=clast composition, cataclasite rock fragments
.CCODM=clast composition, mylonite rock fragments
.CCOI=clast composition, igneous rock fragments
.CCOIA=clast composition, aplite
.CCOIG=clast composition, pegmatite
.CCOIH=clast composition, hypabyssal
.CCOIP=clast composition, plutonic rock fragments
.CCOIPG=clast composition, plutonic rock fragments, granitic
.CCOIPGG=clast composition, plutonic rock fragments, granitic, granodioritic
.CCOIPGL=clast composition, plutonic rock fragments, granitic, muscovite leucogranite
.CCOIPGM=clast composition, plutonic rock fragments, granitic, monzogranitic
.CCOIPGZ=clast composition, plutonic rock fragments, granitic, monzonitic
.CCOIPGZD=clast composition, plutonic rock fragments, granitic, monzodioritic
.CCOIPGZQ=clast composition, plutonic rock fragments, granitic, quartz monzonitic
.CCOIPM=clast composition, plutonic rock fragments, mafic plutonic
.CCOIPMD=clast composition, plutonic rock fragments, mafic plutonic, dioritic-gabbroic
.CCOIV=clast composition, volcanic rock fragments
.CCOIVA=clast composition, volcanic rock fragments, andesite
.CCOIVB=clast composition, volcanic rock fragments, basalt
.CCOIVD=clast composition, volcanic rock fragments, dacite-latite
.CCOIVF=clast composition, volcanic rock fragments, felsic
.CCOIVL=clast composition, volcanic rock fragments, lapilli
.CCOIVM=clast composition, volcanic rock fragments, mafic
.CCOIVP=clast composition, volcanic rock fragments, porphyrys
.CCOIVR=clast composition, volcanic rock fragments, rhyolite
.CCOIVT=clast composition, volcanic rock fragments, tuffaceous
.CCOIVTB=clast composition, volcanic rock fragments, tuffaceous, tuff-breccia
.CCOIVTF=clast composition, volcanic rock fragments, tuffaceous, ash-flow tuff
.CCOK=clast composition, skeletal fragments
.CCOKA=clast composition, skeletal fragments, algal
.CCOKBR=clast composition, skeletal fragments, brachiopods
.CCOKBZ=clast composition, skeletal fragments, bryozoans
.CCOKC=clast composition, skeletal fragments, corals
.CCOKF=clast composition, skeletal fragments, fusulinids
.CCOKM=clast composition, skeletal fragments, mollusks
.CCOKP=clast composition, skeletal fragments, pelmatozoans
.CCOKT=clast composition, skeletal fragments, trilobites
.CCOM=clast composition, metamorphic rock fragments
.CCOMC=clast composition, schist rock fragments
.CCOMG=clast composition, gneiss rock fragments
.CCOMI=clast composition, metaigneous
.CCOMIA=clast composition, amphibolite
.CCOMIV=clast composition, metavolcanic rock fragments
.CCOMIVA=clast composition, metavolcanic rock fragments, agglomerate
.CCOMIVT=clast composition, metavolcanic rock fragments, metatuff
.CCOMS=clast composition, metasedimentary rock fragments
.CCOMSM=clast composition, marble rock fragments
.CCOMSMD=clast composition, dolomite marble rock fragments
.CCOMSML=clast composition, limestone marble rock fragments
.CCOMSQ=clast composition, metaquartzite rock fragments
.CCON=clast composition, intraclasts
.CCOO=clast composition, ooids
.CCOP=clast composition, peloids
.CCOR=sedimentary unit has clasts recycled out of older formation
.CCORK=sedimentary unit has clasts recycled out of older formation, formation known
.CCORKC=sedimentary unit has clasts recycled out of Crowder formation
.CCORKS=sedimentary unit has clasts recycled out of San Timoteo formation
.CCORU=sedimentary unit has clasts recycled out of older formation, formation unknown
.CCOS=clast composition, sedimentary rock fragments
.CCOSC=clast composition, sedimentary, carbonate rock fragments
.CCOSCD=clast composition, dolomite rock fragments

.CCOSCL=clast composition, limestone rock fragments
.CCOSG=clast composition, conglomerate rock fragments
.CCOSH=clast composition, chert rock fragments
.CCOSL=clast composition, shale rock fragments
.CCOSM=clast composition, mudrock rock fragments
.CCOSQ=clast composition, quartzite rock fragments
.CCOSS=clast composition, sandstone rock fragments
.CCOU=sedimentary unit has clasts of specific map unit
.CCOUK=sedimentary unit has clasts of Keller Peak granodiorite
.CCOUL=sedimentary unit has clasts of Lowe-type plutonic rock
.CCOUM=sedimentary unit has clasts of Mill Creek Formation
.CCOUP=sedimentary unit has clasts of Pelona-type schist
.CCOUPE=sedimentary unit has clasts of Pelona-type schist, greenstone unit
.CCOUPS=sedimentary unit has clasts of Pelona-type schist, grayschist unit
.CCOUT=sedimentary unit has clasts of Triassic megaporphyry
.CCOUW=sedimentary unit has clasts of Wildhorse quartzite
.CCOV=clast composition, variable
.CCOX=clast composition, sedimentary, igneous & metamorphic rock fragments
.CHA=fluvial deposit, channel elements
.CHK=charnockite
.CHKD=charnockite (deformed)
.CIN=rock color index, polygon contains information about (plutonic & volcanic rocks)
.CINV=rock color index variable
.CLM=clay and mud (surficial deposit)
.CLMCL=clay (surficial deposit)
.CLMCLG=clay, gravelly (surficial deposit)
.CLMCLML=clay, silty (surficial deposit)
.CLMCLS=clay, sandy (surficial deposit)
.CLMM=mud (surficial deposit)
.CLMMG=mud, gravelly (surficial deposit)
.CLMMML=mud, silty (surficial deposit)
.CLMMS=mud, sandy (surficial deposit)
.CMX=clast-to-matrix relations, polygon contains information about
.CMX25=clast-to-matrix relations, matrix <25%
.CMX50=clast-to-matrix relations, matrix >25% but <50%
.CMX75=clast-to-matrix relations, matrix >50% but <75%
.CMX76=clast-to-matrix relations, matrix >75%
.CMXCM=clast-to-matrix relations, clast support dominant over matrix support
.CMXCS=clast-to-matrix relations, clast-supported fabric
.CMXMC=clast-to-matrix relations, matrix support dominant over clast support
.CMXMS=clast-to-matrix relations, matrix-supported fabric
.CMXQ=clast-to-matrix relations, clast support & matrix support subequal
.COL=rock color, polygon contains information about
.COLB=rock color, brown
.COLBE=rock color, brown, greenish
.COLBG=rock color, brown, grayish
.COLBO=rock color, brown, orange
.COLBP=rock color, brown, pale
.COLBPV=rock color, brown, pale, very
.COLBR=rock color, brown, reddish
.COLBY=rock color, brown, yellowish
.COLBYL=rock color, brown, light yellowish
.COLD=rock color, dark colored
.COLE=rock color, greenish
.COLG=rock color, grayish
.COLGB=rock color, gray, brownish
.COLGBL=rock color, gray, brownish, light
.COLGD=rock color, gray, dark
.COLGE=rock color, gray, greenish
.COLGL=rock color, gray, light
.COLGLD=rock color, gray, light to dark
.COLGLM=rock color, gray, light to medium
.COLGM=rock color, gray, medium
.COLGMD=rock color, gray, medium to dark

.COLGO=rock color, gray, olive
.COLGOL=rock color, gray, olive, light
.COLGOP=rock color, gray, olive, pale
.COLGP=rock color, gray, pinkish
.COLGR=rock color, gray, reddish
.COLGT=rock color, gray, mottled
.COLGY=rock color, gray, yellowish
.COLK=rock color, black
.COLL=rock color, light colored
.COLM=rock color, medium colored
.COLO=rock color, olive
.COLOP=rock color, olive, pale
.COLP=rock color, pink
.COLPP=rock color, pink, pale
.COLRP=rock color, red, pale
.COLS=rock color, striped (thin stripes mm to cm thick)
.COLU=rock color, purple
.COLURG=rock color, purple, grayish red
.COLV=rock color, variable
.COLW=rock color, white
.COLWGL=rock color, white to light gray
.COLY=rock color, yellow
.COLYP=rock color, yellow, pale
.COLZ=rock color, banded (bands cm to dm thick)
.CON=consolidation, polygon contains information about (surficial materials)
.CONC=consolidated (surficial materials)
.CONCE=consolidated to cemented (surficial materials)
.CONCM=consolidated, moderately (surficial materials)
.CONCMI=consolidated, moderately, to indurated (surficial materials)
.CONCMW=consolidated, moderately to well (surficial materials)
.CONCS=consolidated, slightly (surficial materials)
.CONCSM=consolidated, slightly to moderately (surficial materials)
.CONCSW=consolidated, slightly to well (surficial materials)
.CONCV=consolidated, variably (surficial materials)
.CONCW=consolidated, well (surficial materials)
.CONCWI=consolidated, well, to indurated (surficial materials)
.CONEL=cemented locally (surficial materials)
.CONT=surficial materials, glacial sedimentary deposit, continental
.CONU=unconsolidated (surficial materials)
.CONUC=unconsolidated to consolidated (surficial materials)
.CONUCM=unconsolidated to moderately consolidated (surficial materials)
.CONUCS=unconsolidated to slightly consolidated (surficial materials)
.CONUCW=unconsolidated to well consolidated (surficial materials)
.CONUE=unconsolidated to cemented (surficial materials)
.CPL=sedimentary origin, coastal plain geographic setting
.CSF=carbonate shelf deposit
.CSFP=carbonate shelf deposit, platform-basin couplet
.CSFPL=carbonate shelf deposit, platform-lagoon deposit
.CSFPM=carbonate shelf deposit, platform-margin deposit
.CSFPMB=carbonate shelf deposit, platform-margin buildup deposit
.CSFPO=carbonate shelf deposit, off-platform-basin deposit
.CSFPP=carbonate shelf deposit, platform-slope deposit
.CSFPS=carbonate shelf deposit, platform-subtidal deposit
.CSFPT=carbonate shelf deposit, platform tidal-flat deposit
.CSFR=carbonate shelf deposit, carbonate ramp
.CSH=clast shape, polygon containsinformation about
.CSHA=clast shape, angular (in sedimentary unit)
.CSHAD=clast shape, angular to subrounded (in sedimentary unit)
.CSHAG=clast shape, angular to subangular (in sedimentary unit)
.CSHAR=clast shape, angular to rounded (in sedimentary unit)
.CSHD=clast shape, subrounded (in sedimentary unit)
.CSHDR=clast shape, subrounded to rounded (in sedimentary unit)
.CSHG=clast shape, subangular (in sedimentary unit)
.CSHGD=clast shape, subangular to subrounded (in sedimentary unit)

.CSHGR=clast shape, subangular to rounded (in sedimentary unit)
.CSHR=clast shape, rounded (in sedimentary unit)
.CSHUD=clast shape uncertain due to deformation (in sedimentary unit)
.CSHUG=clast shape, uncertain due to grain overgrowths (in sedimentary unit)
.CSHUX=clast shape uncertain due to recrystallization (in sedimentary unit)
.CSHV=clast shape, variable (in sedimentary unit)
.CSZ=clast size, polygon contains information about
.CSZB=clast size, boulder (in sedimentary rock)
.CSZBL=clast size, boulder, large (in sedimentary rock)
.CSZBM=clast size, boulder, medium (in sedimentary rock)
.CSZBS=clast size, boulder, small (in sedimentary rock)
.CSZC=clast size, cobble (in sedimentary rock)
.CSZCB=clast size, cobble-boulder (in sedimentary rock)
.CSZCL=clast size, cobble, large (in sedimentary rock)
.CSZCS=clast size, cobble, small (in sedimentary rock)
.CSZG=clast size, granule (in sedimentary rock)
.CSZGC=clast size, granule-cobble (in sedimentary rock)
.CSZGOV=clast size, uncertain due to grain overgrowths (in sedimentary rock)
.CSZGP=clast size, granule-pebble (in sedimentary rock)
.CSZP=clast size, pebble (in sedimentary rock)
.CSZPB=clast size, pebble-boulder (in sedimentary rock)
.CSZPC=clast size, pebble-cobble (in sedimentary rock)
.CSZPCL=clast size, pebble -large cobble (in sedimentary rock)
.CSZPCS=clast size, pebble-small cobble (in sedimentary rock)
.CSZUD=clast size, uncertain due to deformation (in sedimentary rock)
.CSZUX=clast size, uncertain due to recrystallization (in sedimentary rock)
.CTM=continental margin setting
.CTMR=continental margin setting, continental rise and slope deposit
.CTMRA=continental margin setting, continental rise deposit, submarine-apron
.CTMRF=continental margin setting, continental rise deposit, submarine-fan
.CTMRR=continental margin setting, continental rise deposit
.CTMRRC=continental margin setting, continental rise deposit, contourite deposit
.CTMRS=continental margin setting, continental slope deposit
.CTMS=continental margin setting, continental shelf deposit
.CTMSB=continental margin setting, continental borderland deposit
.CTMSBS=continental margin setting, continental borderland deposit, silled-basin deposit
.CTR=catastrophic sedimentary rock
.CZO=geologic age, Cenozoic
.CZOQ=geologic age, Quaternary
.CZOQH=geologic age, Holocene
.CZOQHD=geologic age, Modern
.CZOQHE=geologic age, Holocene, early
.CZOQHL=geologic age, Holocene, late
.CZOQHM=geologic age, Holocene, middle
.CZOQP=geologic age, Pleistocene
.CZOQPE=geologic age, Pleistocene, early
.CZOQPL=geologic age, Pleistocene, late
.CZOQPM=geologic age, Pleistocene, middle
.CZOT=geologic age, Tertiary
.CZOTA=geologic age, Paleocene
.CZOTAE=geologic age, Paleocene, early
.CZOTAL=geologic age, Paleocene, late
.CZOTE=geologic age, Eocene
.CZOTEE=geologic age, Eocene, early
.CZOTEL=geologic age, Eocene, late
.CZOTEM=geologic age, Eocene, middle
.CZOTM=geologic age, Miocene
.CZOTME=geologic age, Miocene, early
.CZOTML=geologic age, Miocene, late
.CZOTO=geologic age, Oligocene
.CZOTOE=geologic age, Oligocene, early
.CZOTOL=geologic age, Oligocene, late
.CZOTP=geologic age, Pliocene
.CZOTPE=geologic age, Pliocene, early

.CZOTPL=geologic age, Pliocene, late

-DBL=displaced block (landslide, gravity slide)
-DBLS=landslide, displaced block with internal stratigraphy intact
-DCZOTE=deformation age Tertiary, early
-DCZOTL=deformation age, Tertiary, late
-DCZOTM=deformation age, Tertiary, middle
-DDC=displaced debris, carbonate rock
-DDG=displaced debris, granitic rock
-DDM=displaced debris, metamorphic rock
-DDMX=displaced debris, mixed rock
-DDS=displaced debris, sedimentary rock
-DFMTA=strain-dominated rock, deformed above thrust fault
-DFMTB=strain-dominated rock, deformed beneath thrust fault
-DLF=unmapped dacite-latite flows interbedded with sedimentary rock
-DLP=unmapped dacite-latite plugs associated with sedimentary rock
-DMZOE=deformation age, Mesozoic, early
-DMZOL=deformation age, Mesozoic, late
-DMZOM=deformation age, Mesozoic, middle
-DNGN=deformation age, Neogene
-DPGN=deformation age, Paleogene
-DPZOE=deformation age, Paleozoic, early
-DPZOL-deformation age, Paleozoic, late
-DPZOM=deformation age, Paleozoic, middle
-DRB=displaced rubble and blocks (landslide, gravity slide)
-DRUB=displaced rubble (landslide, gravity slide)
.DAC=dacite
.DACD=dacite (deformed)
.DACR=rhyodacite
.DACRD=rhyodacite (deformed)
.DAF=fluvial deposit, downstream-accretion element (longitudinal bar)
.DCZO=deformation age, Cenozoic
.DCZOQ=deformation age, Quaternary
.DCZOQH=deformation age, Holocene
.DCZOQHD=deformation age, Modern
.DCZOQHE=deformation age, Holocene, early
.DCZOQHL=deformation age, Holocene, late
.DCZOQHM=deformation age, Holocene, middle
.DCZOQP=deformation age, Pleistocene
.DCZOQPE=deformation age, Pleistocene, early
.DCZOQPL=deformation age, Pleistocene, late
.DCZOQPM=deformation age, Pleistocene, middle
.DCZOT=deformation age, Tertiary
.DCZOTA=deformation age, Paleocene
.DCZOTAE=deformation age, Paleocene, early
.DCZOTAL=deformation age, Paleocene, late
.DCZOTE=deformation age, Eocene
.DCZOTEE=deformation age, Eocene, early
.DCZOTEL=deformation age, Eocene, late
.DCZOTEM=deformation age, Eocene, middle
.DCZOTM=deformation age, Miocene
.DCZOTME=deformation age, Miocene, early
.DCZOTML=deformation age, Miocene, late
.DCZOTMM=deformation age, Miocene, middle
.DCZOTO=deformation age, Oligocene
.DCZOTOE=deformation age, Oligocene, early
.DCZOTOL=deformation age, Oligocene, late
.DCZOTP=deformation age, Pliocene
.DCZOTPE=deformation age, Pliocene, early
.DCZOTPL=deformation age, Pliocene, late
.DEF=rock deformational history, polygon contains information about
.DEFB=rock deformed under brittle conditions
.DEFBD=rock deformed under brittle-ductile conditions
.DEFC=rock deformed within contractional strain field

.DEFD=rock deformed under ductile conditions
.DEFE=rock deformed within extensional strain field
.DEFF=rock deformed within fault zone
.DEFFN=rock deformed within fault zone, normal-slip
.DEFFS=rock deformed within fault zone, strike-slip
.DEFFT=rock deformed within fault zone, thrust-slip
.DEFFTA=rock deformed within fault zone, thrust-slip, above thrust fault
.DEFFTB=rock deformed within fault zone, thrust-slip, beneath thrust fault
.DEFH=rock deformed under high-strain conditions
.DEFIB=rock intruded under brittle conditions
.DEFIBD=rock intruded under brittle-ductile conditions
.DEFID=rock intruded under ductile conditions
.DEFIH=rock intruded under high-strain conditions
.DEFIL=rock intruded under low-strain conditions
.DEFL=rock deformed under low-strain conditions
.DEFM=rock deformed during metamorphism
.DEFO=rock deformed within fold belt
.DEFOT=rock deformed within fold-and-thrust belt
.DEFP=rock deformed during pluton emplacement
.DEFRP=rock recrystallized under plutonic conditions
.DEFS=rock deformed within shear zone
.DEFT=rock deformed within transtensional strain field
.DEFU=rock deformed by multiple deformations
.DEFY=deformational style, polygon contains information about
.DEFYF=deformational style, rock is faulted
.DEFYO=deformational style, rock is folded
.DEFYOF=deformational style, rock is folded and faulted
.DEL=deltaic deposit (bedrock & surficial)
.DELP=deltaic deposit, delta plain
.DELPL=deltaic deposit, lower delta plain deposit
.DELPLA=deltaic deposit, abandoned distributary-fill deposit
.DELPLB=deltaic deposit, bay-fill deposit
.DELPS=deltaic deposit, subaqueous delta plain
.DELPSD=deltaic deposit, distributary-mouth-bar deposit
.DELPSR=deltaic deposit, river-mouth tidal-ridge deposit
.DELPSS=deltaic deposit, subaqueous slump deposit
.DELPU=deltaic deposit, upper delta plain
.DELPUL=deltaic deposit, lacustrine delta-fill deposit
.DELPUM=deltaic deposit, migratory-channel deposit
.DELR=deltaic deposit, pro-delta deposit
.DIO=diorite
.DIOD=diorite (deformed)
.DIOH=dioritic rock, composition heterogeneous
.DIOHD=dioritic rock (deformed), composition heterogeneous
.DIOQ=diorite, quartz
.DIOQD=diorite, quartz (deformed)
.DIOU=dioritic rock, composition unspecified
.DIOUD=dioritic rock (deformed), composition unspecified
.DIOV=dioritic rock, composition variable
.DIOVD=dioritic rock (deformed), composition variable
.DMZO=deformation age, Mesozoic
.DMZOJ=deformation age, Jurassic
.DMZOJE=deformation age, Jurassic, early
.DMZOJL=deformation age, Jurassic, late
.DMZOK=deformation age, Cretaceous
.DMZOKE=deformation age, Cretaceous, early
.DMZOKL=deformation age, Cretaceous, late
.DMZOT=deformation age, Triassic
.DMZOTE=deformation age, Triassic, early
.DMZOTL=deformation age, Triassic, late
.DPRC=deformation age, Precambrian
.DPRCA=deformation age, Archean
.DPRCAE=deformation age, Archean, early
.DPRCAL=deformation age, Archean, late

.DPRCAM=deformation age, Archean, middle
.DPRCP=deformation age, Proterozoic
.DPRCPE=deformation age, Proterozoic, early
.DPRCPL=deformation age, Proterozoic, late
.DPRCPM=deformation age, Proterozoic, middle
.DPZO=deformation age, Paleozoic
.DPZOC=deformation age, Cambrian
.DPZOCE=deformation age, Cambrian, early
.DPZOCL=deformation age, Cambrian, late
.DPZOD=deformation age, Devonian
.DPZODE=deformation age, Devonian, early
.DPZODL=deformation age, Devonian, late
.DPZOM=deformation age, Mississippian
.DPZOME=deformation age, Mississippian, early
.DPZOML=deformation age, Mississippian, late
.DPZOO=deformation age, Ordovician
.DPZOOE=deformation age, Ordovician, early
.DPZOOL=deformation age, Ordovician, late
.DPZOP=deformation age, Pennsylvanian
.DPZOPE=deformation age, Pennsylvanian, early
.DPZOPL=deformation age, Pennsylvanian, late
.DPZOR=deformation age, Permian
.DPZORE=deformation age, Permian, early
.DPZORL=deformation age, Permian, late
.DPZOS=deformation age, Silurian
.DPZOSE=deformation age, Silurian, early
.DPZOSL=deformation age, Silurian, late

-EVA=evaporitic minerals in sedimentary rock
.EOL=eolian deposit (bedrock)
.EOLD=eolian deposit, dune-sand deposit (bedrock)
.EOLS=eolian deposit, sheet-sand deposit (bedrock)
.EOLU=eolian deposit, unspecified (bedrock)
.ESW=marine deposit, epicontinental seaway
.ESWN=marine deposit, epicontinental seaway, nearshore
.ESWS=marine deposit, epicontinental seaway, shelf

-FELD=feldspar-rich composition
-FLDA=deformational style, rock is folded, assymetric folds
-FLDO=deformational style, rock is folded, open folds
-FLDT=deformational style, rock is folded, tight folds
-FLDTT=deformational style, rock is folded, tight folds broken by thrust faults
-FLDV=deformational style, rock is folded, overturned folds
-FPD=flood-plain deposit
-FRACON=fractures, conjugate
-FRA=fractures, polygon contains information about attributes
-FRALA=fractures, locally abundant
-FRAO=fractures, oriented
-FRAO=fractures, oriented
-FRAORT=fractures, orthogonal
-FRAP=fractures, pervasive
-FRAR=fractures, random
-FRAS=fractures, sparse
-FRAT=fractures, tension
.FLU=fluvial deposit (sedimentary rock)
.FLUD=fluvial deposit, deltaic setting (sedimentary rock)
.FLUF=fluvial deposit, alluvial-fan setting (sedimentary rock)
.FLUU=fluvial deposit, undifferentiated (sedimentary rock)
.FLUV=fluvial deposit, alluvial-valley setting (sedimentary rock)
.FLUVH=fluvial deposit, alluvial-valley setting, high-sinuosity channel (sedimentary rock)
.FLUVL=fluvial deposit, alluvial-valley setting, low-sinuosity channel (sedimentary rock)
.FOS=fossils occur in rock unit
.FOSM=fossils, marine, occur in rock unit
.FOSMI=fossils, marine, invertebrates, occur in rock unit

.FOSMIAC=fossils, acritarchs
.FOSMIBR=fossils, marine, invertebrates, brachiopods
.FOSMIBZ=fossils, marine, invertebrates, bryozoa
.FOSMICD=fossils, marine, invertebrates, conodonts
.FOSMICO=fossils, marine, invertebrates, corals
.FOSMIGP=fossils, marine, invertebrates, graptolites
.FOSMIM=fossils, marine, invertebrates, mollusks
.FOSMIMA=fossils, marine, invertebrates, ammonites
.FOSMIMC=fossils, marine, invertebrates, cephalopods
.FOSMIMG=fossils, marine, invertebrates, gastropods
.FOSMIMP=fossils, marine, invertebrates, pelecypods
.FOSMIO=fossils, marine, invertebrates, ostracods
.FOSMIP=fossils, marine, invertebrates, pelmatozoans
.FOSMIPC=fossils, marine, invertebrates, crinoids
.FOSMIS=fossils, marine, invertebrates, stromatoporoids=
.FOSMIT=fossils, marine, invertebrates, trilobites
.FOSMP=fossils, marine, plants, occur in rock unit
.FOSMPD=fossils, marine, plants, diatoms
.FOSMPDF=fossils, marine, plants, dinoflagellates
.FOSMPN=fossils, marine, plants, nannoplankton
.FOSMPO=fossils, marine, plants, oncolites
.FOSMT=fossils, marine, trace fossils,occur in rock unit
.FOSMTS=fossils, marine, trace fossils, scolithus
.FOSMTZ=fossils, marine, trace fossils, zoophicus
.FOSMV=fossils, marine, vertebrates,occur in rock unit
.FOSMVF=fossils, marine, vertebrates, fish
.FOSMVR=fossils, marine, vertebrates,reptiles
.FOSMZ=fossils, marine, invertebrates, protozoa
.FOSMZF=fossils, marine, invertebrates, foraminifera
.FOSMZFF=fossils, marine, invertebrates, fusulinids
.FOSMZR=fossils, marine, protista, radiolaria
.FOSN=fossils, nonmarine, occur in rock unit
.FOSNI=fossils, nonmarine, invertebrates, occur in rock unit
.FOSNP=fossils, nonmarine, trace fossils, occur in rock unit
.FOSNPA=fossils, nonmarine, plants, algae
.FOSNPC=fossils, nonmarine, plants, coniferous
.FOSNPD=fossils, nonmarine, plants, deciduous
.FOSNPF=fossils, nonmarine, plants, flowering
.FOSNPW=fossils, nonmarine, plants, wood
.FOSNT=fossils, nonmarine, trace fossils, occur in rock unit
.FOSNTT=fossils, nonmarine, trace fossils, tracks
.FOSNV=fossils, nonmarine, vertebrates, occur in rock unit
.FOSNVM=fossils, nonmarine, vertebrates, mammals
.FOSNVML=fossils, nonmarine, vertebrates, large mammals
.FOSNVMLCA=fossils, nonmarine, vertebrates, cat
.FOSNVMLCM=fossils, nonmarine, vertebrates, camel
.FOSNVMLD=fossils, nonmarine, vertebrates, dog
.FOSNVMLE=fossils, nonmarine, vertebrates, elephant
.FOSNVMLH=fossils, nonmarine, vertebrates, horse
.FOSNVMLR=fossils, nonmarine, vertebrates, rhinoceras
.FOSNVMS=fossils, nonmarine, vertebrates, small mammals
.FOSNVMSB=fossils, nonmarine, vertebrates, beaver
.FOSNVMSR=fossils, nonmarine, vertebrates, rodent
.FOSNVMSS=fossils, nonmarine, vertebrates, shrew
.FOSNVR=fossils, nonmarine, vertebrates, reptiles
.FOSNVRC=fossils, nonmarine, vertebrates, crocodile
.FOSNVRT=fossils, nonmarine, vertebrates, turtle
.FSL=age based on fossils
.FSLC=age based on fossils, age certain
.FSLU=age based on fossils, age uncertain
.FZL=fossils, abundance indicator, polygon contains information about
.FZLA=fossils, abundant
.FZLL=fossils, localized
.FZLM=fossils, moderately abundant

.FZLN=fossils, none observed in rock unit
.FZLS=fossils, sparse

-GFLD=gravity-driven deposit, debris-flow deposit (bedrock)
-GFLR=gravity-driven deposit, rock-avalanche deposit (bedrock)
-GFOM=foliation, origin unspecified, moderate
-GFOS=foliation, origin unspecified, strong
-GFOW=foliation, origin unspecified, weak
-GMI=surficial deposit, gravel and mud interbedded
-GMS=metamophic mineral is groundmass constituent
-GRR=granitic rock intermingled with mapped geologic unit
.GAB=gabbro
.GABD=gabbro (deformed)
.GABQ=gabbro, quartzose
.GABQD=gabbro, quartzose (deformed)
.GBB=fluvial deposit, gravel bar & bedform element
.GBD=fluvial deposit, gravel-bed facies
.GBDB=fluvial deposit, gravel-bed facies, braided
.GBDBD=fluvial deposit, gravel-bed facies, braided, deep
.GBDBG=fluvial deposit, gravel-bed facies, braided, with sediment-gravity flows
.GBDBS=fluvial deposit, gravel-bed facies, braided, shallow
.GBDW=fluvial deposit, gravel-bed facies, wandering
.GCO=grain composition, polygon contains information about (sedimentary)
.GCOA=grain composition, micas (sedimentary)
.GCOAB=grain composition, biotite (sedimentary)
.GCOAM=grain composition, muscovite (sedimentary)
.GCOC=grain composition, carbonate minerals (sedimentary)
.GCOF=grain composition, feldspar dominant (sedimentary)
.GCOG=grain composition, glauconite (sedimentary)
.GCOI=grain composition, intraclasts (sedimentary)
.GCOK=grain composition, skeletal fragments (sedimentary)
.GCOKA=grain composition, skeletal fragments, algal material (sedimentary)
.GCOKBR=grain composition, skeletal fragments, brachiopods (sedimentary)
.GCOKBZ=grain composition, skeletal fragments, bryozoans (sedimentary)
.GCOKC=grain composition, skeletal fragments, corals (sedimentary)
.GCOKF=grain composition, skeletal fragments, fusulinids (sedimentary)
.GCOKM=grain composition, skeletal fragments, mollusks (sedimentary)
.GCOKP=grain composition, skeletal fragments, pelmatozoans (sedimentary)
.GCOKT=grain composition, skeletal fragments, trilobites (sedimentary)
.GCOKT=grain composition, skeletal fragments, trilobites (sedimentary)
.GCOL=grain composition, lithics dominant (sedimentary)
.GCOLI=grain composition, igneous rock fragments (sedimentary)
.GCOLIG=grain composition, granitic rock fragments (sedimentary)
.GCOLIV=grain composition, volcanic rock fragments (sedimentary)
.GCOLIVA=grain composition, andesite rock fragments (sedimentary)
.GCOLIVB=grain composition, basalt rock fragments (sedimentary)
.GCOLIVS=grain composition, siliceous rock fragments (sedimentary)
.GCOLIVT=grain composition, tuffaceous rock fragments (sedimentary)
.GCOLM=grain composition, metamorphic rock fragments (sedimentary)
.GCOLMG=grain composition, gneiss fragments (sedimentary)
.GCOLMM=grain composition, marble (sedimentary)
.GCOLMQ=grain composition, metaquartzite rock fragments (sedimentary)
.GCOLMS=grain composition, schist rock fragments (sedimentary)
.GCOLMV=grain composition, metavolcanic rock fragments (sedimentary)
.GCOLMY=grain composition, mylonite rock fragments (sedimentary)
.GCOLS=grain composition, sedimentary rock fragments (sedimentary)
.GCOLSC=grain composition, carbonate rock fragments (sedimentary)
.GCOLSH=grain composition, chert fragments (sedimentary)
.GCOLSM=grain composition, mudrock rock fragments (sedimentary)
.GCOO=grain composition, ooids (sedimentary)
.GCOP=grain composition, peloids (sedimentary)
.GCOPP=grain composition, phosphatic peloids
.GCOQ=grain composition, quartz dominant (sedimentary)
.GCOQF=grain composition, quartz and feldspar subequal (sedimentary)

.GCOQFL=grain composition, quartz, feldspar, lithics subequal (sedimentary)
.GCOTH=grain composition, other (sedimentary)
.GCOU=grain composition, unspecified (sedimentary)
.GCOV=grain composition, variable(sedimentary)
.GDR=granodiorite
.GDRD=granodiorite (deformed)
.GFUN=gravity-flow deposit, unspecified
.GLA=glacial deposit (bedrock)
.GLAA=glacial deposit, alpine (bedrock)
.GLAC=glacial deposit, continental (bedrock)
.GLAU=glacial deposit, unspecified (bedrock)
.GMD=age based on geomorphic development
.GMDC=age based on geomorphic development, age certain
.GMDU=age based on geomorphic development, age uncertain
.GMI=grain size, igneous groundmass, polygon contains information about
.GMIA=grain size, igneous groundmass, aphanitic
.GMIAD=grain size, igneous groundmass, aphanitic (deformed)
.GMIAF=grain size, igneous groundmass, aphanitic to fine
.GMIAFD=grain size, igneous groundmass, aphanitic to fine (deformed)
.GMIC=grain size, igneous groundmass, coarse
.GMICD=grain size, igneous groundmass, coarse (deformed)
.GMICVC=grain size, igneous groundmass, coarse to very coarse
.GMICVCD=grain size, igneous groundmass, coarse to very coarse (deformed)
.GMID=grain size, igneous groundmass (deformed), polygon contains information about
.GMIF=grain size, igneous groundmass, fine
.GMIFC=grain size, igneous groundmass, fine to coarse
.GMIFCD=grain size, igneous groundmass, fine to coarse (deformed)
.GMIFD=grain size, igneous groundmass, fine (deformed)
.GMIFM=grain size, igneous groundmass, fine to medium
.GMIFMD=grain size, igneous groundmass, fine to medium (deformed)
.GMIM=grain size, igneous groundmass, medium
.GMIMC=grain size, igneous groundmass, medium to coarse
.GMIMCD=grain size, igneous groundmass, medium to coarse (deformed)
.GMIMD=grain size, igneous groundmass, medium (deformed)
.GMIV=grain size, igneous groundmass, variable
.GMIVC=grain size, igneous groundmass, very coarse
.GMIVCD=grain size, igneous groundmass, very coarse (deformed)
.GMIVD=grain size, igneous groundmass, variable (deformed)
.GMS=grain shape, igneous groundmass, polygon contains information about
.GMSA=grain shape anhedral, igneous groundmass
.GMSAD=grain shape anhedral, igneous groundmass (deformed)
.GMSD=grain shape, igneous groundmass (deformed), polygon contains information about
.GMSS=grain shape subhedral, igneous groundmass
.GMSSD=grain shape subhedral, igneous groundmass (deformed)
.GMSU=grain shape euhedral, igneous groundmass
.GMSUD=grain shape euhedral, igneous groundmass (deformed)
.GMSV=grain shape variable, igneous groundmass
.GMSVD=grain shape variable, igneous groundmass (deformed)
.GRK=grain-supported sedimentary rock
.GRKC=conglomerate (sedimentary rock)
.GRKCB=conglomerate, boulder (sedimentary rock)
.GRKCC=conglomerate, cobble (sedimentary rock)
.GRKCCB=conglomerate, cobble-boulder (sedimentary rock)
.GRKCG=conglomerate, granule (sedimentary rock)
.GRKCGC=conglomerate, granule-cobble (sedimentary rock)
.GRKCGP=conglomerate, granule-pebble (sedimentary rock)
.GRKCGPS=conglomerate, granule-pebble, sandy (sedimentary rock)
.GRKCP=conglomerate, pebble (sedimentary rock)
.GRKCPB=conglomerate, pebble-boulder (sedimentary rock)
.GRKCPC=conglomerate, pebble-cobble (sedimentary rock)
.GRKCS=conglomerate, sandy (sedimentary rock)
.GRKCSG=conglomerate, granule, sandy (sedimentary rock)
.GRKCSP=conglomerate, pebble, sandy (sedimentary rock)
.GRKCSPC=conglomerate, pebble-cobble, sandy (sedimentary rock)

.GRKCX=conglomerate, matrix-rich (sedimentary rock)
.GRKCXCL=conglomerate, matrix-rich, clayey (sedimentary rock)
.GRKCXML=conglomerate, matrix-rich, silty (sedimentary rock)
.GRKML=siltstone (sedimentary rock)
.GRKMLC=siltstone, conglomeratic (sedimentary rock)
.GRKMLCB=siltstone, cobbly & bouldery (sedimentary rock)
.GRKMLCC=siltstone, cobbly (sedimentary rock)
.GRKMLCG=siltstone, granule-bearing (sedimentary rock)
.GRKMLCGP=siltstone, granule-bearing pebbly (sedimentary rock)
.GRKMLCP=siltstone, pebbly (sedimentary rock)
.GRKMLCPC=siltstone, pebbly & cobbly (sedimentary rock)
.GRKMLS=siltstone, sandy (sedimentary rock)
.GRKMLSC=siltstone, sandy conglomeratic (sedimentary rock)
.GRKMLSCG=siltstone, sandy granule-bearing (sedimentary rock)
.GRKMLSCGC=siltstone, sandy granule-cobble (sedimentary rock)
.GRKMLSCGP=siltstone, sandy granule-pebble (sedimentary rock)
.GRKMLSCPC=siltstone, sandy pebble-cobble (sedimentary rock)
.GRKSS=sandstone (sedimentary rock)
.GRKSSC=sandstone, conglomeratic (sedimentary rock)
.GRKSSCB=sandstone, bouldery (sedimentary rock)
.GRKSSCC=sandstone, cobbly (sedimentary rock)
.GRKSSCCB=sandstone, cobbly & bouldery (sedimentary rock)
.GRKSSCG=sandstone, granule-bearing (sedimentary rock)
.GRKSSCGP=sandstone, pebbly granule-bearing (sedimentary rock)
.GRKSSCP=sandstone, pebbly (sedimentary rock)
.GRKSSCPC=sandstone, pebbly & cobbly (sedimentary rock)
.GRKSSX=sandstone, matrix-rich (sedimentary rock)
.GRKSSXCL=sandstone, matrix-rich, clayey (sedimentary rock)
.GRKSSXML=sandstone, matrix-rich, silty (sedimentary rock)
.GRKV=grainrock, various types occur in map unit (sedimentary rock)
.GRN=granitic rock
.GRND=granitic rock (deformed)
.GRNH=granitic rock, composition heterogeneous
.GRNHD=granitic rock, composition heterogeneous (deformed)
.GRNQD=granitic rock, composition quartz-deficient
.GRNQDD=granitic rock, composition quartz-deficient (deformed)
.GRNQP=granitic rock, composition quartz-poor
.GRNQPD=granitic rock, composition quartz-poor (deformed)
.GRNQR=granitic rock, composition quartz-rich
.GRNQRD=granitic rock, composition quartz-rich (deformed)
.GRNU=granitic rock, composition unspecified
.GRNUD=granitic rock, composition unspecified (deformed)
.GRNV=granitic rock, composition variable
.GRNVD=granitic rock, composition variable (deformed)
.GRO=grainrock (carbonate rocks)
.GROD=dolomitic grainrock
.GRODG=dolomitic grainstone
.GRODP=dolomitic packstone
.GROL=lime grainrock
.GROLG=lime grainstone
.GROLP=lime packstone
.GSH=grain shape, polygon contains information about (sedimentary)
.GSHA=grain shape, angular (sedimentary)
.GSHAD=grain shape, angular to subrounded (sedimentary)
.GSHAG=grain shape, angular to subangular (sedimentary)
.GSHAR=grain shape, angular to rounded (sedimentary)
.GSHD=grain shape, subrounded (sedimentary)
.GSHDR=grain shape, subrounded to rounded (sedimentary)
.GSHG=grain shape, subangular (sedimentary)
.GSHGD=grain shape, subangular to subrounded (sedimentary)
.GSHGR=grain shape, subangular to rounded (sedimentary)
.GSHR=grain shape, rounded (sedimentary)
.GSHUD=grain shape, uncertain due to deformation (sedimentary)
.GSHUG=grain shape, uncertain due to grain overgrowths (sedimentary)

.GSHUX=grain shape, uncertain due to recrystallization (sedimentary)
.GSHV=grain shape, variable (sedimentary)
.GSO=sorting, polygon contains information about(sedimentary)
.GSOM=sorting, moderate (sedimentary)
.GSOMW=sorting, moderate to well (sedimentary)
.GSOP=sorting, poor (sedimentary)
.GSOPM=sorting, poor to moderate (sedimentary)
.GSOPW=sorting, poor to well (sedimentary)
.GSOV=sorting, variable (sedimentary)
.GSOW=sorting, well (sedimentary)
.GSZ=grain size, polygon contains information about (sedimentary)
.GSZCL=grain size, clay (sedimentary)
.GSZML=grain size, silt (sedimentary)
.GSZS=grain size, sand (sedimentary)
.GSZSC=grain size, coarse sand (sedimentary)
.GSZSCVC=grain size, coarse to very coarse sand (sedimentary)
.GSZSF=grain size, fine sand (sedimentary)
.GSZSFC=grain size, fine to coarse sand (sedimentary)
.GSZSFM=grain size, fine to medium sand (sedimentary)
.GSZSFVC=grain size, fine to very coarse sand (sedimentary)
.GSZSM=grain size, medium sand (sedimentary)
.GSZSMC=grain size, medium to coarse sand (sedimentary)
.GSZSMVC=grain size, medium to very coarse sand (sedimentary)
.GSZSVC=grain size, very coarse sand (sedimentary)
.GSZSVF=grain size, very fine sand (sedimentary)
.GSZSVFC=grain size, very fine to coarse sand (sedimentary)
.GSZSVFF=grain size, very fine to fine sand (sedimentary)
.GSZSVFM=grain size, very fine to medium sand (sedimentary)
.GSZSVFVC=grain size, very fine to very coarse sand (sedimentary)
.GSZUD=grain size, sand size and finer, uncertain due to deformation
.GSZUG=grain size, uncertain due to grain overgrowths (sedimentary)
.GSZUX=grain size uncertain due to recrystallization
.GSZV=grain size, variable (sedimentary)
.GVL=gravel deposit (surficial deposit)
.GVLB=gravel deposit, boulder gravel (surficial deposit)
.GVLC=gravel deposit, cobble gravel (surficial deposit)
.GVLCB=gravel deposit, cobble-boulder gravel (surficial deposit)
.GVLG=gravel deposit, granule gravel (surficial deposit)
.GVLGP=gravel deposit, granule-pebble gravel (surficial deposit)
.GVLM=gravel deposit, muddy gravel (surficial deposit)
.GVLP=gravel deposit, pebble gravel (surficial deposit)
.GVLPB=gravel deposit, pebble-boulder gravel (surficial deposit)
.GVLPB=gravel deposit, pebble-boulder gravel (surficial deposit)
.GVLPC=gravel deposit, pebble-cobble gravel (surficial deposit)
.GVLS=gravel deposit, sandy gravel (surficial deposit)
.GVLSC=gravel deposit, sandy cobble gravel (surficial deposit)
.GVLSG=gravel deposit, sandy granule gravel (surficial deposit)
.GVLSGP=gravel deposit, sandy granule-pebble gravel (surficial deposit)
.GVLSP=gravel deposit, sandy pebble gravel (surficial deposit)
.GVLSPC=gravel deposit, sandy pebble-cobble gravel (surficial deposit)
.GZM=grain size, metamorphic groundmass, polygon contains information about
.GZMGA=grain size, metamorphic groundmass, aphanitic
.GZMGAF=grain size, metamorphic groundmass, aphanitic to fine
.GZMGC=grain size, metamorphic groundmass, coarse
.GZMGCVC=grain size, metamorphic groundmass, coarse to very coarse
.GZMGF=grain size, metamorphic groundmass, fine
.GZMGFC=grain size, metamorphic groundmass, fine to coarse
.GZMGFM=grain size, metamorphic groundmass, fine to medium
.GZMGM=grain size, metamorphic groundmass, medium
.GZMGMC=grain size, metamorphic groundmass, medium to coarse
.GZMGV=grain size, metamorphic groundmass, grain size variable
.GZMGVC=grain size, metamorphic groundmass, very coarse
.GZMP=grain size, metamorphic porphyroblasts, polygon contains information about
.GZMPC=grain size, metamorphic porphyroblasts, coarse

.GZMPF=grain size, metamorphic porphyroblasts, fine
.GZMPM=grain size, metamorphic porphyroblasts, medium
.GZMPMC=grain size, metamorphic porphyroblasts, medium to coarse
.GZMPV=grain size, metamorphic porphyroblasts, variable
.GZMPVC=grain size, metamorphic porphyroblasts, very coarse

.HSP=hillslope deposit (bedrock)
.HSPG=hillslope deposit, gravity-driven (bedrock)
.HSPGC=hillslope deposit, gravity-controlled (bedrock)
.HSPGF=hillslope deposit, gravity-driven, gravity-flow (bedrock)
.HSPGS=hillslope deposit, gravity-driven, gravity-slide (bedrock)
.HSPH=hillslope depositional setting, high-angle slopes (bedrock)
.HSPL=hillslope depositional setting, low-angle slopes (bedrock)
.HSPM=hillslope depositional setting, moderate slopes (bedrock)
.HSPU=hillslope deposit, unspecified (bedrock)
.HSPW=hillslope deposit, water-driven (bedrock)
.HSPWC=hillslope deposit, water-driven, colluvial deposit (bedrock)
.HSPWS=hillslope deposit, water-driven, slopewash deposit (bedrock)

-IAD=inactive deposit
-ICM=carbonate material interbedded in surficial deposit
-IOM=organic material interbedded in surficial deposit
-IOML=lignite seams interbedded with other sedimentary material
-IOMP=peat interbedded in surficial deposit
-IPS=paleosols associated within mapped geologic unit
-IVA=unmapped volcanic ash beds within mapped geologic unit
-IVAA=unmapped air-fall tuff within mapped geologic unit
-IVAS=unmapped ash-flow tuff within mapped geologic unit
-IVB=unmapped volcanic bodies within mapped geologic unit
-IVBA=unmapped andesite bodies within mapped geologic unit
-IVBB=unmapped basalt bodies within mapped geologic unit
-IVBBF=unmapped basalt flows within mapped geologic unit
-IVBBP=unmapped basalt plugs within mapped geologic unit
-IVBD=unmapped dacite-latite body unmapped within mapped geologic unit
.IAG=age based on isoptopic analysis
.IAGC=age based on isotopic data, age certain
.IAGU=age based on isotopic data, age uncertain
.IDK=paleocurrent indicator, type, polygon contains information about
.IDKC=paleocurrent indicator, channel geometry
.IDKIM=paleocurrent indicator, clast imbrications
.IDKXL=-paleocurrent indicator, cross lamination
.IGN=igneous rock
.IGND=igneous rock (deformed)
.IGNI=igneous rock, intrusive
.IGNID=igneous rock, intrusive (deformed)
.IGNIH=igneous rock, intrusive, hypabyssal origin
.IGNIHD=igneous rock, intrusive, hypabyssal origin (deformed)
.IGNIHK=igneous rock, intrusive, hypabyssal body, dike
.IGNIHKD=igneous rock, intrusive, hypabyssal body, dike (deformed)
.IGNIHO=igneous rock, intrusive, hypabyssal body, stock
.IGNIHOD=igneous rock, intrusive, hypabyssal body, stock (deformed)
.IGNIHP=igneous rock, intrusive, hypabyssal body, pluton
.IGNIHPD=igneous rock, intrusive, hypabyssal body, pluton (deformed)
.IGNIHS=igneous rock, intrusive, hypabyssal body, sill
.IGNIHSD=igneous rock, intrusive, hypabyssal body, sill (deformed)
.IGNIHU=igneous rock, intrusive, hypabyssal rock, intrusive type unspecified
.IGNIHUD=igneous rock, intrusive, hypabyssal rock, intrusive type unspecified (deformed)
.IGNIP=igneous rock, intrusive, plutonic origin
.IGNIPD=igneous rock, intrusive, plutonic origin (deformed)
.IGNIPK=igneous rock, intrusive, plutonic body, dike
.IGNIPKA=igneous rock, intrusive, plutonic body, dike, aplite
.IGNIPKAD=igneous rock, intrusive, plutonic body, dike, aplite (deformed)
.IGNIPKD=igneous rock, intrusive, plutonic body, dike (deformed)
.IGNIPKP=igneous rock, intrusive, plutonic body, dike, pegmatite

.IGNIPKPD=igneous rock, intrusive, plutonic body, dike, pegmatite (deformed)
.IGNIPO=igneous rock, intrusive, plutonic body, stock
.IGNIPOD=igneous rock, intrusive, plutonic body, stock (deformed)
.IGNIPP=igneous rock, intrusive, plutonic body, pluton
.IGNIPPD=igneous rock, intrusive, plutonic body, pluton (deformed)
.IGNIPS=igneous rock, intrusive, plutonic body, sill
.IGNIPSD=igneous rock, intrusive, plutonic body, sill (deformed)
.IGNIPU=igneous rock, intrusive, plutonic body, type unspecified
.IGNIPUD=igneous rock, intrusive, plutonic body, type unspecified (deformed)
.IGNIV=igneous rock, intrusive, volcanic feeder body
.IGNIVD=igneous rock, intrusive, volcanic feeder body (deformed)
.IGNIVK=igneous rock, intrusive, volcanic feeder body, dike
.IGNIVKD=igneous rock, intrusive, volcanic feeder body, dike (deformed)
.IGNIVO=igneous rock, intrusive, volcanic feeder body, stock
.IGNIVOD=igneous rock, intrusive, volcanic feeder body, stock (deformed)
.IGNIVS=igneous rock, intrusive, volcanic feeder body, sill
.IGNIVSD=igneous rock, intrusive, volcanic feeder body, sill (deformed)
.IGNIVU=igneous rock, intrusive, volcanic feeder body , unspecified type
.IGNIVUD=igneous rock, intrusive, volcanic feeder body , unspecified type (deformed)
.IGNP=igneous rock, pyroclastic
.IGNPC=igneous rock, pyroclastic, cinder cone
.IGNPCD=igneous rock, pyroclastic, cinder cone (deformed)
.IGNPD=igneous rock, pyroclastic (deformed)
.IGNPT=igneous rock, pyroclastic, tuff
.IGNPTD=igneous rock, pyroclastic, tuff (deformed)
.IGNPTFA=igneous rock, pyroclastic, tuff, air-fall
.IGNPTFAD=igneous rock, pyroclastic, tuff, air-fall (deformed)
.IGNPTFL=igneous rock, pyroclastic, tuff, ash-flow
.IGNPTFLD=igneous rock, pyroclastic, tuff, ash-flow (deformed)
.IGNX=igneous rock, extrusive
.IGNXB=igneous rock, extrusive, flow breccia
.IGNXBD=igneous rock, extrusive, flow breccia (deformed)
.IGNXD=igneous rock, extrusive (deformed)
.IGNXF=igneous rock, extrusive, lava flow
.IGNXFB=igneous rock, extrusive, lava flows and flow breccia
.IGNXFBD=igneous rock, extrusive, lava flows and flow breccia (deformed)
.IGNXFD=igneous rock, extrusive, lava flow (deformed)
.IGNXFS=igneous rock, extrusive, lava flows and sedimentary rock
.IGNXFSD=igneous rock, extrusive, lava flows and sedimentary rock (deformed)
.IGNXM=igneous rock, extrusive, lava dome
.IGNXMD=igneous rock, extrusive, lava dome (deformed)
.IGNXU=igneous rock, extrusive, unspecified
.IGNXUD=igneous rock, extrusive, unspecified (deformed)
.IMT=sedimentary origin, intermontane geographic setting
.INCM=inclusions, mafic, in igneous rock
.IND=induration, polygon contains information about (sedimentary rock)
.INDC=induration, consolidated (sedimentary rock)
.INDCE=induration, consolidated to cemented (sedimentary rock)
.INDCI=induration, consolidated to indurated (sedimentary rock)
.INDE=induration, cemented (sedimentary rock)
.INDI=induration, indurated (sedimentary rock)
.INDIE=induration, indurated to cemented (sedimentary rock)
.INDV=induration variable (sedimentary rock)
.INDY=induration, crystalline (sedimentary rock)
.INR=age based on intrusive relations
.INRC=age based on intrusive relations, age certain
.INRU=age based on intrusive relations, age uncertain
.INS=siliciclastic rock interbedded with non-siliciclastic rock
.INSB=siliciclastic rock interbedded with biogenic rock
.INSC=siliciclastic rock interbedded with carbonate rocks
.INSCA=siliciclastic rock interbedded with catastrophic rock
.INSCH=siliciclastic rock interbedded with chert
.INSCO=siliciclastic rock interbedded with coal
.INSIR=siliciclastic rock intermingled with intrusive rock

.INSVA=siliciclastic rock interbedded with volcanic ash beds
.INSVC=siliciclastic rock interbedded with volcaniclastic rocks
.INSVF=siliciclastic rock interbedded with volcanic flows
.ISB=marine deposit, interior shelf-basin complex
.ISBB=marine deposit, interior shelf-basin complex, basin deposit
.ISBBF=marine deposit, interior shelf-basin complex, basin-floor deposit
.ISBBS=marine deposit, interior shelf-basin complex, basin-slope deposit
.ISBN=marine deposit, interior shelf-basin complex, nearshore
.ISBS=marine deposit, interior shelf-basin complex, shelf
.ISO=isotopic age, polygon contains information about
.ISOA=isotopic age, polygon contains information about location of
.ISOAI=isotopic age, determination from inside map area
.ISOAO=isotopic age, determination from outside map area
.ISOC=isotopic age, determined from clasts in sedimentary unit
.ISOCA=isotopic age, determined from clasts in sedimentary unit, Ar-Ar determination
.ISOCK=isotopic age, determined from clasts in sedimentary unit, K-Ar determination
.ISOCU=isotopic age, determined from clasts in sedimentary unit, U-Pb determination
.ISOE=isotopic age is emplacement age
.ISOIU=isotopic age, age determination is uncertain
.ISOIU=isotopic age, isotopic age, interpretation is uncertain
.ISOKAB=isotopic age, K-Ar determination from biotite
.ISOKAC=isotopic age, K-Ar determination is conventional
.ISOKAFT=isotopic age, K-Ar determination is 40-39
.ISOKAG=isotopic age, K-Ar determination from glauconite
.ISOKAH=isotopic age, K-Ar determination from hornblende
.ISOKAI=isotopic age, K-Ar determination is incremental
.ISOKAK=isotopic age, K-Ar determination from K-spar
.ISOKAM=isotopic age, K-Ar determination from muscovite
.ISOKAS=isotopic age, K-Ar determination from sanidine
.ISOKAW=isotopic age, K-Ar determination is whole rock
.ISONE=isotopic age is not emplacement age
.ISORSB=isotopic age, Rb-Sr determination from biotite
.ISORSG=isotopic age, Rb-Sr determination is from glauconite
.ISORSI=isotopic age, Rb-Sr determination is isochron age
.ISORSK=isotopic age, Rb-Sr determination is from K-spar
.ISORSM=isotopic age, Rb-Sr determination is from muscovite
.ISORSNI=isotopic age, Rb-Sr determination is not isochron age
.ISORSP=isotopic age, Rb-Sr determination is from plagioclase
.ISORSW=isotopic age, Rb-Sr determination is whole rock
.ISOS=isotopic age, determined from sedimentary unit
.ISOSA=isotopic age, determined from sedimentary unit, amino-acid racimitization
.ISOSC=isotopic age, determined from sedimentary unit, C14
.ISOSF=isotopic age, determined from sedimentary unit, fission track
.ISOSG=isotopic age, determined from sedimentary unit, glauconite
.ISOSL=isotopic age, determined from sedimentary unit, cathodoluminescence
.ISOSP=isotopic age, determined from sedimentary unit, paleomagnetism
.ISOSS=isotopic age, determined from sedimentary unit, Sr age from fossil shells
.ISOSU=isotopic age, determined from sedimentary unit, U-Th
.ISOSUB=isotopic age, determined from sedimentary unit, U-Th determination from bone
.ISOSUP=isotopic age, determined from sedimentary unit, U-Th determination from petrocalcite
.ISOUP=isotopic age, U-Pb determination
.ISOUPI=isotopic age, U-Pb determination is isochron age
.ISOUPM=isotopic age, U-Pb determination from monazite
.ISOUPN=isotopic age, U-Pb determination is not isochron age
.ISOUPO=isotopic age, U-Pb determination from other mineral species
.ISOUPS=isotopic age, U-Pb determination from sphene
.ISOUPZ=isotopic age, U-Pb determination from zircon
.ISOV=isotopic age, determined from interbedded volcanic deposit
.ISOVA=isotopic age, determined from interbedded volcanic deposit, air-fall tuff
.ISOVAA=isotopic age, determined from interbedded volcanic deposit, air-fall tuff, Ar-Ar determination
.ISOVAK=isotopic age, determined from interbedded volcanic deposit, air-fall tuff, K-Ar determination
.ISOVAT=isotopic age, determined from interbedded volcanic deposit, air-fall tuff, tephrochronology
.ISOVB=isotopic age, determined from interbedded volcanic deposit, basalt flow
.ISOVBA=isotopic age, determined from interbedded volcanic deposit, basalt flow, Ar-Ar determination

.ISOVBK=isotopic age, determined from interbedded volcanic deposit, basalt flow, K-Ar determination
.ISOVF=isotopic age, determined from interbedded volcanic deposit, ash-flow tuff
.ISOVFA=isotopic age, determined from interbedded volcanic deposit, ash-flow tuff, Ar-Ar determination
.ISOVFK=isotopic age, determined from interbedded volcanic deposit, ash-flow tuff, K-Ar determination
.ISOW=isotopic age, determined by other workers

-JAS=silicification, jasperoid alteration or mineralization
.JOT=jotunite
.JOTD=jotunite (deformed)

-LAK=lake deposit
-LAKB=lake deposit, bar
-LAKC=lake deposit, carbonate flat
-LAKD=lake deposit, delta
-LAKF=lake deposit, lake floor
-LAKH=lake deposit, fresh water
-LAKI=lake deposit, interdeltaic
-LAKL=lake deposit, saline
-LAKM=lake deposit, mud flat
-LAKS=lake deposit, shore
-LAU=altered rock, zeolitization, laumontite
-LCB=locally chert-bearing
-LITH=lithic-rich composition (sedimentary rock)
-LMST=limestone unmapped within mapped geologic unit
-LOC=strain-dominated rocks, local deformation
.LAC=lake deposit (bedrock)
.LACM=lake deposit, marginal lacustrine (bedrock)
.LACO=lake deposit, open lacustrine (bedrock)
.LAF=fluvial deposit, lateral-accretion element (transverse bar)
.LAT=latite
.LATD=latite (deformed)
.LATQ=latite, quartzose
.LATQD=latite, quartzose (deformed)
.LMA=geologic-age subdivision, land-mammal age, polygon contains information about
.LMAA=geologic-age subdivision, land-mammal age, Arikareean
.LMAA=geologic-age subdivision, land-mammal age, Arikareean
.LMAB=geologic-age subdivision, land-mammal age, Barstovian
.LMAC=geologic-age subdivision, land-mammal age, Clarendonian
.LMAD=geologic-age subdivision, land-mammal age, Duchesnean
.LMAF=geologic-age subdivision, land-mammal age, Tiffanian
.LMAG=geologic-age subdivision, land-mammal age, Bridgerian
.LMAH=geologic-age subdivision, land-mammal age, Hemphillian
.LMAI=geologic-age subdivision, land-mammal age, Irvingtonian
.LMAK=geologic-age subdivision, land-mammal age, Clarkforkian
.LMAK=geologic-age subdivision, land-mammal age, Clarkforkian
.LMAL=geologic-age subdivision, land-mammal age, Blancan
.LMAN=geologic-age subdivision, land-mammal age, Chadronian
.LMAN=geologic-age subdivision, land-mammal age, Chadronian
.LMAO=geologic-age subdivision, land-mammal age, Orellan
.LMAP=geologic-age subdivision, land-mammal age, Puercan
.LMAR=geologic-age subdivision, land-mammal age, Rancholabrean
.LMAS=geologic-age subdivision, land-mammal age, Wasatchian
.LMAT=geologic-age subdivision, land-mammal age, Torrejonian
.LMAU=geologic-age subdivision, land-mammal age, Uintan
.LMAW=geologic-age subdivision, land-mammal age, Whitneyan
.LPH=lamprophyre
.LPHD=lamprophyre (deformed)
.LSS=fluvial deposit, laminated sand-sheet element
.LUT=lutite (fine grained sedimentary rock)

-MCB=deltaic deposit, braided-channel deposit
-MCL=matrix-supported fabric, clay matrix
-MCM=deltaic deposit, meandering-channel deposit
-MCZOTE=age of metamorphism Tertiary, early

-MCZOTL=age of metamorphism Tertiary, late
-MCZOTM=age of metamorphism Tertiary, middle
-MGP=matrix-supported fabric, granule-pebble matrix
-MMD=matrix-supported fabric, mud matrix
-MMZOE=age of metamorphism Mesozoic, Early
-MMZOL=age of metamorphism Mesozoic, Late
-MMZOM=age of metamorphism Mesozoic, Middle
-MNGN-age of metamorphism Neogene
-MOR=morainal deposit
-MPB=matrix-supported fabric, pebble matrix
-MPC=matrix-supported fabric, pebble-cobble matrix
-MPGN-age of metamorphism Paleogene
-MPZOE-age of metamorphism Paleozoic, Early
-MPZOL-age of metamorphism Paleozoic, Late
-MPZOM-age of metamorphism Paleozoic, Middle
-MRL=marl unmapped within mapped sedimentary unit
-MSD=matrix-supported fabric, sand matrix
-MSG=matrix-supported fabric, sandy granule matrix
-MSGP=matrix-supported fabric, sandy granule-pebble matrix
-MSL=matrix-supported fabric, silty matrix
.MAC=igneous mineral, accessory, polygon contains information about
.MACAL=igneous mineral, accessory, allanite
.MACAP=igneous mineral, accessory, apatite
.MACCL=igneous mineral, accessory, clinozoisite
.MACE=igneous mineral, accessory, epidote
.MACED=igneous mineral, accessory, epidote (in deformed rock)
.MACF=igneous mineral, accessory, fluorite
.MACI=igneous mineral, accessory, ilmenite
.MACMG=igneous mineral, accessory, magnetite
.MACMO=igneous mineral, accessory, monazite
.MACO=igneous mineral, accessory, opaque minerals
.MACS=igneous mineral, accessory, sphene
.MACZ=igneous mineral, accessory, zircon
.MAN=mangerite
.MAND=mangerite (deformed)
.MAR=sedimentary origin, nonmarine
.MARU=marine depositional setting, unspecified
.MCH=igneous mineral, characterizing, polygon contains information about
.MCHB=igneous mineral, characterizing, biotite
.MCHBD=igneous mineral, characterizing, biotite (in deformed rock)
.MCHBH=igneous mineral, characterizing, biotite & hornblende
.MCHBHD=igneous mineral, characterizing, biotite & hornblende (in deformed rock)
.MCHBM=igneous mineral, characterizing, biotite & muscovite
.MCHG=igneous mineral, characterizing, garnet
.MCHH=igneous mineral, characterizing, hornblende
.MCHHB=igneous mineral, characterizing, hornblende & biotite
.MCHHBD=igneous mineral, characterizing, hornblende & biotite (in deformed rock)
.MCHHP=igneous mineral, characterizing, hornblende & pyroxene
.MCHM=igneous mineral, characterizing, muscovite
.MCHMB=igneous mineral, characterizing, muscovite & biotite
.MCHMG=igneous mineral, characterizing, muscovite & garnet
.MCHPH=igneous mineral, characterizing, pyroxene & hornblende
.MCHPX=igneous mineral, characterizing, pyroxene
.MCZO=age of metamorphism Cenozoic
.MCZOQ=age of metamorphism Quaternary
.MCZOQH=age of metamorphism Holocene
.MCZOQHD=age of metamorphism Modern
.MCZOQHE=age of metamorphism Holocene, early
.MCZOQHL=age of metamorphism Holocene, late
.MCZOQHM=age of metamorphism Holocene, middle
.MCZOQP=age of metamorphism Pleistocene
.MCZOQPE=age of metamorphism Pleistocene, early
.MCZOQPL=age of metamorphism Pleistocene, late
.MCZOQPM=age of metamorphism Pleistocene, middle

.MCZOT=age of metamorphism Tertiary
.MCZOTA=age of metamorphism Paleocene
.MCZOTAE=age of metamorphism Paleocene, early
.MCZOTAL=age of metamorphism Paleocene, late
.MCZOTE=age of metamorphism Eocene
.MCZOTEE=age of metamorphism Eocene, early
.MCZOTEL=age of metamorphism Eocene, late
.MCZOTEM=age of metamorphism Eocene, middle
.MCZOTM=age of metamorphism Miocene
.MCZOTME=age of metamorphism Miocene, early
.MCZOTML=age of metamorphism Miocene, late
.MCZOTMM=age of metamorphism Miocene, middle
.MCZOTO=age of metamorphism Oligocene
.MCZOTOE=age of metamorphism Oligocene, early
.MCZOTOL=age of metamorphism Oligocene, late
.MCZOTP=age of metamorphism Pliocene
.MCZOTPE=age of metamorphism Pliocene, early
.MCZOTPL=age of metamorphism Pliocene, late
.MDFB= metamorphosed under brittle conditions
.MDFBD= metamorphosed under brittle-ductile conditions
.MDFC= metamorphosed within contractional strain field
.MDFD= metamorphosed under ductile conditions
.MDFE= metamorphosed within extensional strain field
.MDFF= metamorphosed within fault zone
.MDFFN= metamorphosed within normal-slip fault zone
.MDFFS= metamorphosed within strike-slip fault zone
.MDFFT= metamorphosed within thrust-slip fault zone
.MDFFTA= metamorphosed above thrust fault
.MDFFTB= metamorphosed beneath thrust fault
.MDFH= metamorphosed under high-strain conditions
.MDFL= metamorphosed under low-strain conditions
.MDFM=multiple metamorphic episodes
.MDFME=multiple metamorphic episodes, prograde followed by retrograde
.MDFMO=multiple metamorphic episodes, retrograde followed by prograde
.MDFMR=multiple metamorphic episodes, regional followed by contact
.MDFMS=multiple metamorphic episodes, regional followed by strain-dominant
.MDFP= metamorphosed during pluton emplacement
.MDFRP= metamorphosed under plutonic conditions
.MDFS= metamorphosed within shear zone
.MDFT= metamorphosed within transtensional strain field
.MDFX=metamorphism synchronous with deformation
.MDFXF=metamorphism synchronous with faulting
.MDFXO=metamorphism synchronous with folding
.MET=metamorphic rock
.METC=metamorphic rock, contact
.METR=metamorphic rock, regional dynamothermal
.METS=metamorphic rock, strain dominant
.METSGC=metamorphic rock, strain-dominant, gneiss, cataclastic
.METSGM=metamorphic rock, strain-dominant, gneiss, mylonitic
.METSP=metamorphic rock, strain-dominant, phyllonite
.METU=metamorphic rock, unspecified
.MGD=metamorphic grade, polygon contains information about
.MGDA=metamorphic grade, amphibolite facies
.MGDAL=metamorphic grade, amphibolite facies (lower)
.MGDAU=metamorphic grade, amphibolite facies (upper)
.MGDB=metamorphic grade, blueschist facies
.MGDG=metamorphic grade, greenschist facies
.MGDGL=metamorphic grade, greenschist facies (lower)
.MGDGU=metamorphic grade, greenschist facies (upper)
.MGDPP=metamorphic grade, prehnite-pumpellyite facies
.MGDPY=metamorphic grade, pyroxene hornfels facies
.MGDZ=metamorphic grade, zeolite facies
.MGM=mudrock & grainrock, mixed (sedimentary rock)
.MGMGD=mudrock & grainrock, mixed, grainrock dominant (sedimentary rock)

.MGMMD=mudrock & grainrock, mixed, mudrock dominant (sedimentary rock)
.MGR=monzogranite
.MGRD=monzogranite (deformed)
.MGS=grain shape, metamorphic groundmass
.MGSI=grain shape, metamorphic groundmass, idioblastic
.MGSX=grain shape, metamorphic groundmass, xenoblastic
.MIG=metamorphic rock, metaigneous
.MIGA=metamorphic rock, metaigneous, amphibolite
.MIGE=metamorphic rock, metaigneous, greenstone
.MIGG=metamorphic rock, metaigneous, gneiss
.MIGGA=metamorphic rock, metaigneous, augen gneiss
.MIGGB=metamorphic rock, metaigneous, banded gneiss
.MIGGL=metamorphic rock, metaigneous, gneiss, laminated
.MIGGO=metamorphic rock, metaigneous, orthogneiss
.MIGH=metamorphic rock, metaigneous, hornfels
.MIGPM=metamorphic rock, metaigneous, metaplutonic
.MIGRG=metamorphic rock, metaigneous, gneissose granitic rock
.MIGSP=metamorphic rock, metaigneous, serpentinite
.MIGTM=metamorphic rock, metaigneous, metatuff
.MIGVM=metamorphic rock, metaigneous, metavolcanic
.MIN=mineralization, polygon contains information about
.MINM=miscellaneous mineral information
.MINMP=prospects occur in polygon
.MINO=mineralization outcrop type, information about
.MINOB=mineralization outcrop type, boxwork
.MINOD=mineralization outcrop type, disseminated mineral traces
.MINOMC=mineralization outcrop type, mineralized contact
.MINOO=mineralization outcrop type, oxidized rock
.MINOP=mineralization outcrop type, placer
.MINOS=mineralization outcrop type, skarn
.MINOU=mineralization outcrop type, unspecified
.MINOV=mineralization outcrop type, local veins
.MINT=mineralization type, information about
.MINTC=mineralization type, carbonate
.MINTN=mineralization type, native-metal
.MINTO=mineralization type, oxide
.MINTS=mineralization type, sulphide
.MINTSI=mineralization type, siliceous
.MINTU=mineralization type, unspecified
.MINU=mineralization type, unspecified
.MMG=metamorphic rock, generic
.MMGC=metamorphic rock, generic, calc-silicate rock
.MMGG=metamorphic rock, generic, gneiss
.MMGGA=metamorphic rock, generic, gneiss, augen
.MMGGB=metamorphic rock, generic, gneiss, banded
.MMGGG=metamorphic rock, generic, gneiss, granitic
.MMGGL=metamorphic rock, generic, gneiss, laminated
.MMGGLY=metamorphic rock, generic, gneiss, layered
.MMGGQF=metamorphic rock, generic, gneiss, quartzofeldspathic
.MMGH=metamorphic rock, generic, hornfels
.MMGP=metamorphic rock, generic, phyllite
.MMGPH=metamorphic rock, generic, phyllonite
.MMGS=metamorphic rock, generic, schist
.MMM=metamorphic mineral, polygon contains information about
.MMMA=metamorphic mineral, andalusite
.MMMAC=metamorphic mineral, actinolite
.MMMAL=metamorphic mineral, albite
.MMMB=metamorphic mineral, biotite
.MMMC=metamorphic mineral, clinozoisite
.MMMCA=metamorphic mineral, calcite
.MMMCH=metamorphic mineral, chlorite
.MMMCO=metamorphic mineral, cordierite
.MMMCR=metamorphic mineral, corundum
.MMMD=metamorphic mineral, dolomite

.MMMDI=metamorphic mineral, diopside
.MMME=metamorphic mineral, epidote
.MMMF=metamorphic mineral, forsterite
.MMMG=metamorphic mineral, garnet
.MMMH=metamorphic mineral, hornblende
.MMMJ=metamorphic mineral, jadeite
.MMMK=metamorphic mineral, kyanite
.MMML=metamorphic mineral, lawsonite
.MMMM=metamorphic mineral, magnetite
.MMMMI=metamorphic mineral, microcline
.MMMMU=metamorphic mineral, muscovite
.MMMO=metamorphic mineral, orthoclase
.MMMP=metamorphic mineral, pumpellyite
.MMMPI=metamorphic mineral, piemontite
.MMMPR=metamorphic mineral, prehnite
.MMMPX=metamorphic mineral, pyroxene
.MMMR=metamorphic mineral, rutile
.MMMS=metamorphic mineral, stilpnomelane
.MMMSC=metamorphic mineral, scapolite
.MMMSE=metamorphic mineral, sericite
.MMMSI=metamorphic mineral, sillimanite
.MMMST=metamorphic mineral, staurolite
.MMMT=metamorphic mineral, tourmaline
.MMMTA=metamorphic mineral, talc
.MMMTR=metamorphic mineral, tremolite
.MMMW=metamorphic mineral, wollastonite
.MMMZ=metamorphic mineral, zoisite
.MMZO=age of metamorphism Mesozoic
.MMZOJ=age of metamorphism Jurassic
.MMZOJE=age of metamorphism Jurassic, early
.MMZOJL=age of metamorphism Jurassic, late
.MMZOK=age of metamorphism Cretaceous
.MMZOKE=age of metamorphism Cretaceous, early
.MMZOKL=age of metamorphism Cretaceous, late
.MMZOT=age of metamorphism Triassic
.MMZOTE=age of metamorphism Triassic, early
.MMZOTL=age of metamorphism Triassic, late
.MND=fluvial deposit, meandering-channel facies
.MNDF=fluvial deposit, meandering-channel facies, fine-grained
.MNDG=fluvial deposit, meandering-channel facies, gravel bed
.MNDGS=fluvial deposit, meandering-channel facies, gravel-sand bed
.MNDS=fluvial deposit, meandering-channel facies, sandy
.MNDSE=fluvial deposit, meandering-channel facies, sandy, ephemeral
.MPM=metamorphic rock, polymetamorphic
.MPMA=metamorphic rock, polymetamorphic, amphibolite
.MPMC=metamorphic rock, polymetamorphic, calcsilicate
.MPMCA=metamorphic rock, polymetamorphic, cataclasite
.MPMG=metamorphic rock, polymetamorphic, gneiss
.MPMGA=metamorphic rock, polymetamorphic, augen gneiss
.MPMGB=metamorphic rock, polymetamorphic, banded gneiss
.MPMGO=metamorphic rock, polymetamorphic, orthogneiss
.MPMGP=metamorphic rock, polymetamorphic, paragneiss
.MPMH=metamorphic rock, polymetamorphic, hornfels
.MPMM=metamorphic rock, polymetamorphic, marble
.MPMP=metamorphic rock, polymetamorphic, phyllite
.MPMPH=metamorphic rock, polymetamorphic, phyllonite
.MPMQ=metamorphic rock, polymetamorphic, metaquartzite
.MPMS=metamorphic rock, polymetamorphic, schist
.MPMSL=metamorphic rock, polymetamorphic, slate
.MPMSP=metamorphic rock, polymetamorphic, serpentinite
.MPMY=metamorphic rock, polymetamorphic, mylonite
.MPRC=age of metamorphism Precambrian
.MPRCA=age of metamorphism Archean
.MPRCAE=age of metamorphism Archean, early

.MPRCAL=age of metamorphism Archean, late
.MPRCAM=age of metamorphism Archean, middle
.MPRCP=age of metamorphism Proterozoic
.MPRCPE=age of metamorphism Proterozoic, early
.MPRCPL=age of metamorphism Proterozoic, late
.MPRCPM=age of metamorphism Proterozoic, middle
.MPYX=metamorphic mineral, pyroxene
.MPZO=age of metamorphism Paleozoic
.MPZOC=age of metamorphism Cambrian
.MPZOCE=age of metamorphism Cambrian, early
.MPZOCL=age of metamorphism Cambrian, late
.MPZOD=age of metamorphism Devonian
.MPZODE=age of metamorphism Devonian, early
.MPZODL=age of metamorphism Devonian, late
.MPZOM=age of metamorphism Mississippian
.MPZOME=age of metamorphism Mississippian, early
.MPZOML=age of metamorphism Mississippian, late
.MPZOO=age of metamorphism Ordovician
.MPZOOE=age of metamorphism Ordovician, early
.MPZOOL=age of metamorphism Ordovician, late
.MPZOP=age of metamorphism Pennsylvanian
.MPZOPE=age of metamorphism Pennsylvanian, early
.MPZOPL=age of metamorphism Pennsylvanian, late
.MPZOR=age of metamorphism Permian
.MPZORE=age of metamorphism Permian early
.MPZORL=age of metamorphism Permian, late
.MPZOS=age of metamorphism Silurian
.MPZOSE=age of metamorphism Silurian, early
.MPZOSL=age of metamorphism Silurian, late
.MRK=mud-supported sedimentary rock (non-carbonate)
.MRKCL=claystone (sedimentary rock)
.MRKCLML=claystone, silty (sedimentary rock)
.MRKCLS=claystone, sandy (sedimentary rock)
.MRKM=mudstone (sedimentary rock)
.MRKMC=mudstone, conglomeratic (sedimentary rock)
.MRKMCB=mudstone, bouldery (sedimentary rock)
.MRKMCC=mudstone, cobbly (sedimentary rock)
.MRKMCCB=mudstone, cobbly & bouldery (sedimentary rock)
.MRKMCP=mudstone, pebbly (sedimentary rock)
.MRKMCPC=mudstone, pebbly & cobbly (sedimentary rock)
.MRKMML=mudstone, silty (sedimentary rock)
.MRKMS=mudstone, sandy (sedimentary rock)
.MRKS=shale (sedimentary rock)
.MRKV=mudrock, variable lithologies (sedimentary rock)
.MRO=mudrock (carbonate rock)
.MROD=dolomitic mudrock (carbonate rock)
.MRODM=dolomitic mudstone, (carbonate rock)
.MRODW=dolomitic wackestone, (carbonate rock)
.MROL=lime mudrock (carbonate rock)
.MROLM=lime mudstone (carbonate rock)
.MROLW=lime wackestone (carbonate rock)
.MSD=metamorphic rock, metasedimentary
.MSDA=metamorphic rock, metasedimentary, argillite
.MSDBG=metamorphic rock, metasedimentary, banded gneiss
.MSDC=metamorphic rock, metasedimentary, calcsilicate
.MSDE=metamorphic rock, metasedimentary, slate
.MSDF=metamorphic rock, metasedimentary, hornfels
.MSDG=metamorphic rock, metasedimentary, gneiss
.MSDHM=metamorphic rock, metasedimentary, metachert
.MSDLM=metamorphic rock, metasedimentary, metasiltstone
.MSDM=metamorphic rock, metasedimentary, marble, undifferentiated
.MSDOM=metamorphic rock, metasedimentary, metaconglomerate
.MSDPG=metamorphic rock, metasedimentary, paragneiss
.MSDQM=metamorphic rock, metasedimentary, metaquartzite

.MSDS=metamorphic rock, metasedimentary, schist
.MSDTM=metamorphic rock, metasedimentary, metasandstone
.MSDUM=metamorphic rock, metasedimentary, metamudstone
.MSDWM=metamorphic rock, metasedimentary, metagraywacke
.MSDY=metamorphic rock, metasedimentary, phyllite
.MTM=sedimentary origin, mountain-margin geographic setting
.MXS=matrix-supported sedimentary rock
.MXSC=matrix-supported sedimentary rock, conglomerate
.MXSCCL=matrix-supported sedimentary rock, conglomerate, clay-supported
.MXSCM=matrix-supported sedimentary rock, conglomerate, mud-supported
.MXSCMS=matrix-supported sedimentary rock, conglomerate, muddy sand-supported
.MXSCS=matrix-supported sedimentary rock, conglomerate, sand-supported
.MXSCSG=matrix-supported sedimentary rock, conglomerate, sandy granule-supported
.MXSCSGP=matrix-supported sedimentary rock, conglomerate, sandy granule-pebble-supported
.MXSSS=matrix-supported sedimentary rock, sandstone
.MXSSSCL=matrix-supported sedimentary rock, sandstone, clay-supported
.MXSSSD=matrix-supported sedimentary rock, sandstone, mud-supported
.MXSSSML=matrix-supported sedimentary rock, sandstone, silt-supported
.MZD=monzodiorite
.MZDD=monzodiorite (deformed)
.MZDQ=quartz monzodiorite
.MZDQD=quartz monzodiorite (deformed)
.MZN=monzonite
.MZND=monzonite (deformed)
.MZNQ=monzonite, quartz-bearing
.MZNQD=monzonite, quartz-bearing (deformed)
.MZO=geologic age, Mesozoic
.MZOJ=geologic age, Jurassic
.MZOJE=geologic age, Jurassic, early
.MZOJL=geologic age, Jurassic, late
.MZOK=geologic age, Cretaceous
.MZOKE=geologic age, Cretaceous, early
.MZOKL=geologic age, Cretaceous, late
.MZOT=geologic age, Triassic
.MZOTE=geologic age, Triassic, early
.MZOTL=geologic age, Triassic, late

-NAG=silver mineralization
-NAU=gold mineralization
-NCU=copper mineralization
-NGN=geologic age, Neogene
.NMA=sedimentary origin, nonmarine
.NMAU=nonmarine depositional setting, unspecified
.NOR=norite
.NORD=norite (deformed)
.NPZ=geologic-age subdivision, calcareous nannoplankton zone
.NPZN21=geologic-age subdivision, calcareous nannoplankton zone NN21
.NPZN20=geologic-age subdivision, calcareous nannoplankton zone NN20
.NPZN19=geologic-age subdivision, calcareous nannoplankton zone NN19
.NPZN19=geologic-age subdivision, calcareous nannoplankton zone NN19
.NPZN18=geologic-age subdivision, calcareous nannoplankton zone NN18
.NPZN17=geologic-age subdivision, calcareous nannoplankton zone NN17
.NPZN16=geologic-age subdivision, calcareous nannoplankton zone NN16
.NPZN15=geologic-age subdivision, calcareous nannoplankton zone NN15
.NPZN14=geologic-age subdivision, calcareous nannoplankton zone NN14
.NPZN13=geologic-age subdivision, calcareous nannoplankton zone NN13
.NPZN12=geologic-age subdivision, calcareous nannoplankton zone NN12
.NPZN12=geologic-age subdivision, calcareous nannoplankton zone NN12
.NPZN11=geologic-age subdivision, calcareous nannoplankton zone NN11
.NPZN10=geologic-age subdivision, calcareous nannoplankton zone NN10
.NPZN09=geologic-age subdivision, calcareous nannoplankton zone NN09
.NPZN08=geologic-age subdivision, calcareous nannoplankton zone NN08
.NPZN07=geologic-age subdivision, calcareous nannoplankton zone NN07
.NPZN06=geologic-age subdivision, calcareous nannoplankton zone NN06

.NPZN05=geologic-age subdivision, calcareous nannoplankton zone NN05
.NPZN04=geologic-age subdivision, calcareous nannoplankton zone NN04
.NPZN03=geologic-age subdivision, calcareous nannoplankton zone NN03
.NPZN02=geologic-age subdivision, calcareous nannoplankton zone NN02
.NPZN01=geologic-age subdivision, calcareous nannoplankton zone NN01
.NPZP25=geologic-age subdivision, calcareous nannoplankton zone NP25
.NPZP24=geologic-age subdivision, calcareous nannoplankton zone NP24
.NPZP23=geologic-age subdivision, calcareous nannoplankton zone NP23
.NPZP22=geologic-age subdivision, calcareous nannoplankton zone NP22
.NPZP21=geologic-age subdivision, calcareous nannoplankton zone NP21
.NPZP20=geologic-age subdivision, calcareous nannoplankton zone NP20
.NPZP19=geologic-age subdivision, calcareous nannoplankton zone NP19
.NPZP18=geologic-age subdivision, calcareous nannoplankton zone NP18
.NPZP17=geologic-age subdivision, calcareous nannoplankton zone NP17
.NPZP17=geologic-age subdivision, calcareous nannoplankton zone NP17
.NPZP16=geologic-age subdivision, calcareous nannoplankton zone NP16
.NPZP15=geologic-age subdivision, calcareous nannoplankton zone NP15
.NPZP14=geologic-age subdivision, calcareous nannoplankton zone NP14
.NPZP13=geologic-age subdivision, calcareous nannoplankton zone NP13
.NPZP12=geologic-age subdivision, calcareous nannoplankton zone NP12
.NPZP11=geologic-age subdivision, calcareous nannoplankton zone NP11
.NPZP10=geologic-age subdivision, calcareous nannoplankton zone NP10
.NPZP09=geologic-age subdivision, calcareous nannoplankton zone NP09
.NPZP08=geologic-age subdivision, calcareous nannoplankton zone NP08
.NPZP07=geologic-age subdivision, calcareous nannoplankton zone NP07
.NPZP06=geologic-age subdivision, calcareous nannoplankton zone NP06
.NPZP05=geologic-age subdivision, calcareous nannoplankton zone NP05
.NPZP04=geologic-age subdivision, calcareous nannoplankton zone NP04
.NPZP03=geologic-age subdivision, calcareous nannoplankton zone NP03
.NPZP02=geologic-age subdivision, calcareous nannoplankton zone NP02
.NPZP01=geologic-age subdivision, calcareous nannoplankton zone NP01

-OFE=iron oxide mineralization
-OPAL=siliceous alteration or mineralization, opal
-OST=observation station contained in polygon
-OUT=glacial outwash deposit
-OWP=outwash-plain sedimentary rock
.OBF=fluvial deposit, overbank-fines element
.OCE=oceanic deposit
.OCEA=oceanic deposit, abyssal plain deposit
.OCEP=oceanic deposit, plateau deposit
.OCES=oceanic deposit, seamount deposit
.OGM=outcrop geomorphology, polygon contains information about
.OGMB=outcrop geomorphology, blocky
.OGMC=outcrop geomorphology, cliff forming
.OGMD=outcrop geomorphology, rounded
.OGMF=outcrop geomorphology, fissil
.OGMG=outcrop geomorphology, rib-forming
.OGMH=outcrop geomorphology, regolith developed on outcrop
.OGMI=outcrop geomorphology, interbedded ledgeforming and slopeforming
.OGML=outcrop geomorphology, ledgeforming
.OGMMB=outcrop geomorphology, massive, blocky
.OGMMR=outcrop geomorphology, massive, rounded
.OGMR=outcrop geomorphology, recessive
.OGMRB=outcrop geomorphology, rounded and blocky
.OGMS=outcrop geomorphology, slopeforming
.OGMWSL=outcrop geomorphology, weathered, slightly
.OGMWST=outcrop geomorphology, weathered, strongly
.OGMWSU=outcrop geomorphology, weathered, substantially
.ORF=original fabric (carbonate rocks)
.ORFG=original fabric grain-supported (carbonate rocks)
.ORFM=original fabric mud-supported (carbonate rocks)
.ORFO=original fabric organic-supported (carbonate rocks)

-PAVM=Av-horizon soil, moderate
-PAVS=Av-horizon soil, strong
-PAVW=Av-horizon soil, weak
-PBL=metamophic mineral as porphyroblast
-PCL=metamophic mineral as porphyroclast
-PER=strain-dominated rocks, pervasive deformation
-PFOL=foliation (penetrative deformation), polygon contains information about intensity
-PFOLM=foliation (penetrative deformation), moderate
-PFOLMS=foliation (penetrative deformation), moderate to strong
-PFOLS=foliation (penetrative deformation), strong
-PFOLW=foliation (penetrative deformation), weak
-PFOLWM=foliation (penetrative deformation), weak to moderate
-PGN=geologic age, Paleogene
-PLINM=lineation, moderate (penetrative deformation)
-PLINS=lineation, strong (penetrative deformation)
-PLINW=lineation, weak (penetrative deformation)
-PUBW=geologic-unit identification supported by published observation by other workers
-PUBWU=geologic-unit identification supported by unpublished observation by other workers
-PZOE=geologic age, Paleozoic, early
-PZOI=geologic age, Paleozoic, middle
-PZOL=geologic age, Paleozoic, late
.PAF=provincial affinity, polygon contains information about
.PAFC=provincial affinity, rock has affinities with Chocolate Mountains
.PAFG=provincial affinity, rock has affinities with San Gabriel Mountains
.PAFM=provincial affinity, rock has affinities with Mojave Desert
.PAFMB=provincial affinity, rock has affinities with Mojave Desert, San Bernardino Mts
.PAFML=provincial affinity, rock has affinities with Mojave Desert, Little San Bernardino Mts
.PAFP=provincial affinity, rock has affinities with Peninsular Ranges
.PAFPJ=provincial affinity, rock has affinities with Peninsular Ranges, San Jacinto Mountains type
.PAFPR=provincial affinity, rock has affinities with Peninsular Ranges, Santa Rosa Mountains type
.PBY=paleobathymetry
.PBY=paleobathymetry, bathyal deposit
.PBYA=paleobathymetry, abyssal deposit
.PBYL=paleobathymetry, littoral deposit
.PBYL=paleobathymetry, lower bathyal deposit
.PBYM=paleobathymetry, middle bathyal deposit
.PBYN=paleobathymetry, neritic deposit
.PBYNI=paleobathymetry, inner neritic deposit
.PBYNO=paleobathymetry, outer neritic deposit
.PBYU=paleobathymetry, upper bathyal deposit
.PCI=paleocurrent indicators
.PCIA=paleocurrent indicators, azimuth only
.PCIAE=paleocurrent indicators, azimuth only, direction E-W
.PCIAN=paleocurrent indicators, azimuth only, direction N-S
.PCIANE=paleocurrent indicators, azimuth only, direction NE-SW
.PCIANW=paleocurrent indicators, azimuth only, direction NW-SE
.PCID=paleocurrent indicators, azimuth and direction
.PCIDE=paleocurrent indicators, azimuth and direction, out of the east
.PCIDN=paleocurrent indicators, azimuth and direction, out of the north
.PCIDNE=paleocurrent indicators, azimuth and direction, out of the northeast
.PCIDNW=paleocurrent indicators, azimuth and direction, out of the northwest
.PCIDS=paleocurrent indicators, azimuth and direction, out of the south
.PCIDSE=paleocurrent indicators, azimuth and direction, out of the southeast
.PCIDSW=paleocurrent indicators, azimuth and direction, out of the southwest
.PCIDW=paleocurrent indicators, azimuth and direction, out of the west
.PFUN=platform, unspecified
.PFZ=geologic-age subdivision, planktonic foraminiferal zone
.PFZN04=geologic-age subdivision, planktonic foraminiferal zone N04
.PFZN05=geologic-age subdivision, planktonic foraminiferal zone N05
.PFZN06=geologic-age subdivision, planktonic foraminiferal zone N06
.PFZN07=geologic-age subdivision, planktonic foraminiferal zone N07
.PFZN08=geologic-age subdivision, planktonic foraminiferal zone N08
.PFZN09=geologic-age subdivision, planktonic foraminiferal zone N09
.PFZN10=geologic-age subdivision, planktonic foraminiferal zone N10

.PFZN11=geologic-age subdivision, planktonic foraminiferal zone N11
.PFZN12=geologic-age subdivision, planktonic foraminiferal zone N12
.PFZN13=geologic-age subdivision, planktonic foraminiferal zone N13
.PFZN14=geologic-age subdivision, planktonic foraminiferal zone N14
.PFZN15=geologic-age subdivision, planktonic foraminiferal zone N15
.PFZN16=geologic-age subdivision, planktonic foraminiferal zone N16
.PFZN17=geologic-age subdivision, planktonic foraminiferal zone N17
.PFZN18=geologic-age subdivision, planktonic foraminiferal zone N18
.PFZN19=geologic-age subdivision, planktonic foraminiferal zone N19
.PFZN20=geologic-age subdivision, planktonic foraminiferal zone N20
.PFZN21=geologic-age subdivision, planktonic foraminiferal zone N21
.PFZN22=geologic-age subdivision, planktonic foraminiferal zone N22
.PFZN22=geologic-age subdivision, planktonic foraminiferal zone N22
.PFZN23=geologic-age subdivision, planktonic foraminiferal zone N23
.PFZP01=geologic-age subdivision, planktonic foraminiferal zone P01
.PFZP02=geologic-age subdivision, planktonic foraminiferal zone P02
.PFZP03=geologic-age subdivision, planktonic foraminiferal zone P03
.PFZP04=geologic-age subdivision, planktonic foraminiferal zone P04
.PFZP05=geologic-age subdivision, planktonic foraminiferal zone P05
.PFZP06=geologic-age subdivision, planktonic foraminiferal zone P06
.PFZP06=geologic-age subdivision, planktonic foraminiferal zone P06
.PFZP07=geologic-age subdivision, planktonic foraminiferal zone P07
.PFZP08=geologic-age subdivision, planktonic foraminiferal zone P08
.PFZP09=geologic-age subdivision, planktonic foraminiferal zone P09
.PFZP10=geologic-age subdivision, planktonic foraminiferal zone P10
.PFZP11=geologic-age subdivision, planktonic foraminiferal zone P11
.PFZP12=geologic-age subdivision, planktonic foraminiferal zone P12
.PFZP13=geologic-age subdivision, planktonic foraminiferal zone P13
.PFZP14=geologic-age subdivision, planktonic foraminiferal zone P14
.PFZP15=geologic-age subdivision, planktonic foraminiferal zone P15
.PFZP16=geologic-age subdivision, planktonic foraminiferal zone P16
.PFZP17=geologic-age subdivision, planktonic foraminiferal zone P17
.PFZP18=geologic-age subdivision, planktonic foraminiferal zone P18
.PFZP19=geologic-age subdivision, planktonic foraminiferal zone P19
.PFZP20=geologic-age subdivision, planktonic foraminiferal zone P20
.PFZP21=geologic-age subdivision, planktonic foraminiferal zone P21
.PFZP22=geologic-age subdivision, planktonic foraminiferal zone P22
.PHA=continental-shelf deposit, siliciclastic or carbonate phase
.PHAC=continental-shelf deposit, carbonate phase
.PHAM=continental-shelf deposit, mixed siliciclastic and carbonate
.PHAS=continental-shelf deposit, siliciclastic phase
.PHM=phenocryst and porphyroclast mineralogy, polygon contains information about
.PHMAM=phenocryst mineralogy, amphibole
.PHMAMD=porphyroclast mineralogy, amphibole (in deformed igneous rock)
.PHMAU=phenocryst mineralogy, augite
.PHMAUD=porphyroclast mineralogy, augite (in deformed igneous rock)
.PHMB=phenocryst mineralogy, biotite
.PHMBD=porphyroclast mineralogy, biotite (in deformed igneous rock)
.PHMH=phenocryst mineralogy, hornblende
.PHMHD=porphyroclast mineralogy, hornblende (in deformed igneous rock)
.PHMKS=phenocryst mineralogy, potassium feldspar
.PHMKSD=porphyroclast mineralogy, potassium feldspar (in deformed igneous rock)
.PHMM=phenocryst mineralogy, muscovite
.PHMMD=porphyroclast mineralogy, muscovite (in deformed igneous rock)
.PHMO=phenocryst mineralogy, olivine
.PHMOD=porphyroclast mineralogy, olivine (in deformed igneous rock)
.PHMPO=phenocryst mineralogy, orthopyroxene
.PHMPOD=porphyroclast mineralogy, orthopyroxene (in deformed igneous rock)
.PHMPY=phenocryst mineralogy, pyroxene
.PHMPYD=porphyroclast mineralogy, pyroxene (in deformed igneous rock)
.PHMPL=phenocryst mineralogy, plagioclase
.PHMPLD=porphyroclast mineralogy, plagioclase (in deformed igneous rock)
.PHMQ=phenocryst mineralogy, quartz
.PHMQD=porphyroclast mineralogy, quartz (in deformed igneous rock)

.PHMQB=phenocryst mineralogy, quartz, beta habit
.PHMQBD=porphyroclast mineralogy, quartz, beta habit (in deformed igneous rock)
.PHMR=phenocrysts, rimmed
.PHMRD=porphyroclasts, rimmed (in deformed igneous rock)
.PHMRR=phenocrysts, with reaction rims
.PHMRRD=porphyroclasts, with reaction rims (in deformed igneous rock)
.PHMZ=phenocrysts, zoned
.PHMZD=porphyroclasts, zoned (in deformed igneous rock)
.PHS=phenocryst grain shape, polygon contains information about
.PHSA=phenocryst grain shape anhedral
.PHSAD=porphyroclast grain shape, anhedral (deformed igneous rock)
.PHSD=porphyroclast grain shape, polygon contains information about (deformed igneous rock)
.PHSF=phenocrysts, diffuse
.PHSS=phenocryst grain shape subhedral
.PHSSD=porphyroclast grain shape, subhedral (deformed igneous rock)
.PHSU=phenocryst grain shape euhedral
.PHSUD= porphyroclast grain shape, euhedral (deformed igneous rock)
.PHSV=phenocryst grain shape variable
.PHSVD=porphyroclast grain shape, variable (deformed igneous rock)
.PHZ=phenocryst and porphyroclast grain size, polygon contains information about
.PHZC=phenocryst grain size, coarse
.PHZCD=porphyroclast grain size, coarse (deformed igneous rock)
.PHZF=phenocryst grain size, fine
.PHZFD=porphyroclast grain size, fine (deformed igneous rock)
.PHZFM=phenocryst grain size, fine to medium
.PHZFMD=porphyroclast grain size, fine to medium (deformed igneous rock)
.PHZM=phenocryst grain size, medium
.PHZMC=phenocryst grain size, medium to coarse
.PHZMCD=porphyroclast grain size, medium to coarse (deformed igneous rock)
.PHZMD=porphyroclast grain size, medium (deformed igneous rock)
.PHZV=phenocryst grain size, variable
.PHZVD=porphyroclast grain size, variable (deformed igneous rock)
.PLI=protolith, polygon contains information about (pre-metamorphic lithology)
.PLIH=protolith heterogeneous (pre-metamorphic lithology)
.PLII=protolith igneous (pre-metamorphic lithology)
.PLIIP=protolith plutonic (pre-metamorphic lithology)
.PLIIPD=protolith dioritic (pre-metamorphic lithology)
.PLIIPG=protolith granitic (pre-metamorphic lithology)
.PLIIPGE=protolith granitic, equigranular (pre-metamorphic lithology)
.PLIIPGL=protolith granitic, leucocratic (pre-metamorphic lithology)
.PLIIPGM=protolith granitic, mafic (pre-metamorphic lithology)
.PLIIPGP=protolith granitic, porphyritic (pre-metamorphic lithology)
.PLIIV=protolith volcanic (pre-metamorphic lithology)
.PLIIVB=protolith volcanic, basalt (pre-metamorphic lithology)
.PLIIVF=protolith volcanic, felsic (pre-metamorphic lithology)
.PLIIVL=protolith volcanic, lava (pre-metamorphic lithology)
.PLIIVM=protolith volcanic, mafic (pre-metamorphic lithology)
.PLIIVP=protolith volcanic, pyroclastic rocks (pre-metamorphic lithology)
.PLIIVQP=protolith volcanic, quartz-poor (pre-metamorphic lithology)
.PLIIVQR=protolith volcanic, quartz-rich (pre-metamorphic lithology)
.PLIM=protolith metamorphic (pre-metamorphic lithology)
.PLIS=protolith sedimentary (pre-metamorphic lithology)
.PLISC=protolith sedimentary, carbonate rock (pre-metamorphic lithology)
.PLISCD=protolith dolomite (pre-metamorphic lithology)
.PLISCDC=protolith dolomite, calcareous (pre-metamorphic lithology)
.PLISCL=protolith limestone (pre-metamorphic lithology)
.PLISCLC=protolith limestone, cherty (pre-metamorphic lithology)
.PLISCLD=protolith limestone, dolomitic (pre-metamorphic lithology)
.PLISCLM=protolith limestone, silty (pre-metamorphic lithology)
.PLISCLS=protolith limestone, sandy (pre-metamorphic lithology)
.PLISM=protolith sedimentary, marine (pre-metamorphic lithology)
.PLISN=protolith sedimentary, nonmarine (pre-metamorphic lithology)
.PLISS=protolith sedimentary, siliciclastic (pre-metamorphic lithology)
.PLISSH=protolith shale (pre-metamorphic lithology)

.PLISSL=protolith siltstone (pre-metamorphic lithology)
.PLISSM=protolith mudrock (pre-metamorphic lithology)
.PLISSMC=protolith mudrock, calcareous (pre-metamorphic lithology)
.PLISSMS=protolith mudrock, siliceous (pre-metamorphic lithology)
.PLISSQ=protolith quartzite (pre-metamorphic lithology)
.PLISSS=protolith sandstone (pre-metamorphic lithology)
.PLISSSC=protolith sandstone, conglomeratic (pre-metamorphic lithology)
.PLISSSCP=protolith sandstone, pebbly (pre-metamorphic lithology)
.PLISSSM=protolith sandstone, muddy (pre-metamorphic lithology)
.PLIUK=protolith unknown
.PLIUN=protolith unspecified
.PLY=sedimentary origin, playa geographic setting
.PMC=geologic-age subdivision, magnetic chron, polygon contains information about
.PMC01=geologic-age subdivision, magnetic chron C1
.PMC02=geologic-age subdivision, magnetic chron C2
.PMC02A=geologic-age subdivision, magnetic chron C2A
.PMC03=geologic-age subdivision, magnetic chron C3
.PMC03A=geologic-age subdivision, magnetic chron C3A
.PMC03B=geologic-age subdivision, magnetic chron C3B
.PMC04=geologic-age subdivision, magnetic chron C4
.PMC04A=geologic-age subdivision, magnetic chron C4A
.PMC05=geologic-age subdivision, magnetic chron C5
.PMC05A=geologic-age subdivision, magnetic chron C5A
.PMC05B=geologic-age subdivision, magnetic chron C5B
.PMC05C=geologic-age subdivision, magnetic chron C5C
.PMC05D=geologic-age subdivision, magnetic chron C5D
.PMC05E=geologic-age subdivision, magnetic chron C5E
.PMC06=geologic-age subdivision, magnetic chron C6
.PMC06A=geologic-age subdivision, magnetic chron C6A
.PMC06B=geologic-age subdivision, magnetic chron C6B
.PMC06C=geologic-age subdivision, magnetic chron C6C
.PMC07=geologic-age subdivision, magnetic chron C7
.PMC07=geologic-age subdivision, magnetic chron C7A
.PMC08=geologic-age subdivision, magnetic chron C8
.PMC09=geologic-age subdivision, magnetic chron C9
.PMC10=geologic-age subdivision, magnetic chron C10
.PMC11=geologic-age subdivision, magnetic chron C11
.PMC12=geologic-age subdivision, magnetic chron C12
.PMC13=geologic-age subdivision, magnetic chron C13
.PMC15=geologic-age subdivision, magnetic chron C15
.PMC16=geologic-age subdivision, magnetic chron C16
.PMC17=geologic-age subdivision, magnetic chron C17
.PMC17=geologic-age subdivision, magnetic chron C17
.PMC18=geologic-age subdivision, magnetic chron C18
.PMC19=geologic-age subdivision, magnetic chron C19
.PMC20=geologic-age subdivision, magnetic chron C20
.PMC21=geologic-age subdivision, magnetic chron C21
.PMC22=geologic-age subdivision, magnetic chron C22
.PMC23=geologic-age subdivision, magnetic chron C23
.PMC24=geologic-age subdivision, magnetic chron C24
.PMC25=geologic-age subdivision, magnetic chron C25
.PMC26=geologic-age subdivision, magnetic chron C26
.PMC27=geologic-age subdivision, magnetic chron C27
.PMC28=geologic-age subdivision, magnetic chron C28
.PMC29=geologic-age subdivision, magnetic chron C29
.PMC30=geologic-age subdivision, magnetic chron C30
.PMC31=geologic-age subdivision, magnetic chron C31
.PMC32=geologic-age subdivision, magnetic chron C32
.PMC33=geologic-age subdivision, magnetic chron C33
.PMC34=geologic-age subdivision, magnetic chron C34
.PMG=age based on paleomagnetism
.PMGC=age based on paleomagnetism, age certain
.PMGU=age based on paleomagnetism, age uncertain
.PRC=geologic age, Precambrian age

.PRCA=geologic age, Archean
.PRCAE=geologic age, Archean, early
.PRCAL=geologic age, Archean, late
.PRCP=geologic age, Proterozoic
.PRCPE=geologic age, Proterozoic, early
.PRCPL=geologic age, Proterozoic, late
.PZO=geologic age, Paleozoic
.PZOC=geologic age, Cambrian
.PZOCE=geologic age, Cambrian, early
.PZOCL=geologic age, Cambrian, late
.PZOD=geologic age, Devonian
.PZODE=geologic age, Devonian, early
.PZODL=geologic age, Devonian, late
.PZOM=geologic age, Mississippian
.PZOME=geologic age, Mississippian, early
.PZOML=geologic age, Mississippian, late
.PZOO=geologic age, Ordovician
.PZOOE=geologic age, Ordovician, early
.PZOOL=geologic age, Ordovician, late
.PZOP=geologic age, Pennsylvanian
.PZOPE=geologic age, Pennsylvanian, early
.PZOPL=geologic age, Pennsylvanian, late
.PZOR=geologic age, Permian
.PZORE=geologic age, Permian, early
.PZORL=geologic age, Permian, late
.PZOS=geologic age, Silurian
.PZOSE=geologic age, Silurian, early
.PZOSL=geologic age, Silurian, late

-Q75=quartz-rich composition, quartz >75% <95% (sedimentary rocks)
-Q95=quartz-rich composition, quartz >95% (sedimentary rocks)
-QFD=quartzofeldspathic composition (sedimentary rocks)
-QFL=mixed quartz-feldspar-lithic composition (sedimentary rocks)
-QPC=grain composition, polycrystalline quartz fragments (sedimentary rocks)
-QST=grain composition, strained quartz fragments (sedimentary rocks)
-QTZ=quartz-rich composition (sedimentary rocks)
-QUAR=siliceous alteration or mineralization, quartz
.QTZI=quartzite (quartz-rich sedimentary rock)

-RCRH=recrystallization, high (due to penetrative deformation)
-RCRM=recrystallization, moderate (due to penetrative deformation)
-RCRMH=recrystallization, moderate to high (due to penetrative deformation)
-RCRS=recrystallization, slight (due to penetrative deformation)
-RCRSM=recrystallization, slight to moderate (due to penetrative deformation)
-RSI=geologic-unit identification based on remote-sensing imagery identification
.RCO=age based on regional correlation
.RCOC=age based on regional correlation, age certain
.RCOU=age based on regional correlation, age uncertain
.RHY=rhyolite
.RHYA=rhyolite, alkalic
.RHYAD=rhyolite, alkalic (deformed)
.RHYD=rhyolite (deformed)
.RPS=regolith or pedogenic soil
.RSC=classification of map unit, polygon contains information about
.RSCB=classification of map unit, bedrock
.RSCBF=classification of map unit, bedrock, formal
.RSCBFF=classification of map unit, bedrock, formal, Formation-rank
.RSCBFFC=classification of map unit, bedrock, formal, catastrophic Formation
.RSCBFFM=classification of map unit, bedrock, formal, metamorphic Formation
.RSCBFFP=classification of map unit, bedrock, formal, plutonic Formation
.RSCBFFS=classification of map unit, bedrock, formal, sedimentary Formation
.RSCBFFSF=classification of map unit, bedrock, formal, facies
.RSCBFFSL=classification of map unit, bedrock, formal, Lentil
.RSCBFFSM=classification of map unit, bedrock, formal, Member

.RSCBFFST=classification of map unit, bedrock, formal, Tongue
.RSCBFFT=classification of map unit, bedrock, formal, tectonic Formation
.RSCBFFV=classification of map unit, bedrock, formal, volcanic Formation
.RSCBFG=classification of map unit, bedrock, formal (Group)
.RSCBFGF=classification of map unit, bedrock, formal (Group, Formation)
.RSCBFGFF=classification of map unit, bedrock, formal (Group, Formation, facies)
.RSCBFGFL=classification of map unit, bedrock, formal (Group, Formation, Lentil)
.RSCBFGFM=classification of map unit, bedrock, formal (Group, Formation, Member)
.RSCBFGFT=classification of map unit, bedrock, formal (Group, Formation, Tongue)
.RSCBFI=classification of map unit, bedrock, formal with informal subunit
.RSCBFIF=classification of map unit, bedrock, formal with informal subunit, formation-rank
.RSCBFIFS=classification of map unit, bedrock, formal with informal subunit, sedimentary formation
.RSCBFIFSF=classification of map unit, bedrock, formal with informal subunit, facies
.RSCBFIFSL=classification of map unit, bedrock, formal with informal subunit, lentil
.RSCBFIFSM=classification of map unit, bedrock, formal with informal subunit, member
.RSCBFIFST=classification of map unit, bedrock, formal with informal subunit, tongue
.RSCBFS=classification of map unit, bedrock, formal (Supergroup)
.RSCBFSG=classification of map unit, bedrock, formal (Supergroup, Group)
.RSCBFSGF=classification of map unit, bedrock, formal (Supergroup, Group, Formation)
.RSCBFSGFF=classification of map unit, bedrock, formal (Supergroup, Group, Formation, facies)
.RSCBFSGFL=classification of map unit, bedrock, formal (Supergroup, Group, Formation, Lentil)
.RSCBFSGFM=classification of map unit, bedrock, formal (Supergroup, Group, Formation, Member)
.RSCBFSGFT=classification of map unit, bedrock, formal (Supergroup, Group, Formation, Tongue)
.RSCBI=classification of map unit, bedrock, informal
.RSCBIF=classification of map unit, bedrock, informal, formation rank
.RSCBIFC=classification of map unit, bedrock, informal, catastrophic formation
.RSCBIFM=classification of map unit, bedrock, informal, metamorphic formation
.RSCBIFP=classification of map unit, bedrock, informal, plutonic formation
.RSCBIFS=classification of map unit, bedrock, informal, sedimentary formation
.RSCBIFSF=classification of map unit, bedrock, informal (formation & facies)
.RSCBIFSL=classification of map unit, bedrock, informal (formation & lentil)
.RSCBIFSM=classification of map unit, bedrock, informal (formation & member)
.RSCBIFST=classification of map unit, bedrock, informal (formation & tongue)
.RSCBIFT=classification of map unit, bedrock, informal, tectonic formation
.RSCBIFV=classification of map unit, bedrock, informal, volcanic formation
.RSCS=classification of map unit, surficial
.RSCSI=classification of map unit, surficial, informal
.RSCSIA=classification of map unit, surficial, alluvial unit
.RSCSIAF=classification of map unit, surficial, alluvial-fan deposit
.RSCSIAFM=classification of map unit, surficial, alluvial-fan deposit, modern
.RSCSIAFO=classification of map unit, surficial, alluvial-fan deposit, old
.RSCSIAFV=classification of map unit, surficial, alluvial-fan deposit, very old
.RSCSIAFY=classification of map unit, surficial, alluvial-fan deposit, young
.RSCSIAP=classification of map unit, surficial, pediment veneer unit
.RSCSIAPM=classification of map unit, surficial, pediment-veneer deposit, modern
.RSCSIAPO=classification of map unit, surficial, pediment-veneer deposit, old
.RSCSIAPV=classification of map unit, surficial, pediment-veneer deposit, very old
.RSCSIAPY=classification of map unit, surficial, pediment-veneer deposit, young
.RSCSIAV=classification of map unit, surficial, alluvial-valley deposit
.RSCSIAVM=classification of map unit, surficial, alluvial-valley deposit, modern
.RSCSIAVO=classification of map unit, surficial, alluvial-valley deposit, old
.RSCSIAVV=classification of map unit, surficial, alluvial-valley deposit, very old
.RSCSIAVY=classification of map unit, surficial, alluvial-valley deposit, young
.RSCSIAW=classification of map unit, surficial, wash deposit
.RSCSIAWM=classification of map unit, surficial, modern-wash deposit
.RSCSIAWMA=classification of map unit, surficial, modern-wash deposit, active
.RSCSIAWMI=classification of map unit, surficial, modern-wash deposit, intermittently active
.RSCSIAWMO=classification of map unit, surficial, modern-wash deposit, older
.RSCSIE=classification of map unit, surficial, eolian unit
.RSCSIEM=classification of map unit, surficial, eolian deposit, modern
.RSCSIEO=classification of map unit, surficial, eolian deposit, old
.RSCSIEV=classification of map unit, surficial, eolian deposit, very old
.RSCSIEY=classification of map unit, surficial, eolian deposit, young
.RSCSIG=classification of map unit, surficial, glacial unit

.RSCSIGM=classification of map unit, surficial, glacial deposit, modern
.RSCSIGO=classification of map unit, surficial, glacial deposit, old
.RSCSIGV=classification of map unit, surficial, glacial deposit, very old
.RSCSIGY=classification of map unit, surficial, glacial deposit, young
.RSCSIH=classification of map unit, surficial, hillslope unit
.RSCSIHC=classification of map unit, surficial, colluvium unit
.RSCSIHCM=classification of map unit, surficial, colluvium deposit, modern
.RSCSIHCO=classification of map unit, surficial, colluvium deposit, old
.RSCSIHCV=classification of map unit, surficial, colluvium deposit, very old
.RSCSIHCY=classification of map unit, surficial, colluvium deposit, young
.RSCSIHS=classification of map unit, surficial, slope-wash unit
.RSCSIHSM=classification of map unit, surficial, slope-wash deposit, modern
.RSCSIHSO=classification of map unit, surficial, slope-wash deposit, old
.RSCSIHSV=classification of map unit, surficial, slope-wash deposit, very old
.RSCSIHSY=classification of map unit, surficial, slope-wash deposit, young
.RSCSIHT=classification of map unit, surficial, hillslope deposit, talus
.RSCSIHTM=classification of map unit, surficial, hillslope deposit, talus, modern
.RSCSIHTO=classification of map unit, surficial, hillslope deposit, talus, old
.RSCSIHTV=classification of map unit, surficial, hillslope deposit, talus, very old
.RSCSIHTY=classification of map unit, surficial, hillslope deposit, talus, young
.RSCSIL=classification of map unit, surficial, lacustrine unit
.RSCSILM=classification of map unit, surficial, lacustrine deposit, modern
.RSCSILO=classification of map unit, surficial, lacustrine deposit, old
.RSCSILV=classification of map unit, surficial, lacustrine deposit, very old
.RSCSILY=classification of map unit, surficial, lacustrine deposit, young
.RSCSIM=classification of map unit, surficial, marine unit
.RSCSIMM=classification of map unit, surficial, marine deposit, modern
.RSCSIMO=classification of map unit, surficial, marine deposit, old
.RSCSIMV=classification of map unit, surficial, marine deposit, very old
.RSCSIMY=classification of map unit, surficial, marine deposit, young
.RSCSIP=classification of map unit, surficial, playa unit
.RSCSIPM=classification of map unit, surficial, playa deposit, modern
.RSCSIPO=classification of map unit, surficial, playa deposit, old
.RSCSIPV=classification of map unit, surficial, playa deposit, very old
.RSCSIPY=classification of map unit, surficial, playa deposit, young
.RSCSIR=classification of map unit, surficial, regolith or pedogenic-soil unit
.RSCSIRM=classification of map unit, surficial, regolith or pedogenic-soil deposit, modern
.RSCSIRO=classification of map unit, surficial, regolith or pedogenic-soil deposit, old
.RSCSIRV=classification of map unit, surficial, regolith or pedogenic-soil deposit, very old
.RSCSIRY=classification of map unit, surficial, regolith or pedogenic-soil deposit, young
.RSCSIS=classification of map unit, surficial, slope-failure unit
.RSCSISM=classification of map unit, surficial, slope-failure deposit, modern
.RSCSISO=classification of map unit, surficial, slope-failure deposit, old
.RSCSISV=classification of map unit, surficial, slope-failure deposit, very old
.RSCSISY=classification of map unit, surficial, slope-failure deposit, young
.RSCSIU=classification of map unit, surficial, slope-failure unit
.RSCSIUM=classification of map unit, surficial, undifferentiated deposit, modern
.RSCSIUO=classification of map unit, surficial, undifferentiated deposit, old
.RSCSIUV=classification of map unit, surficial, undifferentiated deposit, very old
.RSCSIUY=classification of map unit, surficial, undifferentiated deposit, young
.RTO=retrograde metamorphism, polygon contains information about
.RTOM=retrograde metamorphism, multiple episodes
.RTON=retrograde metamorphism, none
.RTOP=retrograde metamorphism, probable
.RTOUN=retrograde metamorphism, unknown
.RTOY=retrograde metamorphism, documented
.RXF=recrystallized fabric, carbonate rocks
.RXFC=recrystallized fabric, carbonate rocks, coarse
.RXFF=recrystallized fabric, carbonate rocks, fine
.RXFFC=recrystallized fabric, carbonate rocks, fine to coarse
.RXFFM=recrystallized fabric, carbonate rocks, fine to medium
.RXFM=recrystallized fabric, carbonate rocks, medium
.RXFMC=recrystallized fabric, carbonate rocks, medium to coarse
.RXFS=recrystallized fabric, carbonate rocks, sugary

.RXFV=recrystallized fabric, carbonate rocks, grain size variable

-SFE=iron sulphide mineralization
-SGC=surficial deposit, sand having a gravel component
-SHDB=shore-zone depofacies, beach deposit
-SHDBB=shore-zone depofacies, beach deposit, backshore deposit
-SHDBD=shore-zone depofacies, beach deposit, dune ridge deposit
-SHDBS=shore-zone depofacies, beach deposit, shoreface deposit
-SHDBSL-shore-zone depofacies, beach deposit, lower shoreface deposit
-SHDBSU=shore-zone depofacies, beach deposit, upper shoreface deposit
-SHDBSUB-shore-zone depofacies, beach deposit, beachface deposit
-SHDBSUF-shore-zone depofacies, beach deposit, swash-zone deposit
-SHDBSUL-shore-zone depofacies, beach deposit, longitudinal-bar deposit
-SHDBSUS-shore-zone depofacies, beach deposit, surf-zone deposit
-SHDE=shore-zone depofacies, eolian deposit
-SHDL=shore-zone depofacies, lagoon deposit
-SHDM=shore-zone depofacies, salt marsh deposit
-SHDS=shore-zone depofacies, estuarine deposit
-SHDT=shore-zone depofacies, tidal deposits, undifferentiated
-SHDTC=shore-zone depofacies, tidal-channel deposit
-SHDTD=shore-zone depofacies, tidal delta deposit
-SHDTF=shore-zone depofacies, tidal-flat deposit
-SHDW=shore-zone depofacies, washover-fan deposit
-SHDY=shore-zone depofacies, bay deposit
-SHG=mercury sulphide mineralization
-SMFL=continental rise deposit, lower fan deposit
-SMFM=continental rise deposit, mid fan deposit
-SMFMS=continental rise deposit, suprafan lobe deposit
-SMFU=continental rise deposit, upper fan deposit
-SMFUL=continental rise deposit, levee deposit
-SMFUO=continental rise deposit, overbankdeposit
-SMFUV=continental rise deposit, fan valley deposit
-SMI=surficial deposit, sand interbedded mud
-SPB=lead sulphide mineralization
-SSC=surficial deposit, sand, silt, and clay, interbedded
.SAR=surface armor, polygon contains information about
.SARDRP=surface armor, degraded relict pavement
.SARHSD=surface armor, hard pavement slightly degraded
.SARM=surface armor, moderate pavement
.SARN=surface armor, no pavement
.SARS=surface armor, slight pavement
.SBB=fluvial deposit, sandy-bedform element
.SCH=fluvial deposit, scour-hollow element
.SDF=rocks having deformation structures, polygon contains information about
.SDFN=rocks having deformation structures (non-penetrative)
.SDFNB=non-penetrative deformation, brecciated structure or fabric
.SDFNCSD=non-penetrative deformation, cataclastic seams
.SDFNJ=non-penetrative deformation, jointing
.SDFNM=non-penetrative deformation, mullions
.SDFNR=non-penetrative deformation, fractures
.SDFNRC=non-penetrative deformation, fractures, closed
.SDFNRCP=non-penetrative deformation, fractures, partly closed
.SDFNRO=non-penetrative deformation, fractures, open
.SDFNU=non-penetrative deformation, fissures
.SDFP=rocks having deformation structures (penetrative)
.SDFPB=penetrative deformation, boudinage
.SDFPC=penetrative deformation, cataclastic seams
.SDFPCI=penetrative deformation, cataclasis, intergranular
.SDFPCL=penetrative deformation, cataclastic seams, local
.SDFPCP=penetrative deformation, cataclastic seams, pervasive
.SDFPF=penetrative deformation, fabric, polygon contains information about
.SDFPFB=penetrative deformation, fabric, brittle
.SDFPFBD=penetrative deformation, fabric, brittle-ductile
.SDFPFD=penetrative deformation, fabric, ductile

.SDFPFHE=penetrative deformation, fabric, heterogeneous
.SDFPFHO=penetrative deformation, fabric, homogeneous
.SDFPFL=penetrative deformation, fabric, laminated
.SDFPFP=penetrative deformation, fabric, porphyroclastic
.SDFPFPL=penetrative deformation, fabric, porphyroclastic locally
.SDFPFR=penetrative deformation, fabric, recrystallized
.SDFPGF=penetrative deformation, grain flattening
.SDFPGL=penetrative deformation, grain lenticulation
.SDFPGRB=penetrative deformation, grain-size reduction, brittle
.SDFPGRD=penetrative deformation, grain-size reduction, ductile
.SDFPKS=penetrative deformation, slaty cleavage
.SDFPL=penetrative deformation, lineation
.SDFPM=penetrative deformation, mylonitic seams
.SDFPO=penetrative deformation, foliation
.SDFPOC=penetrative deformation, foliation, cataclastic
.SDFPOG=penetrative deformation, foliation, gneissose
.SDFPOM=penetrative deformation, foliation, mylonitic
.SDFPPL=penetrative deformation, shear planes, local
.SDFPR=penetrative deformation, fractures, fault-rock related
.SDFPRC=penetrative deformation, fractures, fault-rock related, closed
.SDFPRCP=penetrative deformation, fractures, fault-rock, partly closed
.SDFPRO=penetrative deformation, fractures, fault-rock related, open
.SDFPT=penetrative deformation, microtectonite features
.SDFPTF=penetrative deformation, microtectonite features, foliation fish
.SDFPTM=penetrative deformation, microtectonite features, mica fish
.SDFPTP=penetrative deformation, microtectonite features, pressure shadows
.SDFPTS=penetrative deformation, microtectonite features, S-C fabrics
.SDFPTW=penetrative deformation, microtectonite features, winged porphyroclasts
.SDFPU=penetrative deformation, pseudotachylitic seams
.SDFPX=penetrative deformation, milling
.SDFPY=penetrative deformation, layering, mineral segregation
.SDI=surface dissection, polygon contains information about (surficial deposit)
.SDIM=surface dissection, moderate (surficial deposit)
.SDIMW=surface dissection, moderate to well (surficial deposit)
.SDIN=surface dissection, none (surficial deposit)
.SDINS=surface dissection, nondissected to slightly dissected (surficial deposit)
.SDIS=surface dissection, slight (surficial deposit)
.SDISM=surface dissection, slight to moderate (surficial deposit)
.SDIW=surface dissection, well (surficial deposit)
.SDR=strain-dominated rock
.SDRC=strain-dominated rock, crushed and (or) sheared
.SDRCB=strain-dominated rock, brecciated
.SDRCC=strain-dominated rock, crushed
.SDRCCD=strain-dominated rock, crushed (discrete crush zones)
.SDRCCP=strain-dominated rock, crushed pervasively
.SDRCS=strain-dominated rock, sheared
.SDRCSD=strain-dominated rock, sheared (discrete shear zones)
.SDRCSP=strain-dominated rock, sheared pervasively
.SDRF=strain-dominated rock, fault rocks
.SDRFB=strain-dominated rock, brittle fault rocks
.SDRFBB=strain-dominated rock, brittle fault rocks, breccia series
.SDRFBBB=strain-dominated rock, brittle fault rocks, breccia
.SDRFBBG=strain-dominated rock, brittle fault rocks, fault gouge
.SDRFBBI=strain-dominated rock, brittle fault rocks, microbreccia
.SDRFBBM=strain-dominated rock, brittle fault rocks, megabreccia
.SDRFBC=strain-dominated rock, brittle fault rocks, cataclasite series
.SDRFBCC=strain-dominated rock, brittle fault rocks, cataclasite
.SDRFBCP=strain-dominated rock, brittle fault rocks, pseudotachylite
.SDRFBCU=strain-dominated rock, brittle fault rocks, ultracataclasite
.SDRFD=strain-dominated rock, ductile fault rocks
.SDRFDM=strain-dominated rock, ductile fault rocks, mylonite
.SDRFDP=strain-dominated rock, ductile fault rocks, protomylonite
.SDRFDU=strain-dominated rock, ductile fault rocks, ultramylonite
.SDRH=strain-dominated rock, high-strain

.SDRHC=strain-dominated rock, high-strain, cataclastic
.SDRHF=strain-dominated rock, high-strain, foliated
.SDRHG=strain-dominated rock, high-strain, gneissose
.SDRHM=strain-dominated rock, high-strain, mylonitic
.SDRU=strain-dominated rock, type unspecified
.SDS=sedimentary structure, polygon contains information about
.SDSB=sedimentary structure, bedding, polygon contains information about
.SDSBA=sedimentary structure, bedding, amalgamated
.SDSBC=sedimentary structure, bedding, channelate
.SDSBG=sedimentary structure, bedding, graded
.SDSBL=sedimentary structure, bedding, lenticular
.SDSBP=sedimentary structure, bedding, parallel
.SDSBS=sedimentary structure, turbidity-current Bouma sequences
.SDSBT=sedimentary structure, bioturbated
.SDSCI=sedimentary structure, clast imbrication
.SDSFS=sedimentary structure, fenestrate structure, origin unknown
.SDSK=sedimentary structure, mud cracks
.SDSL=sedimentary structure, lamination, all
.SDSLA=sedimentary structure, lamination, algal
.SDSLAC=sedimentary structure, lamination, cryptalgal
.SDSLAL=sedimentary structure, lamination, algal, laterally linked heads
.SDSLC=sedimentary structure, lamination, convolute
.SDSLF=sedimentary structure, lamination, flat
.SDSLFX=sedimentary structure, lamination, flat to cross
.SDSLR=sedimentary structure, lamination, ripple
.SDSLRC=sedimentary structure, lamination, climbing ripple
.SDSLX=sedimentary structure, lamination, cross
.SDSLXH=sedimentary structure, lamination, cross, hummocky
.SDSLXP=sedimentary structure, lamination, cross, planar
.SDSLXT=sedimentary structure, lamination, cross, trough
.SDSM=sedimentary structure, massive
.SDSMFL=sedimentary structure, massive to flat laminated
.SDSMT=sedimentary structure, massive to mottled
.SDSPB=sedimentary structure, pillow and ball
.SDSSM=sedimentary structure, sole marks,
.SDST=sedimentary structure, mottled
.SDSU=sedimentary structure, unconformities locally present
.SDSV=sedimentary structure, depositional structures, variable
.SDSZ=sedimentary structure, flaser structure
.SDWS=de-watering structure (post-depositional)
.SED=sedimentary rock
.SEDB=biogenic sedimentary rock
.SEDC=sedimentary rock, carbonate
.SEDCB=sedimentary rock, carbonate, interbedded with non-carbonate rock
.SEDCBM=sedimentary rock, carbonate interbedded with non-carbonate rock (metamorphosed)
.SEDCBMC=sedimentary rock, carbonate, interbedded with chert (metamorphosed)
.SEDCBMI=sedimentary rock, carbonate, intermingled with intrusive rock (metamorphosed)
.SEDCBMK=sedimentary rock, carbonate, interbedded with volcaniclastic rock (metamorphosed)
.SEDCBMS=sedimentary rock, carbonate, interbedded with siliciclastic rock (metamorphosed)
.SEDCBMV=sedimentary rock, carbonate, interbedded with volcanic rock (metamorphosed)
.SEDCBN=sedimentary rock, carbonate, interbedded with non-carbonate rock
.SEDCBNC=sedimentary rock, carbonate, interbedded carbonate rock and chert
.SEDCBNI=sedimentary rock, carbonate, intermingled with intrusive igneous rock
.SEDCBNK=sedimentary rock, carbonate, interbedded with volcaniclastic rock
.SEDCBNS=sedimentary rock, carbonate, interbedded with siliciclastic rock
.SEDCBNV=sedimentary rock, carbonate, interbedded with volcanic rock
.SEDCC=sedimentary rock, carbonate, calcareous
.SEDCCM=sedimentary rock, carbonate, calcareous (metamorphosed)
.SEDCCML=limestone marble
.SEDCCMLD=limestone marble, dolomitic
.SEDCCMLH=limestone marble, heterogeneous
.SEDCCN=sedimentary rock, carbonate, calcareous (non-metamorphosed)
.SEDCCNL=limestone
.SEDCCNLD=limestone, dolomitic

.SEDCCNLH=limestone, heterogeneous
.SEDCD=sedimentary rock, carbonate, dolomitic
.SEDCDM=sedimentary rock, carbonate, dolomitic (metamorphosed)
.SEDCDMD=dolomite marble
.SEDCDMDC=dolomite marble, calcareous
.SEDCDMDH=dolomite marble, heterogeneous
.SEDCDN=sedimentary rock, carbonate, dolomitic (non-metamorphosed)
.SEDCDND=dolomite
.SEDCDNDC=dolomite, calcareous
.SEDCDNDH=dolomite, heterogeneous
.SEDCH=sedimentary rock, carbonate, heterogeneous
.SEDCHM=sedimentary rock, carbonate, heterogeneous (metamorphosed)
.SEDCHMD=heterogeneous dolomite and limestone marble (metamorphosed)
.SEDCHML=heterogeneous limestone and dolomite marble (metamorphosed)
.SEDCHN=sedimentary rock, carbonate, heterogeneous (non-metamorphosed)
.SEDCHND=heterogeneous dolomite and limestone, dolomite dominant
.SEDCHNL=heterogeneous limestone and dolomite, limestone dominant
.SEDCI=sedimentary rock, carbonate, impure
.SEDCIM=sedimentary rock, carbonate, impure (metamorphosed)
.SEDCIMA=sedimentary rock, carbonate, argillaceous (metamorphosed)
.SEDCIMAD=dolomite marble, argillaceous
.SEDCIMAL=limestone marble, argillaceous
.SEDCIMC=sedimentary rock, carbonate, cherty (metamorphosed)
.SEDCIMCD=dolomite marble, cherty
.SEDCIMCL=limestone marble, cherty
.SEDCIMG=sedimentary rock, carbonate, conglomeratic (metamorphosed)
.SEDCIMGD=dolomite marble, conglomeratic
.SEDCIMGL=limestone marble, conglomeratic
.SEDCIMM=sedimentary rock, carbonate, silty (metamorphosed)
.SEDCIMMD=dolomite marble, silty
.SEDCIMML=limestone marble, silty
.SEDCIMS=sedimentary rock, carbonate, sandy (metamorphosed)
.SEDCIMSD=dolomite marble, sandy
.SEDCIMSL=limestone marble, sandy
.SEDCIN=sedimentary rock, carbonate, impure (non-metamorphosed)
.SEDCINA=sedimentary rock, carbonate, impure, argillaceous, (non-metamorphosed)
.SEDCINAD=dolomite, argillaceous
.SEDCINAL=limestone, argillaceous
.SEDCINC=sedimentary rock, carbonate, impure, cherty (non-metamorphosed)
.SEDCINCD=dolomite, cherty
.SEDCINCL=limestone, cherty
.SEDCING=sedimentary rock, carbonate, impure, conglomeratic (non-metamorphosed)
.SEDCINGD=dolomite, conglomeratic
.SEDCINGL=limestone, conglomeratic
.SEDCINM=sedimentary rock, carbonate, impure, silty (non-metamorphosed)
.SEDCINMD=dolomite, silty
.SEDCINML=limestone, silty
.SEDCINS=sedimentary rock, carbonate, impure, sandy (non-metamorphosed)
.SEDCINSD=dolomite, sandy
.SEDCINSL=limestone, sandy
.SEDCX=sedimentary rock, carbonate, pure and impure mixed
.SEDCXM=sedimentary rock, carbonate, pure and impure mixed (metamorphosed)
.SEDCXMI=sedimentary rock, carbonate, pure and impure mixed, impure dominant (metamorphosed)
.SEDCXMP=sedimentary rock, carbonate, pure and impure mixed, pure dominant (metamorphosed)
.SEDCXN=sedimentary rock, carbonate, pure and impure mixed, nonmetamorphosed (non-metamorphosed)
.SEDCXNI=sedimentary rock, carbonate, pure and impure mixed, impure dominant (non-metamorphosed)
.SEDCXNP=sedimentary rock, carbonate, pure and impure mixed, pure dominant (non-metamorphosed)
.SEDE=evaporite deposit
.SEDEB=evaporite deposit, bedded evaporite
.SEDEF=evaporite deposit, filamentous evaporite
.SEDEN=evaporite deposit, nodular evaporite
.SEDEV=evaporite deposit, varved evaporite
.SEDH=sedimentary rock, chert
.SEDHB=sedimentary rock, chert, bedded

.SEDHN=sedimentary rock, chert, nodular
.SEDK=catastrophic sedimentary rock
.SEDKB=catastrophic sedimentary rock, breccia & shattered rock
.SEDKBR=catastrophic sedimentary rock, rubble
.SEDKBS=catastrophic sedimentary rock, shattered blocks
.SEDKBSR=catastrophic sedimentary rock, shattered blocks and rubble
.SEDKBU=catastrophic sedimentary rock, breccia, unspecified
.SEDKR=catastrophic sedimentary rock, roundstone conglomerate
.SEDKS=catastrophic sedimentary rock, catastrophically deposited breccia
.SEDLC=carbonate conglomerate
.SEDLCS=carbonate conglomerate, sandy
.SEDLML=carbonate siltstone
.SEDLSS=carbonate sandstone
.SEDLSSC=carbonate sandstone, conglomeratic
.SEDLSSM=carbonate sandstone, silty
.SEDS=siliciclastic sedimentary rock
.SEDV=volcaniclastic rock
.SEDVA=volcaniclastic rock, agglomerate
.SEDVC=volcaniclastic rock, conglomerate
.SEDVCS=volcaniclastic rock, conglomerate, sandy
.SEDVL=volcaniclastic rock, lahar
.SEDVM=volcaniclastic rock, siltstone
.SEDVMS=volcaniclastic rock, siltstone, sandy
.SEDVS=volcaniclastic rock, sandstone
.SEDVSC=volcaniclastic rock, sandstone, conglomeratic
.SEDVSM=volcaniclastic rock, sandstone, silty
.SFE=igneous emplacement structure, polygon contains information about
.SFEB=igneous emplacement structure, banding
.SFEBD=igneous fabric, flow banding (deformed)
.SFEC=igneous emplacement structure, cumulate layering
.SFECD=igneous emplacement structure, cumulate layering (deformed)
.SFEF=igneous fabric, polygon contains information about
.SFEFE=igneous fabric, heterogeneous
.SFEFED=igneous fabric, heterogeneous (deformed)
.SFEFF=igneous fabric, foliated
.SFEFFD=igneous fabric, foliated (magmatic-flow foliation) (deformed)
.SFEFFM=igneous fabric, foliated, moderately
.SFEFFMD=igneous fabric, foliated, moderately (magmatic-flow foliation) (deformed)
.SFEFFS=igneous fabric, foliated, slightly
.SFEFFSD=igneous fabric, foliated, slightly (magmatic-flow foliation) (deformed)
.SFEFFW=igneous fabric, foliated, well
.SFEFFWD=igneous fabric, foliated, well (magmatic-flow foliation) (deformed)
.SFEFL=igneous fabric, lineated
.SFEFLD=igneous fabric, lineated (magmatic-flow lineation) (deformed)
.SFEFLM=igneous fabric, lineated, moderately
.SFEFLMD=igneous fabric, lineated, moderately (magmatic-flow lineation) (deformed)
.SFEFLS=igneous fabric, lineated, slightly
.SFEFLSD=igneous fabric, lineated, slightly (magmatic-flow lineation) (deformed)
.SFEFLW=igneous fabric, lineated, well
.SFEFLWD=igneous fabric, llineated, well (magmatic-flow lineation) (deformed)
.SFEFM=igneous fabric, massive
.SFEFMD=igneous fabric, massive (deformed)
.SFEFMF=igneous fabric, massive to foliated
.SFEFMFD=igneous fabric, massive to foliated (magmatic-flow foliation) (deformed)
.SFEFMFS=igneous fabric, massive to foliated slightly
.SFEFMFSD=igneous fabric, massive to slightly foliated (magmatic-flow foliation) (deformed)
.SFEFO=igneous fabric, homogeneous
.SFEFOD=igneous fabric, homogeneous (deformed)
.SFEG=igneous emplacement structure, gneissose compositional layering
.SFEGD=igneous fabric, gneissose compositional layering (deformed)
.SFEI=igneous emplacement structure, inclusions
.SFEID=igneous emplacement structure, inclusions, local (deformed)
.SFEIL=igneous emplacement structure, inclusions locally
.SFEIR=igneous emplacement structure, inclusion-rich igneous rock

.SFEIRD=igneous emplacement structure, inclusion-rich structure (deformed)
.SFEM=igneous emplacement structure, migmatitic injection structures
.SFEMD=igneous emplacement structure, magmatic migmatite (deformed)
.SFER=igneous emplacement structure, intermingled country rock
.SFERD=igneous emplacement structure, intermingled with country rock (deformed)
.SFES=igneous emplacement structure, schlieren
.SFESD=igneous emplacement structure, schlieren (deformed)
.SFEV=igneous emplacement structure, variable
.SFEVD=igneous fabric, variable (deformed)
.SFL=sediment-gravity-flow facies, information about
.SFLA=sediment-gravity-flow facies, Mutti/Ricci-Lucci facies A
.SFLB=sediment-gravity-flow facies, Mutti/Ricci-Lucci facies B
.SFLC=sediment-gravity-flow facies, Mutti/Ricci-Lucci facies C
.SFLD=sediment-gravity-flow facies, Mutti/Ricci-Lucci facies D
.SFLE=sediment-gravity-flow facies, Mutti/Ricci-Lucci facies E
.SFLF=sediment-gravity-flow facies, Mutti/Ricci-Lucci facies F
.SFLG=sediment-gravity-flow facies, Mutti/Ricci-Lucci facies G
.SFM=metamorphic structure and fabric, polygon contains information about
.SFMBD=metamorphic structure and fabric, boudinage
.SFMCI=metamorphic structure and fabric, cataclasis, intergranular
.SFMFB=metamorphic fabric, brittle
.SFMFD=metamorphic fabric, ductile
.SFMFG=metamorphic fabric, granoblastic
.SFMFK=metamorphic fabric, poikiloblastic
.SFMFL=metamorphic fabric, laminated
.SFMFM=metamorphic fabric, massive
.SFMFP=metamorphic fabric, porphyroblastic
.SFMFT=metamorphic fabric, blastoporphyritic
.SFMGF=metamorphic structure and fabric, grain flattening
.SFMGL=metamorphic structure and fabric, grain lenticulation
.SFMK=metamorphic structure and fabric, slaty cleavage
.SFML=metamorphic structure and fabric, lineation
.SFMO=metamorphic structure and fabric, foliation
.SFMOC=metamorphic structure and fabric, foliation, cataclastic
.SFMOG=metamorphic structure and fabric, foliation, gneissic
.SFMOM=metamorphic structure and fabric, foliation, mylonitic
.SFMOS=metamorphic structure and fabric, foliation, schistose
.SFMR=metamorphic structure and fabric, recrystallized
.SFMRH=metamorphic structure and fabric, recrystallized, highly
.SFMRM=metamorphic structure and fabric, recrystallized, moderately
.SFMRMH=metamorphic structure and fabric, recrystallized, moderately to highly
.SFMRS=metamorphic structure and fabric, recrystallized, slightly
.SFMRSM=metamorphic structure and fabric, recrystallized, slightly to moderately
.SFMSC=metamorphic structure and fabric, S-C structures
.SFMV=metamorphic structure and fabric, mineral overgrowths
.SFMY=metamorphic structure and fabric, layering
.SFMYM=metamorphic structure and fabric, layering, migmatitic
.SFMYS=metamorphic structure and fabric, layering, mineral-segregation
.SGD=sand & gravel deposit (surficial deposit)
.SGDG=sand & gravel deposit, gravelly (surficial deposit)
.SGDGD=sand & gravel deposit, gravel dominant over sand (surficial deposit)
.SGDQ=sand & gravel deposit, sand and gravel subequal (surficial deposit)
.SGDS=sand & gravel deposit, sandy (surficial deposit)
.SGDSD=sand & gravel deposit, sand dominant over gravel (surficial deposit)
.SGF=sediment-gravity-flow deposit
.SGFD=sediment-gravity-flow deposit, debris flow
.SGFG=sediment-gravity-flow deposit, grain flow
.SGFN=sediment-gravity-flow deposit, nepheloid-layer deposit
.SGFO=sediment-gravity-flow deposit, olistolith
.SGFSD=sediment-gravity-flow deposit, slide
.SGFSL=sediment-gravity-flow deposit, slump
.SGFT=sediment-gravity-flow deposit, turbidite
.SGR=syenogranite
.SGRD=syenogranite (deformed)

.SHE=shelf depofacies
.SHEC=shelf depofacies, carbonate shelf facies
.SHEM=shelf depofacies, mud facies
.SHEP=shelf depofacies, prograding-shelf system
.SHEPM=shelf depofacies, prograding-shelf, mixed-energy shelf
.SHEPS=shelf depofacies, prograding-shelf, storm-dominated shelf
.SHES=shelf depofacies, sand facies
.SHESG=shelf depofacies, sand facies, shelf sand-ridge deposit
.SHESR=shelf depofacies, sand facies, sand-ribbon deposit
.SHEST=shelf depofacies, sand facies, shelf-storm deposit
.SHESW=shelf depofacies, sand facies, sand-wave deposit
.SHET=shelf depofacies, transgressive-shelf system
.SHETS=shelf depofacies, transgressive-shelf, storm-dominated
.SHETT=shelf depofacies, transgressive-shelf, tide-dominated shelf
.SHF=fluvial deposit, sheetflood facies, sand bed, ephemeral, flashy
.SHZ=shore-zone depofacies
.SHZB=shore-zone depofacies, barrier-island coasts
.SHZO=shore-zone depofacies, open coasts
.SHZR=shore-zone depofacies, rockyshore coasts
.SHZS=shore-zone depofacies, strandplain coasts
.SHZT=shore-zone depofacies, tidal-flat dominated coasts
.SIT=siltite
.SLT=silty deposit (surficial deposit)
.SLTML=silt (surficial deposit)
.SLTMLG=silt, gravelly (surficial deposit)
.SLTMLM=silt, muddy (surficial deposit)
.SLTMLS=silt, sandy (surficial deposit)
.SMO=surface morphology, polygon contains information about (surficial deposit)
.SMOD=surface morphology largely degraded (surficial deposit)
.SMOP=surface morphology largely preserved (surficial deposit)
.SMOPA=surface morphology largely preserved, alluvial-flat setting (surficial deposit)
.SMOPB=surface morphology largely preserved, bar and swale (surficial deposit)
.SMOPC=surface morphology largely preserved, anastomosing channels (surficial deposit)
.SMOPD=surface morphology largely preserved, debris-flow lobe (surficial deposit)
.SMOPE=surface morphology largely preserved, eolian dunes (surficial deposit)
.SMOPH=surface morphology largely preserved, hummocky ground (surficial deposit)
.SMOPM=surface morphology largely preserved, morainal ridges (surficial deposit)
.SMOPR=surface morphology largely preserved, rock-avalanche ridges (surficial deposit)
.SMOPS=surface morphology largely preserved, scree slope (surficial deposit)
.SMOPT=surface morphology largely preserved, talus cone (surficial deposit)
.SMOPV=surface morphology largely preserved, hillslope sediment veneer (surficial deposit)
.SMTV=metamorphic structures, variable
.SND=sand (surficial deposit)
.SNDC=sand, coarse (surficial deposit)
.SNDCL=sand, clay-bearing (surficial deposit)
.SNDCLML=sand, clay- and silt-bearing (surficial deposit)
.SNDCVC=sand, coarse to very coarse (surficial deposit)
.SNDF=sand, fine (surficial deposit)
.SNDFC=sand, fine to coarse (surficial deposit)
.SNDFM=sand, fine to medium (surficial deposit)
.SNDFVC=sand, fine to very coarse (surficial deposit)
.SNDG=sand, gravelly (surficial deposit)
.SNDGB=sand, bouldery (surficial deposit)
.SNDGC=sand, cobbly (surficial deposit)
.SNDGCB=sand, cobbly and bouldery (surficial deposit)
.SNDGCPG=sand, cobbly pebble-granule (surficial deposit)
.SNDGGB=sand, granule-bearing (surficial deposit)
.SNDGP=sand, pebbly (surficial deposit)
.SNDGPC=sand, pebbly and cobbly (surficial deposit)
.SNDGPGB=sand, pebbly granule-bearing (surficial deposit)
.SNDM=sand, medium (surficial deposit)
.SNDMC=sand, medium to coarse (surficial deposit)
.SNDML=sand, silty (surficial deposit)
.SNDMLF=sand, silty, fine (surficial deposit)

.SNDMLFC=sand, silty, fine to coarse (surficial deposit)
.SNDMLFM=sand, silty, fine to medium (surficial deposit)
.SNDMLM=sand, silty, medium (surficial deposit)
.SNDMLMC=sand, silty, medium to coarse (surficial deposit)
.SNDMLVF=sand, silty, very fine (surficial deposit)
.SNDMLVFC=sand, silty, very fine to coarse (surficial deposit)
.SNDMLVFF=sand, silty, very fine to fine (surficial deposit)
.SNDMLVFM=sand, silty, very fine to medium (surficial deposit)
.SNDMVC=sand, medium to very coarse (surficial deposit)
.SNDMY=sand, muddy (surficial deposit)
.SNDVC=sand, very coarse (surficial deposit)
.SNDVF=sand, very fine (surficial deposit)
.SNDVFC=sand, very fine to coarse (surficial deposit)
.SNDVFF=sand, very fine to fine (surficial deposit)
.SNDVFM=sand, very fine to medium (surficial deposit)
.SNDVFVC=sand, very fine to very coarse (surficial deposit)
.SOD=age based on pedogenic-soil development
.SODC=age based on pedogenic-soil development, age certain
.SODU=age based on pedogenic-soil development, age uncertain
.SOU=structure resulting from deformation, origin unspecified
.SOUB=banding structure resulting from deformation, origin unspecified,
.SOUFC=cataclastic fabric resulting from deformation, origin unspecified
.SOUFM=mylonitic fabric resulting from deformation, origin unspecified
.SOUFO=foliation, origin unspecified
.SOUGL=gneissose layering resulting from deformation, origin unspecified
.SOUL=lineation resulting from deformation, origin unspecified,
.SPD=post depositional feature, carbonate rocks, polygon contains infromation about
.SPDB=post depositional feature, carbonate rocks, dissolution breccia
.SPDC=post depositional feature, carbonate rocks, calcite fillings in dissolution features
.SPDCB=post depositional feature, carbonate rocks, calcite fillings in dissolution blebs
.SPDCF=post depositional feature, carbonate rocks, calcite fillings in dissolution fractures
.SPDCS=post depositional feature, carbonate rocks, calcite fillings in dissolution stringers
.SPDCV=post depositional feature, carbonate rocks, calcite fillings in dissolution vugs
.SPDF=post depositional feature, carbonate rocks, fenestrae
.SPDK=, post depositional feature, carbonate rocks, karst collapse structures
.SPDT=, post depositional feature, carbonate rocks, tepee structures
.SRL=age based on stratigraphic relations
.SRLC=age based on stratigraphic relations, age certain
.SRLU=age based on stratigraphic relations, age uncertain
.SSO=soil, surface, polygon contains information about
.SSOABW=soil with A/Bw/C horizon (surficial unit capped by)
.SSOAC=soil with A/C horizon (surficial unit capped by)
.SSOAW=soil with A horizon (surficial unit capped by)
.SSOB=soil with B horizon, cambic and (or) argillic (surficial unit capped by)
.SSOBC=soil with A/C/Bcambic horizon (surficial unit capped by)
.SSOBT=soil with Bt horizon (surficial unit capped by)
.SSOBTM=soil with moderate Bt horizon (surficial unit capped by)
.SSOBTS=soil with strong Bt horizon (surficial unit capped by)
.SSOC=soil, calcic (surficial unit capped by)
.SSOD=soil, degraded (surficial unit capped by)
.SSOK1=soil with stage I K horizon (surficial unit capped by)
.SSOK2=soil with stage II K horizon (surficial unit capped by)
.SSOK3=soil with stage III K horizon (surficial unit capped by)
.SSOK4=soil with stage IV K horizon (surficial unit capped by)
.SSOK5=soil with stage V K horizon (surficial unit capped by)
.SSOK6=soil with stage VI K horizon (surficial unit capped by)
.SSOM=soil, moderate (surficial unit capped by)
.SSON=soil, no development (surficial unit capped by)
.SSONC=soil, non-calcic (surficial unit capped by)
.SSOS=soil, strong (surficial unit capped by)
.SSOSI=soil, silicic (surficial unit capped by)
.SSOSID=soil, duripan (surficial unit capped by)
.SSOSIDS=soil, silcrete (surficial unit capped by)
.SSOW=soil, weak (surficial unit capped by)

.SSUN=surficial deposit, unspecified
.STA=stained rock
.STAL=stained rock, localized
.STALG=stained rock, localized, greenish
.STALP=stained rock, localized, pinkish
.STALR=stained rock, localized, reddish
.STALY=stained rock, localized, yellowish
.STALYO=stained rock, localized, yellowish-orange
.SUR=surficial deposit
.SURA=alluvial deposit
.SURAA=alluvial deposit, alluvial-valley
.SURAAB=alluvial deposit, alluvial-valley, braided-channel
.SURAAM=alluvial deposit, alluvial-valley, meandering-channel
.SURAAMO=alluvial deposit, alluvial-valley, meandering-channel & overbank
.SURAAP=alluvial deposit, alluvial-valley, marshy-pond
.SURAF=alluvial deposit, alluvial-fan
.SURAFD=alluvial deposit, alluvial fan, debris flow dominant
.SURAFL=alluvial deposit, alluvial-fan delta
.SURAFQ=alluvial deposit, alluvial fan, stream flow and debris flow subequal
.SURAFS=alluvial deposit, alluvial fan, stream flow dominant
.SURAP=alluvial deposit, pediment-veneer
.SURAU=alluvial deposit, unspecified
.SURAW=alluvial deposit, modern wash
.SURAWA=alluvial deposit, modern wash, active
.SURAWI=alluvial deposit, modern wash, intermittent
.SURAWO=alluvial deposit, modern wash, older
.SURD=deltaic deposit (suficial)
.SURDP=deltaic deposit, delta plain (suficial)
.SURDPL=deltaic deposit, delta plain, lower plain (suficial)
.SURDPLA=deltaic deposit, delta plain, lower plain, abandoned distributary-fill (suficial)
.SURDPLB=deltaic deposit, delta plain, lower plain, bay-fill (suficial)
.SURDPP=deltaic deposit, pro-delta (suficial)
.SURDPS=deltaic deposit, subaqueous delta plain (suficial)
.SURDPSD=deltaic deposit, subaqueous delta plain, distributary-mouth bar (suficial)
.SURDPSR=deltaic deposit, subaqueous delta plain, river-mouth tidal-ridge (suficial)
.SURDPSS=deltaic deposit, subaqueous delta plain, subaqueous slump (suficial)
.SURDPU=deltaic deposit, delta plain, upper plain (suficial)
.SURDPUL=deltaic deposit, delta plain, upper plain, lacustrine delta-fill (suficial)
.SURDPUM=deltaic deposit, delta plain, upper plain, migratory-channel (suficial)
.SURE=eolian deposit (surficial deposit)
.SURED=eolian deposit, dune-sand (surficial deposit)
.SURES=eolian deposit, sheet-sand (surficial deposit)
.SUREU=eolian deposit, unspecified (surficial deposit)
.SURG=glacial deposit (surficial deposit)
.SURGA=glacial deposit, alpine type (surficial deposit)
.SURGC=glacial deposit, continental type (surficial deposit)
.SURGU=glacial deposit, unspecified (surficial deposit)
.SURH=hillslope deposit (surficial deposit)
.SURHC=hillslope deposit, colluvium (surficial deposit)
.SURHS=hillslope deposit, slopewash (surficial deposit)
.SURHT=hillslope deposit, talus (surficial deposit)
.SURHU=hillslope deposit, unspecified (surficial deposit)
.SURL=lake deposit (surficial deposit)
.SURLM=lake deposit, marginal-lake (surficial deposit)
.SURLO=lake deposit, open-lake (surficial deposit)
.SURLU=lake deposit, unspecified (surficial deposit)
.SURM=marine deposit (surficial deposit)
.SURMB=marine deposit, beach (surficial deposit)
.SURME=marine deposit, estuarine (surficial deposit)
.SURMM=marine deposit, salt marsh (surficial deposit)
.SURMS=marine deposit, subtidal (surficial deposit)
.SURMT=marine deposit, tidal-channel (surficial deposit)
.SURMY=marine deposit, bay (surficial deposit)
.SURP=playa deposit (surficial deposit)

.SURPF=playa deposit, fluvial (surficial deposit)
.SURPL=playa deposit, lacustrine (surficial deposit)
.SURPS=playa deposit, sheetwash (surficial deposit)
.SURS=slope-failure deposit (surficial deposit)
.SURSA=slope-failure deposit, rock-avalanche (surficial deposit)
.SURSD=slope-failure deposit, debris-flow (surficial deposit)
.SURSF=slope-failure deposit, rock-fall (surficial deposit)
.SURSG=slope-failure deposit, gravity-slide (surficial deposit)
.SURSL=slope-failure deposit, landslide (surficial deposit)
.SURSS= slope-failure deposit, sackungen (surficial deposit)
.SURU=surficial deposit, unspecified (surficial deposit)
.SURW=weathered or modified parent material
.SVR=surface varnish, polygon contains information about
.SVRM=surface varnish, moderate
.SVRN=surface varnish, none
.SVRS=surface varnish, slight
.SVRT=surface varnish, strong
.SYN=syenite
.SYND=syenite (deformed)
.SYNQ=quartz syenite
.SYQD=quartz syenite (deformed)

-TDT=carbonate shelf deposit, tidal deposit, undifferentiated
-TDTA=carbonate shelf deposit, supratidal deposit
-TDTI=carbonate shelf deposit, intertidal deposit
-TDTP=carbonate shelf deposit, peritidal deposit
-TDTP=carbonate shelf deposit, peritidal deposit
-TDTS=carbonate shelf deposit, carbonate ramp, subtidal deposit
-TFCM=basin setting, convergent-margin transform-fault
-TFDM=basin setting, divergent-margin transform-fault
-TFPB=basin setting, plate-boundary transform-fault
-TFSZ=basin setting, suture-zone transform-fault
-TLS=hillslope deposit, gravity-controlled, talus (bedrock)
-TNRW=pyroclastic igneous rock, tuff, air-fall, not re-worked
-TNRWD=pyroclastic igneous rock, tuff, air-fall, not re-worked (deformed)
-TRW=pyroclastic igneous rock, tuff, air-fall, re-worked
-TRWD=pyroclastic igneous rock, tuff, air-fall, re-worked (deformed)
.TEC=tectonic assemblage of rocks
.TECB=tectonic rock assemblage, broken formation
.TECB=tectonic rock assemblage, fault-bound rock body
.TECM=tectonic rock assemblage, melange assemblage
.TECO=tectonic rock assemblage, olistostrome
.TECU=tectonic rock assemblage, unspecified
.TEP=age based on tephrochronology
.TEPC=age based on tephrolochronology, age certain
.TEPU=age based on tephrolochronology, age uncertain
.TIG=igneous texture, polygon contains information about
.TIGA=igneous texture, amygdaloidal
.TIGAD=igneous texture, amygdaloidal (deformed rock)
.TIGE=igneous texture, equigranular
.TIGED=igneous texture, equigranular (deformed rock)
.TIGG=igneous texture, granitic
.TIGGD=igneous texture, granitic (deformed rock)
.TIGP=igneous texture, porphyritic
.TIGPD=igneous texture, porphyritic (deformed rock)
.TIGPL=igneous texture, porphyritic locally
.TIGPLD=igneous texture, porphyritic locally (deformed rock)
.TIGS=igneous texture, seriate
.TIGSD=igneous texture, seriate (deformed rock)
.TIGV=igneous texture, variable
.TON=tonalite
.TOND=tonalite (deformed)
.TRC=trachyte
.TRCA=trachyte, alkalic

.TRCAD=trachyte, alkalic (deformed)
.TRCD=trachyte (deformed)
.TRCQ=trachyte, quartzose
.TRCQA=trachyte, quartzose, alkalic
.TRCQAD=trachyte, quartzose, alkalic (deformed)
.TRCQD=trachyte, quartzose (deformed,
.TRJ=trondhjemite
.TRJD=trondhjemite (deformed)

-UMF=ultramafic rock interbedded with sedimentary rock
.URC.=unmapped rocks included in map unit
.URCS.=unmapped rocks included in map unit, same age
.URCSI.=unmapped rocks included in map unit, same age, igneous rock
.URCSIG.=unmapped rocks included in map unit, same age, igneous rock, granitic
.URCSIGM.=unmapped rocks included in map unit, same age, igneous rock, granitic, monzogranite
.URCSIGG.=unmapped rocks included in map unit, same age, igneous rock, granitic, granodiorite
.URCSID.=unmapped rocks included in map unit, same age, igneous rock, dioritic
.URCSM.=unmapped rocks included in map unit, same age, metamorphic
.URCSMS.=unmapped rocks included in map unit, same age, metamorphic, metasedimentary
.URCSMSM.=unmapped rocks included in map unit, same age, metamorphic, metasedimentary, marble
.URCSMSQ.=unmapped rocks included in map unit, same age, metamorphic, metasedimentary, metaquartzite
.URCSMSS.=unmapped rocks included in map unit, same age, metamorphic, metasedimentary, metasandstone
.URCSMI.=unmapped rocks included in map unit, same age, metamorphic, metaigneous
.URCSMIA.=unmapped rocks included in map unit, same age, metaigneous, amphibolite
.URCSMIV.=unmapped rocks included in map unit, same age, metaigneous, metavolcanic
.URCSMIVG.=unmapped rocks included in map unit, same age, metaigneous, metavolcanic, greenstone
.URCSD.=unmapped rocks included in map unit, same age, strain dominated
.URCSDC.=unmapped rocks included in map unit, same age, strain dominated, cataclastic rock
.URCSDM.=unmapped rocks included in map unit, same age, strain dominated, mylonitic rock
.URCSDS.=unmapped rocks included in map unit, same age, strain dominated, sheared rock
.URCO.=unmapped rocks included in map unit, older
.URCOC=unmapped rocks included in map unit, older, undifferentiated country rock
.URCOI=unmapped rocks included in map unit, older, igneous
.URCOIG=unmapped rocks included in map unit, older, igneous, granitic
.URCOIGL=unmapped rocks included in map unit, older, igneous granitic, Lowe pluton
.URCOIGM=unmapped rocks included in map unit, older, igneous, granitic, monzogranite
.URCOIGG=unmapped rocks included in map unit, older, igneous, granitic, granodiorite
.URCOID=unmapped rocks included in map unit, older, igneous, dioritic
.URCOM=unmapped rocks included in map unit, older, metamorphic
.URCOMS=unmapped rocks included in map unit, older, metamorphic, metasedimentary
.URCOMSM=unmapped rocks included in map unit, older, metamorphic, metasedimentary, marble
.URCOMSQ=unmapped rocks included in map unit, older, metamorphic, metasedimentary, metaquartzite
.URCOMSS=unmapped rocks included in map unit, older, metamorphic, metasedimentary, schist
.URCOMI=unmapped rocks included in map unit, older, metamorphic, metaigneous
.URCOMIA=unmapped rocks included in map unit, older, metamorphic, metaigneous, amphibolite
.URCOD=unmapped rocks included in map unit, older, strain-dominated rock
.URCODC=unmapped rocks included in map unit, older, strain-dominated rock, cataclastic
.URCODM=unmapped rocks included in map unit, older, strain-dominated rock, mylonitic
.URCODS=unmapped rocks included in map unit, older, strain-dominated rock, sheared
.URCY=unmapped rocks included in map unit, younger
.URCYI=unmapped rocks included in map unit, younger, igneous
.URCYIA=unmapped rocks included in map unit, younger, igneous, aplite dikes
.URCYIB=unmapped rocks included in map unit, younger, igneous, basalt dikes
.URCYID=unmapped rocks included in map unit, younger, igneous, dioritic rock
.URCYIG=unmapped rocks included in map unit, younger, igneous, granitic rock
.URCYIGM=unmapped rocks included in map unit, younger, igneous, granitic rock, monzogranite
.URCYIGG=unmapped rocks included in map unit, younger, igneous, granitic rock, granodiorite
.URCYS=unmapped rocks included in map unit, younger, sedimentary rock
.URCYD=unmapped rocks included in map unit, younger, strain-dominated rock
.URCYDC=unmapped rocks included in map unit, younger, strain-dominated rock, cataclastic
.URCYDM=unmapped rocks included in map unit, younger, strain-dominated rock, mylonitic
.URCYDS=unmapped rocks included in map unit, younger, strain-dominated rock, sheared rock
.UMR=ultramafic intrusive rocks
.UMRD=ultramafic intrusive rocks (deformed)

.UMRN=ultramafic intrusive rocks, dunite
.UMRND=ultramafic intrusive rocks, dunite (deformed)
.UMRP=ultramafic intrusive rocks, peridotite
.UMRPD=ultramafic intrusive rocks, peridotite (deformed)
.UMRY=ultramafic intrusive rocks, pyroxenite
.UMRYD=ultramafic intrusive rocks, pyroxenite (deformed)

.VOL=volcanic rock
.VOLD=volcanic rock (deformed)
.VOLG=volcanogenic depositional setting
.VOLGD=volcanogenic depositional setting, distant-source environments
.VOLGN=volcanogenic depositional setting, near-source environments
.VOLH=volcanic rock, composition heterogeneous
.VOLQP=volcanic rock, composition quartz-poor
.VOLQPD=volcanic rock, composition quartz-poor (deformed)
.VOLQPU=volcanic rock, composition quartz-poor, unspecified
.VOLQPUD=volcanic rock, composition quartz-poor, unspecified (deformed)
.VOLQPV=volcanic rock, composition quartz-poor, variable
.VOLQPVD=volcanic rock, composition quartz-poor, variable (deformed)
.VOLQR=volcanic rock, composition quartz-rich
.VOLQRD=volcanic rock, composition quartz-rich (deformed)
.VOLQRU=volcanic rock, composition quartz-rich, unspecified
.VOLQRUD=volcanic rock, composition quartz-rich, unspecified (deformed)
.VOLQRV=volcanic rock, composition quartz-rich, variable
.VOLQRVD=volcanic rock, composition quartz-rich, variable (deformed)
.VOLU=volcanic rock, composition unspecified
.VOLUD=volcanic rock, composition unspecified (deformed)
.VOLV=volcanic rock, composition variable
.VOLVD=volcanic rock, composition variable (deformed)

.WCFA=West Coast foraminiferal stage, Danian
.WCFB=West Coast foraminiferal stage, Bulitian
.WCFD=West Coast foraminiferal stage, Delmontian
.WCFD=West Coast foraminiferal stage, Delmontian
.WCFF=West Coast foraminiferal stage, Refugian
.WCFH=West Coast foraminiferal stage, Hallian
.WCFL=West Coast foraminiferal stage, Luisian
.WCFM=West Coast foraminiferal stage, Mohnian
.WCFN=West Coast foraminiferal stage, Narizian
.WCFP=West Coast foraminiferal stage, Penutian
.WCFR=West Coast foraminiferal stage, Relizian
.WCFS=West Coast foraminiferal stage, Saucesian
.WCFT=West Coast foraminiferal stage, Repettian
.WCFU=West Coast foraminiferal stage, Ulatizian
.WCFV=West Coast foraminiferal stage, Venturian
.WCFW=West Coast foraminiferal stage, Wheelerian
.WCFY=West Coast foraminiferal stage, Ynezia
.WCFZ=West Coast foraminiferal stage, Zemorrian
.WCFZ=West Coast foraminiferal stage, Zemorrian

.XEN=xenoliths
.XENL=xenoliths, local country rock
.XENO=xenoliths, olivine
.XENU=xenoliths, ultramafic

APPENDIX A

POLYGON-ATTRIBUTE CODES FOR DIGITAL GEOLOGIC-MAP DATA BASES
Version 1.0

U.S. Geological Survey, Southern California Areal Mapping Project (SCAMP)

Suggestions for searching and selecting: How it's done with a SCAMP database

SCAMP's digital data bases can be searched in a number of ways--each requiring a basic understanding of the database structure in order to take full advantage of Arc/Info's selection tools. The SCAMP database and coding model is linguistic by nature. Coding is accomplished through the use of alpha-numeric characters separated by a parsing symbol--dots (.) that separate primary attribute data and hyphens (-) that separate secondary attribute data.

ARC has a number of selection commands that can be employed to access the database:

SELECT	Selects features or data items
ASELECT	Adds to your selected set of items or features
UNSELECT	Removes selected features from your group of selected items.
RESELECT	Selects a subset of items our of your group of selected items.
NSELECT	Unselects all of your currently selected items and selects all those you did not have selected.

All of the selection commands except for NSELECT can be used in conjunction with logical expressions of operators and connectors so that you can select for or against any item that is coded in the database.

Table A-1 illustrates some ways to search the polygon data base. The examples use code sentences from two different polygon types (Item 1 and Item 2), using the data-base fields LABL and LITH1 (in LITHOLOGY.REL):

	Item 1	Item 2
LABL:	Qya	Qyf
LITH1:	.SDE.ESE.TES.TES.ZXE.SEES.MESE.	.SDE.ESE.TES.TES.ZXE.SEEB.MEII.

For Items 1 and 2 the two code sentences clearly are related, but they differ slightly in their last two codes.

Expression	Example	Explanation
CN .	Select LITHOLOGY.REL//LITH1 cn '.SEES.'	This is a whole-word search which would select sentence one above
CN	Select LITHOLOGY.REL//LITH1 cn '.SEE	This is a prefix search that will select all items containing a word with the prefix **.SEE;** in this case both sentence one and two would be selected
CN	Select LITHOLOGY.REL//LITH1 cn '.SEES.' and LABL cn 'Qya	This example uses the connector AND, which would select all items that contain **SEES** and also are of type Qya

Table A-1

The user can substitute any operator or connector to search for and/or against any combination of items coded in the database. Some of the operators and connectors that are useful include:

Operators:

CN	Contains
NC	Not containing
LK	Contains something like

Table A-2

Connectors:

AND	Only items for which the expressions on both side of the AND are true will be selected
OR	Items for which the expressions on either side of the OR will be selected
XOR	Items for which ONLY one of the expressions on either side of the XOR are true will be selected

Table A-3

SCAMP polygon coverages: some representative examples of completed data-base fields

(1) Geologic map of the Yucaipa 7.5' quadrangle, data in "SUMMARY.REL" for polygons of TAG QwA:

TAG QwA

AGE

.CZOQHD.-NGN-

AGECON

.GMDC.SODC.

TYPE

.SURAWA.SGDGD.

CLASS

.RSCSIAWMA.

SURFACE

.SDIN.SVRN.SARN.SMOPC.SSON.

ORIGIN

.NMA.SURAW.

(2) Geologic map of the Yucaipa 7.5' quadrangle, data for four main rock types in "LITHOLOGY.REL" for polygons of TAG TmcA:

TAG TmcA

LITH1

.GRKSS.OGML.INDIE.BEDTKV.COLBG.COLGOL.COLGO.COLE.COLGB.CMXCS.CMX25.GSOPW.GSZS.GSZSFVC.GSHAD.GCOLIG.GCOLM.GCOLMG.GCOLMS.

LITH2

.GRKSSC.GRKSSCGP.OGML.INDIE.BEDTKV.COLBG.COLGOL.COLGO.COLE.COLGB.CMXCS.CMX25.GSOPW.GSZS.GSZSFVC.GSHAD.GCOLIG.GCOLM.GCOLMG.GCOLMS.CSZGC.CSZCS.CSHDR.CCOIPG.CCOIPMDC.CCOMC.CCOMG.CCOATGP.

LITH3

.MXSCSG.OGML.INDIE.BEDTKV.COLBG.COLGOL.COLGO.COLE.COLGB.CMXMS.CMX75.GSOP.-MSGP-.CSZGC.CSZCS.CSHDR.CCOIPG.CCOIPMD.CCOMG.CCOMC.CCOATGP.

LITH4

.GRKC.GRKCGC.OGML.INDIE.BEDTKV.COLBG.COLGOL.COLGO.COLE.COLGB.CMXCS.CMX25.GSOP.CSZGC.CSZCS.CSHDR.CCOIPG.CCOIPMD.CCOMG.CCOMC.CCOATGP.

(3) Geologic map of the Fawnskin 7.5' quadrangle, data for four main rock types in "STRUCTURE.REL" for polygons of TAG Ts3B:

TAG Ts3B

LITH1

.SDSBL.SDSCI.

LITH2

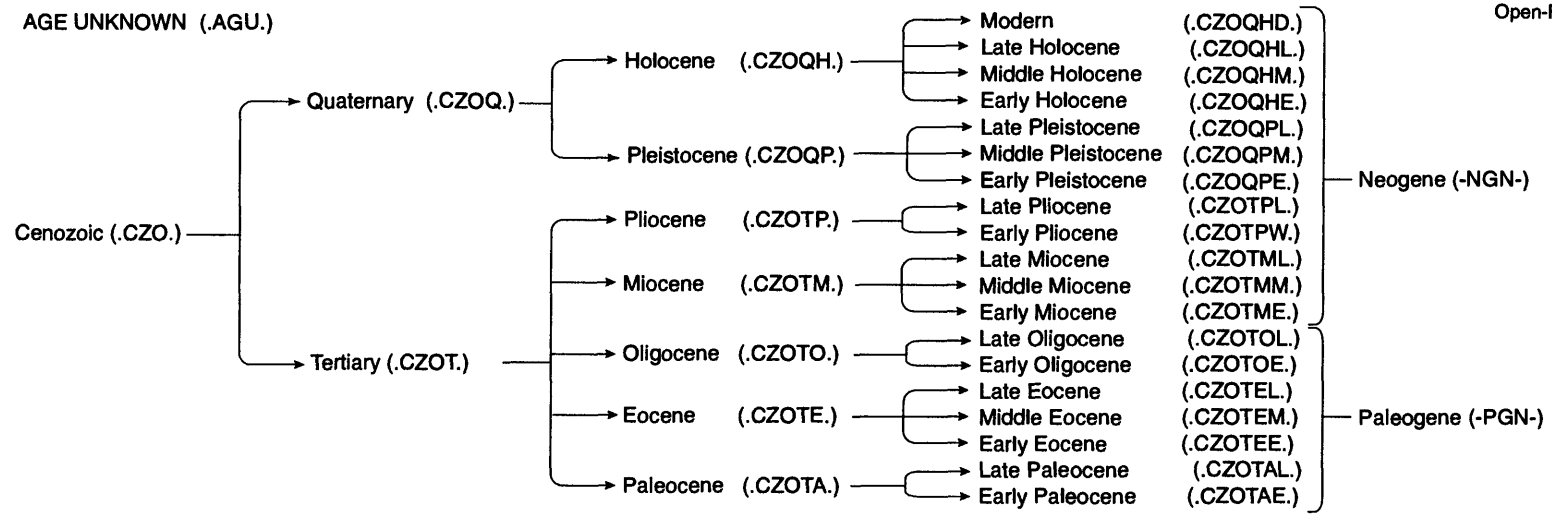
.SDSBC.SDSBP.SDSM.SDSLF.SDSLX.

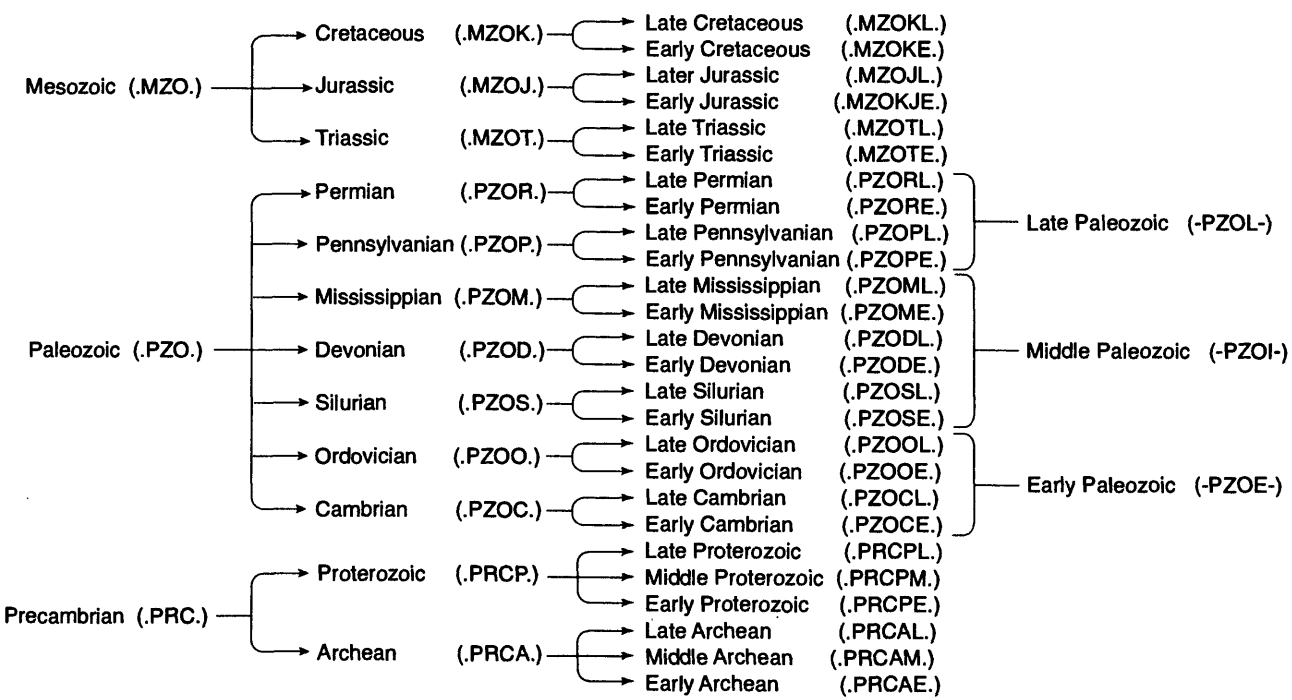
LITH3

.SDSBP.SDSM.

LITH4

.SDSM.





BASIS & CONFIDENCE OF AGE ASSIGNMENT	
Fossils	(.FSL.)
Age is certain	(.FSLC.)
Age is uncertain	(.FSLU.)
Geomorphic development	(.GMD.)
Age is certain	(.GMDC.)
Age is uncertain	(.GMDU.)
Intrusive relations	(.INR.)
Age is certain	(.INRC.)
Age is uncertain	(.INRU.)
Isotopic age	(.IAG.)
Age is certain	(.IAGC.)
Age is uncertain	(.IAGU.)
Paleomagnetism	(.PMG.)
Age is certain	(.PMGC.)
Age is uncertain	(.PMGU.)
Regional correlation	(.RCO.)
Age is certain	(.RCOC.)
Age is uncertain	(.RCOU.)
Stratigraphic relations	(.SRL.)
Age is certain	(.SRLC.)
Age is uncertain	(.SRLU.)
Soil development	(.SOD.)
Age is certain	(.SODC.)
Age is uncertain	(.SODU.)
Tephrochronology	(.TEP.)
Age is certain	(.TEPC.)
Age is uncertain	(.TEPU.)

GEOLOGIC-AGE SUBCATEGORIES BASED ON FOSSILS, PALEOMAGNETISM, AND TEPHROCHRONOLOGY

TIME-STRATIGRAPHIC CATEGORIES BASED ON FOSSIL MAMMALS AND FOSSIL BENTHIC FORAMINIFERA

LAND-MAMMAL AGES (.LMA.) From Woodburne, 1987		WEST-COAST FORAMINIFERAL STAGES (.WCF.)	
Pleistocene		Pleistocene	
Rancholabrean	(.LMAR.)	Hallian	(.WCFH.)
Irvingtonian	(.LMAI.)	Wheelerian	(.WCFW.)
Pliocene		Pliocene	
Blancan	(.LMAL.)	Venturian	(.WCFV.)
Miocene		Repettian	(.WCFT.)
Hemphillian	(.LMAH.)	Delmontian	(.WCFD.)
Clarendonian	(.LMAC.)	Miocene	
Barstovian	(.LMAB.)	Delmontian	(.WCFD.)
Arikareean	(.LMAA.)	Mohnian	(.WCFM.)
Oligocene		Luisian	(.WCFL.)
Arikareean	(.LMAA.)	Relizian	(.WCFR.)
Whitneyan	(.LMAW.)	Saucesian	(.WCFS.)
Orellan	(.LMAO.)	Zemorrian	(.WCFZ.)
Chadronian	(.LMAN.)	Oligocene	
Eocene		Zemorrian	(.WCFZ.)
Chadronian	(.LMAN.)	Eocene	
Duchesnean	(.LMAD.)	Refugian	(.WCFF.)
Uintan	(.LMAU.)	Narizian	(.WCFN.)
Bridgerian	(.LMAG.)	Ulatizian	(.WCFU.)
Wasatchian	(.LMAS.)	Penutian	(.WCFP.)
Clarkforkian	(.LMAK.)	Paleocene	
Paleocene		Builtian	(.WCFB.)
Clarkforkian	(.LMAK.)	Ynezian	(.WCFY.)
Tiffanian	(.LMAF.)	Danian	(.WCFA.)
Torrejonian	(.LMAT.)		
Puercan	(.LMAP.)		

TIME-STRATIGRAPHIC CATEGORIES BASED ON FOSSIL MARINE PLANKTON (Berggren and others, 1985)

NANNOPLANKTON ZONATION (.NPZ.)				PLANKTONIC FORMANIFERAL ZONATION (.PFZ.)	
Pleistocene			NP16	(.NPZP16.)	Pleistocene	P10	(.PFZP10.)
NN21	(.NPZN21.)		NP15	(.NPZP15.)	N23	(.PFZN23.)	P09	(.PFZP09.)
NN20	(.NPZN20.)		NP14	(.NPZP14.)	N22	(.PFZN22.)	P08	(.PFZP08.)
NN19	(.NPZN19.)		NP13	(.NPZP13.)	Pliocene		P07	(.PFZP07.)
Pliocene			NP12	(.NPZP12.)	N22	(.PFZN22.)	P06	(.PFZP08.)
NN19	(.NPZN19.)		NP11	(.NPZP11.)	N21	(.PFZN21.)	Paleocene	
NN18	(.NPZN18.)		NP10	(.NPZP10.)	N20	(.PFZN20.)	P06	(.PFZP08.)
NN17	(.NPZN17.)	Paleocene			N19	(.PFZN19.)	P05	(.PFZP05.)
NN16	(.NPZN16.)		NP09	(.NPZP09.)	N18	(.PFZN18.)	P04	(.PFZP04.)
NN15	(.NPZN15.)		NP08	(.NPZP08.)	Miocene		P03	(.PFZP03.)
NN14	(.NPZN14.)		NP07	(.NPZP07.)	N17	(.PFZN17.)	P02	(.PFZP02.)
NN13	(.NPZN13.)		NP06	(.NPZP06.)	N16	(.PFZN16.)	P01	(.PFZP01.)
NN12	(.NPZN12.)		NP05	(.NPZP05.)	N15	(.PFZN15.)		
Miocene			NP04	(.NPZP04.)	N14	(.PFZN14.)		
NN12	(.NPZN12.)		NP03	(.NPZP03.)	N13	(.PFZN13.)		
NN11	(.NPZN11.)		NP02	(.NPZP02.)	N12	(.PFZN12.)		
NN10	(.NPZN10.)		NP01	(.NPZP01.)	N11	(.PFZN11.)		
NN09	(.NPZN09.)	Cretaceous			N10	(.PFZN10.)		
NN08	(.NPZN08.)				N09	(.PFZN09.)		
NN07	(.NPZN07.)				N08	(.PFZN08.)		
NN06	(.NPZN06.)				N07	(.PFZN07.)		
NN05	(.NPZN05.)				N06	(.PFZN06.)		
NN04	(.NPZN04.)				N05	(.PFZN05.)		
NN03	(.NPZN03.)				N04	(.PFZN04.)		
NN02	(.NPZN02.)				Oligocene			
NN01	(.NPZN01.)				P22	(.PFZP22.)		
Oligocene					P21	(.PFZP21.)		
NP25	(.NPZP25.)				P20	(.PFZP20.)		
NP24	(.NPZP24.)				P19	(.PFZP19.)		
NP23	(.NPZP23.)				P18	(.PFZP16.)		
NP22	(.NPZP22.)				Eocene			
NP21	(.NPZP21.)				P17	(.PFZP17.)		
Eocene					P16	(.PFZP16.)		
NP20	(.NPZP20.)				P15	(.PFZP15.)		
NP19	(.NPZP19.)				P14	(.PFZP14.)		
NP18	(.NPZP18.)				P13	(.PFZP13.)		
NP17	(.NPZP17.)				P12	(.PFZP12.)		
NP17	(.NPZP17.)				P11	(.PFZP11.)		

PALEOMAGNETIC CHRON SEQUENCE (.PMC.) From Cande and Kent (1995)

Pleistocene		Eocene	
Chron C1	(.PMC01.)	Chron C17	(.PMC17.)
Chron C2	(.PMC02.)	Chron C18	(.PMC18.)
Pliocene		Chron C19	(.PMC19.)
Chron C2	(.PMC02.)	Chron C20	(.PMC20.)
Chron C2A	(.PMC02A.)	Chron C21	(.PMC21.)
Chron C3	(.PMC03.)	Chron C22	(.PMC22.)
Miocene		Chron C23	(.PMC23.)
Chron C3	(.PMC03.)	Chron C24	(.PMC24.)
Chron C3A	(.PMC03A.)	Chron C25	(.PMC25.)
Chron C3B	(.PMC03B.)	Chron C26	(.PMC26.)
Chron C4	(.PMC04.)	Paleocene	
Chron C4A	(.PMC04A.)	Chron C27	(.PMC27.)
Chron C5	(.PMC05.)	Chron C28	(.PMC28.)
Chron C5	(.PMC05.)	Chron C29	(.PMC29.)
Chron C5A	(.PMC05A.)	Cretaceous	
Chron C5B	(.PMC05B.)	Chron C30	(.PMC30.)
Chron C5C	(.PMC05C.)	Chron C31	(.PMC31.)
Chron C5D	(.PMC05D.)	Chron C32	(.PMC32.)
Chron C5E	(.PMC05E.)	Chron C33	(.PMC33.)
Chron C6	(.PMC06.)	Chron C34	(.PMC34.)
Chron C6A	(.PMC06A.)		
Chron C6B	(.PMC06B.)		
Oligocene			
Chron C6C	(.PMC06C.)		
Chron C7	(.PMC07.)		
Chron C7A	(.PMC07.)		
Chron C8	(.PMC08.)		
Chron C9	(.PMC09.)		
Chron C10	(.PMC10.)		
Chron C11	(.PMC11.)		
Chron C12	(.PMC12.)		
Chron C13	(.PMC13.)		
Chron C15	(.PMC15.)		
Chron C16	(.PMC16.)		
Chron C17	(.PMC17.)		

TEPHROCHRONOLOGIC SEQUENCE (.TCS.) From Bartow (1990)

Pleistocene		Nomlaki tuff	(.TCSN.)
Lava Creek tuff	(.TCSV.)	Lawlor tuff	(.TCSL.)
Bishop tuff	(.TCSB.)	Alturas tuff	(.TCSA.)
Glass Mountain tuff D	(.TCSGD.)	Miocene	
Glass Mountain tuff G	(.TCSGG.)	Modelo (?) tuff	(.TCSM.)
Bailey tuff	(.TCSY.)		
Pliocene			
Huckleberry Ridge tuff	(.TCSH.)		
Tulare C tuff	(.TCSTC.)		
Tulare S tuff	(.TCSTS.)		

AGE

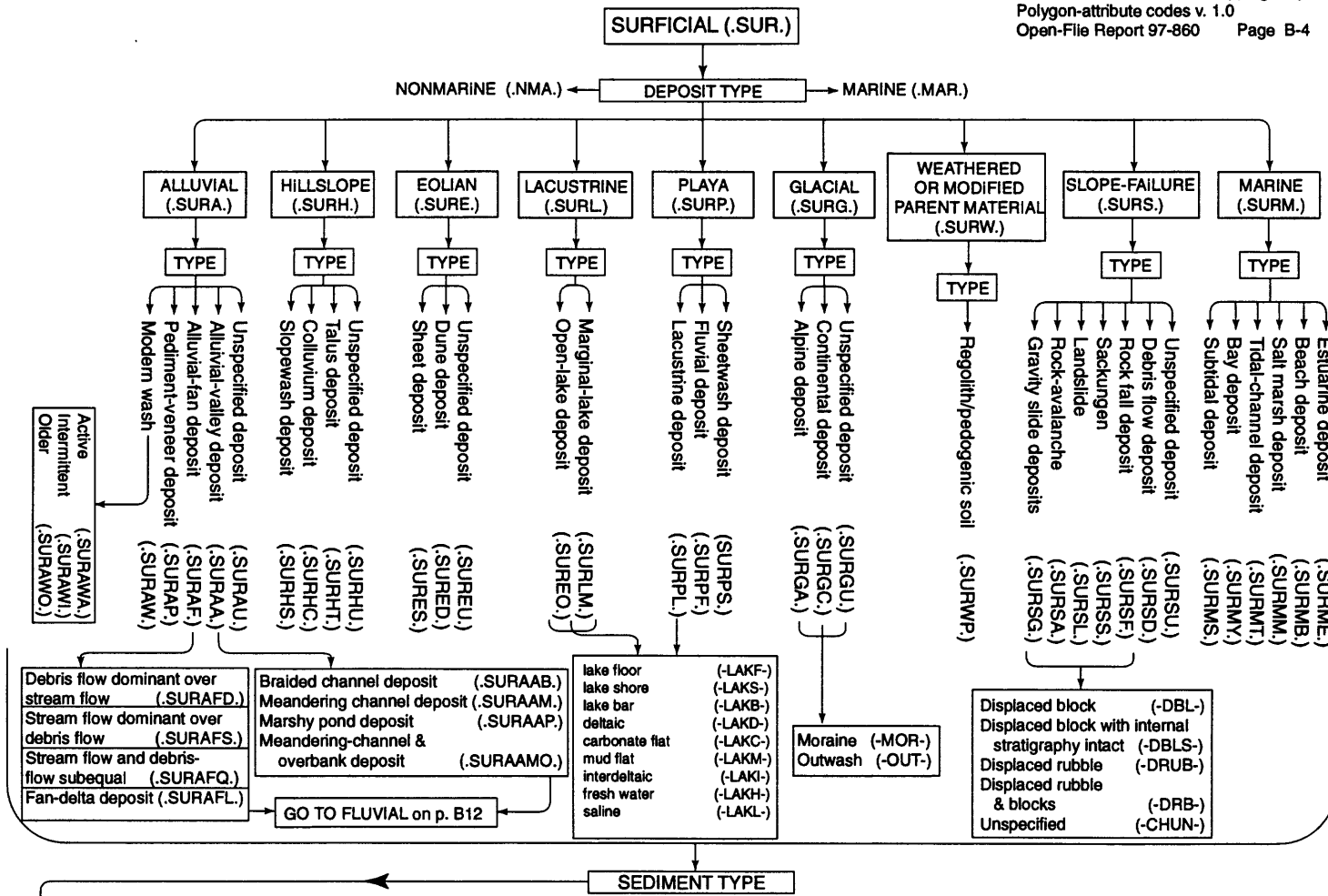
- SURFICIAL (.SUR.)
  - Alluvial (.SURA.)
  - Eolian (.SURE.)
  - Deltaic (.SURD.)
  - Glacial (.SURG.)
  - Hillslope (.SURH.)
  - Lake (.SURL.)
  - Marine (.SURM.)
  - Playa (.SURP.)
  - Slope failure (.SURS.)
  - Weathered and (or) modified parent material (.SURW.)
  - Other (.SURO.)
  - Unspecified (.SURU.)
- BEDROCK (.BRK.)
  - METAMORPHIC (.MET.)
    - Regional dynamothermal (.METR.)
    - Contact (.METC.)
    - Strain dominated (.METS.)
    - Unspecified (.METU.)
  - SEDIMENTARY (.SED.)
    - Biogenic (.SEDB.)
    - Calclastic (.SEDL.)
    - Carbonate (.SEDC.)
    - Catastrophic (.SEDK.)
    - Chert (.SEDH.)
    - Evaporite (.SEDE.)
    - Siliclastic (.SEDS.)
    - Volcaniclastic (.SEDV.)
    - Unspecified (.SEDU.)
  - IGNEOUS (.IGN.)
    - Extrusive (.IGNX.)
    - Intrusive (.IGNI.)
    - Pyroclastic (.IGNP.)
    - Unspecified (.IGNU.)
  - STRAIN-DOMINATED ROCK (.SDR.)
    - Crushed or sheared rock (.SDRC.)
    - Fault rock (.SDRF.)
      - Brittle fault rock (.SDRFB.)
      - Ductile fault rock (.SDRFD.)
    - High-strain rock (.SDRH.)
    - Unspecified (.SDRU.)
  - TECTONIC ASSEMBLAGE (.TEC.)
    - Fault-bound rock body (.TECF.)
    - Broken formation (.TECB.)
    - Melange assemblage (.TECM.)
    - Olistostrome (.TECO.)
    - Unspecified (.TECU.)

BASIS FOR ASSIGNMENT OF GEOLOGIC UNITS TO POLYGONS (.CAG.)

Identification based on field observation (.CAGF.)
- Geologic-unit assignment is certain (.CAGFC.)
- Geologic-unit assignment is likely but is not confirmed (.CAGFL.)
- Geologic-unit assignment is uncertain (.CAGFU.)
- • Observation station within polygon (-OST-)
- • Binocular determination (-BIN-)

Identification based on extrapolation (.CAGE.)
- Geologic-unit assignment is certain (.CAGEC.)
- Geologic-unit assignment is likely but is not confirmed (.CAGEL.)
- Geologic-unit assignment is uncertain (.CAGEU.)
- • Air-photo identification (-APH-)
- • Remote-sensing-imagery identification (-RSI-)
- • Extrapolation in conjunction with published observation by other workers (-PUBW-)
- • Extrapolation in conjunction with unpublished observation by other wortkers (-PUBWU-)

Identification determined by other workers (.CAGW.)



SEDIMENT TYPE

SAND & GRAVEL DEPOSITS (.SGD.)

Gravelly deposits (.SGDG.)	Gravel dominant over sand (.SGDGD.)	Sand & gravel subequal (.SGDQ.)	Sand dominant over gravel (.SGDSD.)	Sandy deposits (.SGDS.)

Gravel	(.GVL.)	Sand, cobbly & bouldery	(.SNDGCB.)	Sand, very fine to medium	(.SNDVFM.)
Gravel, boulder	(.GVLB.)	Sand, cobbly	(.SNDGC.)	Sand, fine	(.SNDF.)
Gravel, cobble-boulder	(.GVLCB.)	Sand, pebbly & cobbly	(.SNDGPC.)	Sand, very fine to fine	(.SNDVFF.)
Gravel, pebble-boulder	(.GVLPB.)	Sand, cobbly pebbie-granule	(.SNDGCPG.)	Sand, very fine	(.SNDVF.)
Gravel, cobble	(.GVLC.)	Sand, pebbly	(.SNDGP.)	Sand, silty	(.SNDML.)
Gravel, pebble-cobble	(.GVLPC.)	Sand, pebbly granule-bearing	(.SNDGPGB.)	Sand, silty, medium to coarse	(.SNDMLMC.)
Gravel, pebble	(.GVLP.)	Sand, granule-bearing	(.SNDGGB.)	Sand, silty, fine to coarse	(.SNDMLFC.)
Gravel, granule-pebble	(.GVLGP.)	Sand	(.SND.)	Sand, silty, very fine to coarse	(.SNDMLVFC.)
Gravel, granule	(.GVLG.)	Sand, very coarse	(.SNDVC.)	Sand, silty, medium	(.SNDMLM.)
Gravel, sandy	(.GVLS.)	Sand, coarse to very coarse	(.SNDCVC.)	Sand, silty, fine to medium	(.SNDMLFM.)
Gravel, sandy cobbie	(.GVLSC.)	Sand, medium to very coarse	(.SNDMVC.)	Sand, silty, very fine to medium	(.SNDMLVFM.)
Gravel, sandy pebbie-cobble	(.GVLSPC.)	Sand, fine to very coarse	(.SNDFVC.)	Sand, silty, fine	(.SNDMLF.)
Gravel, sandy pebble	(.GVLSP.)	Sand, very fine to very coarse	(.SNDVFVC.)	Sand, silty, very fine to fine	(.SNDMLVFF.)
Gravel, sandy granule-pebble	(.GVLSGP.)	Sand, coarse	(.SNDC.)	Sand, silty, very fine	(.SNDMLVF.)
Gravel, sandy granule	(.GVLSG.)	Sand, medium to coarse	(.SNDMC.)	Sand, muddy	(.SNDMY.)
Gravel, muddy	(.GVLM.)	Sand, fine to coarse	(.SNDFC.)	Sand, clay-bearing	(.SNDCL.)
Sand, gravelly	(.SNDG.)	Sand, very fine to coarse	(.SNDVFC.)	Sand, clay- and silt-bearing	(.SNDCLML.)
Sand, bouldery	(.SNDGB.)	Sand, medium	(.SNDM.)		
		Sand, fine to medium	(.SNDFM.)		

SILTY DEPOSITS (.SLT.)

Silt, gravelly	(.SLTMLG.)
Silt, sandy	(.SLTMLS.)
Silt	(.SLTML.)
Silt, muddy	(.SLTMLM.)

CLAY & MUD DEPOSITS (.CLM.)

Clay, gravelly	(.CLMCLG.)
Clay, sandy	(.CLMCLS.)
Clay, silty	(.CLMCLML.)
Clay	(.CLMCL.)
Mud, gravelly	(.CLMMG.)
Mud, sandy	(.CLMMS.)
Mud, silty	(.CLMMML.)
Mud	(.CLMM.)

SECONDARY CODES

Buried paleosols	(-BPS-)	Interbedded organic material	(-IOM-)	Sand & gravel interbedded	(-SGI-)
Interbedded carbonate material	(-ICM-)	peat	(-IOMP-)	Sand with gravel component	(-SGC-)
calcrete	(-CALC-)	lignite seams	(-IOML-)	Sand and mud interbedded	(-SMI-)
caliche	(-CLC-)	Interbedded volcanic ash	(-IVA-)	Sand, silt, & clay interbedded	(-SSC-)
pedogenic caliche	(-CLCP-)	air-fall tuff	(-IVAA-)	Gravel and mud interbedded	(-GMI-)
non-pedogenic caliche	(-CLCNP-)	ash-flow tuff	(-IVAF-)		
caliche filaments	(-CLCNPF-)	Interbedded volcanic bodies	(-IVB-)		
caliche nodules	(-CLCNPN-)	andesite flows	(-IVBA-)		
caliche seams	(-CLCNPS-)	basalt	(-IVBB-)		
caliche filled fractures	(-CLCNPFR-)	basalt flows	(-IVBBF-)		
limestone	(-LMST-)	basalt plugs	(-IVBBP-)		
marl	(-MRL-)	dacite-latite bodies	(-IVBD-)		

- SURFACE CHARACTER AND SOIL CHARACTER
  - SURFACE SOIL (.SSO.)
    - Pedogenic soil degraded (.SSOD.)
    - Non-calcic soils with organic A (.SSONC.)
      - Strong soil development (.SSOS.) → Strong Bt soils (thick, red, high clay content) (.SSOBTS.)
      - Moderate soil development (.SSOM.) → Moderate Bt soils (.SSOBTM.); A/C/Bcambic soils (.SSOBC.)
      - Weak soil development (.SSOW.) → A/Bw/C soils (SSOABW.); A/C soils (.SSOAC.); Weak A horizon (.SSOAW.)
    - Silicic soils (.SSOSI.)
      - Duripan soils (.SSOSID.) → Silcrete (.SSOSIDS.)
    - Calcic soils[2] (.SSOC.)
      - Strong soil development (.SSOS.) → Stage 6 K horizon (.SSOK6.); Stage 5 K horizon (.SSOK5.); Stage 4 K horizon (.SSOK4.)
      - Moderate soil development (.SSOM.) → Stage 3 Bk horizon (.SSOK3.); Stage 2 Bk horizon (.SSOK2.)
      - Weak soil development (.SSOW.) → Stage 1 Bk horizon (.SSOK1.)
    - No pedogenic soil development (.SSON.)
  - SURFACE MORPHOLOGY (.SMO.)
    - Surface morphology largely preserved (.SMOP.)
      - Alluvial-flat setting (.SMOPA.)
      - Anastomosing channel (.SMOPC.)
      - Bar-and-swale (.SMOPB.)
      - Debris-flow lobe (.SMOPD.)
      - Eolian dunes (.SMOPE.)
      - Hillslope sediment veneer (.SMOPV.)
      - Hummocky ground (.SMOPH.)
      - Morainal ridges (.SMOPM.)
      - Rock-avalanche ridges (.SMOPR.)
      - Scree slope (.SMOPS.)
      - Talus cone (.SMOPT.)
    - Surface morphology largely degraded (.SMOD.)
  - COBBLE-WEATHERING STAGE[1] (.CWS.)
    - Strongly weathered (.CWSST.)
    - Substantially weathered (.CWSSU.)
    - Slightly weathered (.CWSSL.)
    - Unweathered (.CWSUW.)
  - SURFACE VARNISH (.SVR.)
    - Strong varnish (.SVRT.)
    - Moderate varnish (.SVRM.)
    - Slight varnish (.SVRS.)
    - No varnish (.SVRN.)
  - SURFACE ARMOR (.SAR.)
    - Degraded relict pavement (.SARD.)
    - Hard pavement, slightly degraded (.SARH.)
    - Moderate pavement (.SARM.)
    - Slight pavement (.SARS.)
    - No pavement (.SARN.)
  - SURFACE DISSECTION (.SDI.)
    - Well dissected ridge-and-ravine (.SDIW.)
    - Moderately to well dissected (.SDIMW.)
    - Moderately dissected flat-ridge & ravine (.SDIM.)
    - Slightly to moderately dissected (.SDISM.)
    - Slightly dissected (.SDIS.)
    - Nondissected to slightly dissected (.SDINS.)
    - Nondissected (.SDIN.)

SECONDARY CODES	
Av profile development:	
Weak	(-PAVW-)
Moderate	(-PAVM-)
Strong	(-PAVS-)

[1] From Bull, 1991, Table 2.6

[2] From Machette, 1985, modified from Gile and others, 1966

BEDROCK

SEDIMENTARY (.SED.)

- BIOGENIC (.SEDB.)
  - Diatomaceous rock (.SEDBD.)
  - Foraminiferal rock (.SEDBF.)
  - Nannofossil rock (.SEDBN.)
  - Radiolarian rock (.SEDBR.)
- CHERT (.SEDH.)
  - Nodular chert (.SEDHN.)
  - Bedded chert (.SEDHB.)
  - Ribbon chert (.SEDHR.)
- EVAPORITE (.SEDE.)
  - Filamentous evaporite (.SEDEF.)
  - Nodular evaporite (.SEDEN.)
  - Varved evaporite (.SEDEV.)
  - Bedded evaporite (.SEDEB.)

  → GO TO: OUTCROP-SCALE ATTRIBUTES—PAGE B-9; HAND SPECIMEN-SCALE ATTRIBUTES—PAGE B-10
- CATASTROPHIC (.SEDK.)
  - Brecciated and shattered rock (.SEDKB.)
    - Shattered block (.SEDKBS.)
    - Rubble (.SEDKBR.)
    - Shattered block and rubble (.SEDKBSR.)
    - Breccia unspecified (.SEDKBU.)
  - Catastrophically deposited sedimentary breccia (.SEDKS.)
  - Roundstone conglomerate (.SEDKR.)

  Secondary codes:
  - Brecciated carbonate rock (-BRCC-)
  - Brecciated granitic rock (-BRCG-)
  - Brecciated metamorphic rock (-BRCM-)
  - Brecciated marble (-BRCMM-)
  - Brecciated marble, white (-BRCMMW-)
  - Brecciated marble, gray (-BRCMMG-)
  - Brecciated granitic and metamorphicrock (-BRCGM-)
  - Brecciated sedimentary rock (-BRCS-)
  - Brecciated mixed rock (-BRCX-)
- VOLCANICLASTIC (.SEDV.)
  - Volcanic siltstone (.SEDVM.)
  - Volcanic siltstone, sandy (.SEDVMS.)
  - Volcanic sandstone, silty (.SEDVSM.)
  - Volcanic sandstone (.SEDVS.)
  - Volcanic sandstone, conglomeratic (.SEDVSC.)
  - Volcanic conglomerate, sandy (.SEDVCS.)
  - Volcanic conglomerate (.SEDVC.)
  - Lahar (.SEDVL.)
  - Agglomerate (.SEDVA.)

  → GO TO: OUTCROP-SCALE ATTRIBUTES—PAGE B-9; HAND SPECIMEN-SCALE ATTRIBUTES—PAGE B-10
- CALCLASTIC (.SEDL.)
  - Carbonate siltstone (.SEDLM.)
  - Carbonate siltstone, sandy (.SEDLMS.)
  - Carbonate sandstone, silty (.SEDLSM.)
  - Carbonate sandstone (.SEDLS.)
  - Carbonate sandstone, conglomeratic (.SEDLSC.)
  - Carbonate conglomerate, sandy (.SEDLCS.)
  - Carbonate conglomerate (.SEDLC.)

  → GO TO: OUTCROP-SCALE ATTRIBUTES—PAGE B-9; HAND SPECIMEN-SCALE ATTRIBUTES—PAGE B-10
- CARBONATE (.SEDC.)
  - Calcareous rock
    - Non-metamorphosed
    - Metamorphosed
  - Dolomitic rock
    - Non-metamorphosed
    - Metamorphosed
  - Impure carbonate rock
  - Pure & impure carbonate rocks mixed
  - Heterogeneous carbonate rocks
  - Interbedded carbonate & noncarbonate rocks

  → GO TO: PAGE B-7
- SILICICLASTIC (.SEDS.)
  - Mudrocks
    - Variable mudrocks
  - Grainrocks
    - Variable grainrocks
  - Mudrock & grainrock mixed
    - Mudrock dominant over grainrock
    - Grainrock dominant over mudrock
  - Matrix-supported rocks

  → GO TO: PAGE B-6

BEDROCK

SEDIMENTARY (.SED.)

SILICICLASTIC (.SEDS.)

MUDROCKS (.MRK.)

Shale	(.MRKS.)
Claystone	(.MRKCL.)
Claystone, silty	(.MRKCLML.)
Claystone, sandy	(.MRKCLS.)
Mudstone	(.MRKM.)
Mudstone, silty	(.MRKMML.)
Mudstone, sandy	(.MRKMS.)
Mudstone, conglomeratic	(.MRKMC.)
Mudstone, pebbly	(.MRKMCP.)
Mudstone, pebbly & cobbly	(.MRKMCPC.)
Mudstone, cobbly	(.MRKMCC.)
Mudstone, cobbly & bouldery	(.MRKMCCB.)
Mudstone, bouldery	(MRKMCB.)

Specialized Names

Arenite	(.ARN.)
Arkose	(.ARK.)
Lutite	(.LUT.)
Quartzite	(.QTZI.)
Siltite	(.SIT.)

Quartzose	(-QTZ-)
quartz 95-100%	(-Q95-)
quartz >75<95%	(-Q75-)
Quartzofeldspathic	(-QFD-)
Feldspathic	(-FELD-)
Lithic	(-LiTH-)

GRAINROCKS (.GRK.)

Siltstone	(.GRKML.)	Sandstone, pebbly & cobbly	(.GRKSSCPC.)
Siltstone, sandy	(.GRKMLS.)	Sandstone, cobbly	(.GRKSSCC.)
Siltstone, sandy conglomeratic	(.GRKMLSC.)	Sandstone, cobbly & boulder	(.GRKSSCCB.)
Siltstone, sandy granule	(.GRKMLSCG.)	Sandstone, bouldery	(.GRKSSCB.)
Siltstone, sandy granule-pebble	(.GRKMLSCGP.)	Conglomerate	(.GRKC.)
Siltstone, sandy granule-cobble	(.GRKMLSCGC.)	Conglomerate, boulder	(.GRKCB.)
Siltstone, sandy pebble-cobble	(.GRKMLSCPC.)	Conglomerate, cobble-boulder	(.GRKCCB.)
Siltstone, conglomeratic	(.GRKMLCG.)	Conglomerate, pebble-boulder	(.GRKCPB.)
Siltstone, granule-bearing	(.GRKMLCG.)	Conglomerate, cobble	(.GRKCC.)
Siltstone, pebbly granule	(.GRKMLCPG.)	Conglomerate, pebble-cobble	(.GRKCPC.)
Siltstone, pebbly	(.GRKMLCP.)	Conglomerate, granule-cobble	(.GRKCGC.)
Siltstone, pebbly & cobbly	(.GRKMLCPC.)	Conglomerate, pebble	(.GRKCP.)
Siltstone, cobbly	(.GRKMLCC.)	Conglomerate, granule-pebble	(.GRKCGP.)
Sandstone	(.GRKSS.)	Conglomerate, granule	(.GRKCG.)
Sandstone, matrix-rich	(.GRKSSX.)	Conglomerate, sandy	(.GRKCS.)
Sandstone, clayey	(.GRKSSXCL.)	Conglomerate, sandy peb-cob	(.GRKCSPC.)
Sandstone, silty	(.GRKSSXML.)	Conglomerate, sandy pebble	(.GRKCSP.)
Sandstone, conglomeratic	(.GRKSSC.)	Conglomerate, sandy granule	(.GRKCSG.)
Sandstone, granule-bearing	(.GRKSSCG.)	Conglomerate, matrix-rich	(.GRKCX.)
Sandstone, pebbly granule	(.GRKSSCGP.)	Conglomerate, silty	(.GRKCXML.)
Sandstone, pebbly	(.GRKSSCP.)	Conglomerate, clayey	(.GRKCXCL.)

MINOR INTERBEDDED NON-SILICLASTIC ROCKS (.INS.)

Interbedded biogenic rock	(.INSB.)
Interbedded carbonate rock	(.INSC.)
Interbedded catastrophic rock	(.INSCA.)
Interbedded chert	(.INSCH.)
Interbedded coal	(.INSCO.)
Intermingled intrusive rock	(.INSIR.)
Interbedded volcanic ash beds	(.INSVA.)
Interbedded volcanic flows	(.INSVF.)
Interbedded volcaniclastic rock	(.INSVC.)

VARIABLE MUDROCKS (.MRKV.)

Rock types listed in order of decreasing abundance. Examples:
Mudstone & silty mudstone (.MRKM.MRKMML.)
Mudstone & claystone (.MRKM.MRKCL.)
Mudstone, silty mudstone, & sandy mudstone (.MRKM.MRKMML.MRKMS.)
Claystone & mudstone (.MRKCL.MRKM.)

VARIABLE GRAINROCKS (.GRKV.)

Rock types listed in order of decreasing abundance. Examples:
Sandstone & siltstone (.GRKSS.GRKML.)
Conglomeratic sandstone, sandstone, & siltstone (.GRKSSC.GRKSS.GRKML.)
Conglomeratic sandstone & sandstone (.GRKSSC.GRKSS.)
Pebbly sandstone & sandstone (.GRKSSCP.GRKSS.)
Cobbly sandstone & sandstone (.GRKSSC.GRKSS.)
Conglomerate, conglomeratic sandstone, & sandstone (.GRKC.GRKSSC.GRKSS.)
Conglomerate & conglomeratic sandstone (.GRKC.GRKSSC.)

Secondary codes

Air-fall tuff	(-IVAA-)
Andesite	(-IVBA-)
Ash-flow tuff	(-IVAS-)
Basalt	(-IVBB-)
flows	(-IVBBF-)
plugs	(-IVBBP-)
Caliche	(-CLC-)
Dacite-latite	(-IVBD-)
Granitic rock	(-GRR-)
Lignite	(-LIG-)
Limestone	(-LMST-)
Marl	(-MRL-)
Ultramafic rock	(-UMF-)

MATRIX-SUPPORTED ROCK (.MXS.)

Sandstone	(.MXSSS.)
Sandstone, clay-supported	(.MXSSSCL.)
Sandstone, mud-supported	(.MXSSSD.)
Sandstone, silt-supported	(.MXSSSML.)
Conglomerate	(.MXSC.)
Conglomerate, clay-supported	(.MXSCCL.)
Conglomerate, mud-supported	(.MXSCD.)
Conglomerate, mud- and sand-supported	(.MXSCDS.)
Conglomerate, sand-supported	(.MXSCS.)
Conglomerate, sandy granule-supported	(.MXSCSG.)
Conglomerate, sandy granule-pebble-supported	(.MXSCSGP.)

MUDROCK AND GRAINROCK MIXED (.MGM.)

Mudrock dominant over grainrock (.MGMMD.)	Grainrock dominant over mudrock (.MGMGD.)	Grainrock and mudrock subequal (.MGMQ.)

Rock types listed in order of decreasing abundance. Examples:
Claystone & siltstone (.MRKCL.GRKML.)
Claystone & sandstone (.MRKCL.GRKSS.)
Mudstone & siltstone (.MRKM.GRKML.)
Mudstone, siltstone, & sandstone (.MRKM.GRKML.GRKSS.)
Mudstone & sandstone (.MRKM.GRKSS.)
Mudstone & conglomerate (.MRKM.GRKC.)
Mudstone, sandstone, & conglomerate (.MRKM.GRKSS.GRKC.)
Mudstone, pebbly mudstone, & conglomerate (.MRKM.MRKMP.GRKC.)
Siltstone & claystone (.GRKML.MRKCL.)
Siltstone & mudstone (.GRKML.MRKM.)
Sandstone & mudstone (.GRKSS.MRKM.)
Sandstone, siltstone, & mudstone (.GRKSS.GRKML.MRKM.)
Pebbly sandstone, siltstone, & mudstone (.GRKSSCP.GRKML.MRKM.)
Conglomerate, sandstone, & mudstone, (.GRKC.GRKSS.MRKM.)
Conglomerate, pebbly sandstone, & mudstone (.GRKC.GRKSSCP.MRKM.)

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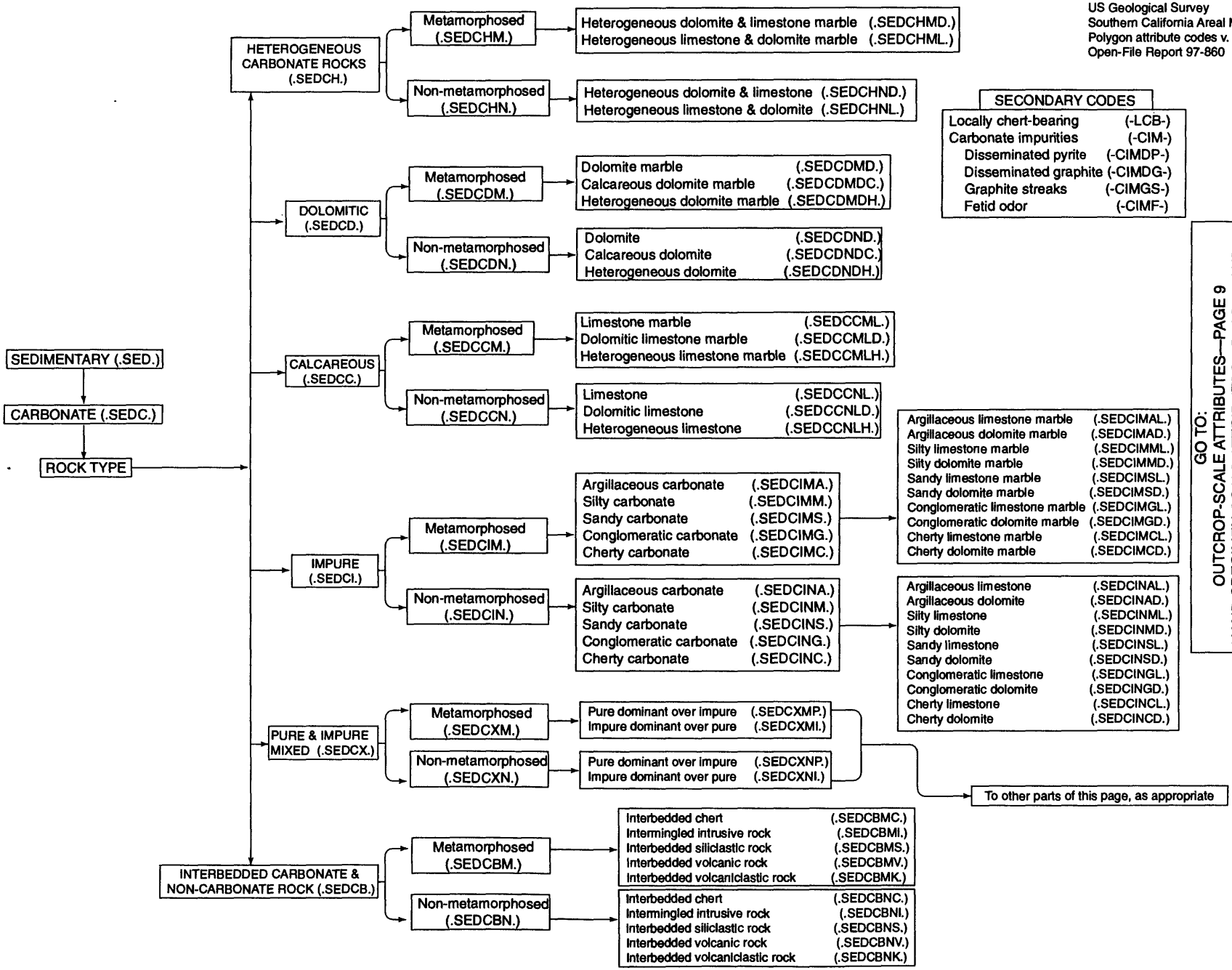
HAND SPECIMEN-SCALE ATTRIBUTES—PAGE B-10


SEDIMENTARY (.SED.)
CARBONATE (.SEDC.)
ROCK TYPE
HETEROGENEOUS CARBONATE ROCKS (.SEDCH.)
Metamorphosed (.SEDCHM.)
Heterogeneous dolomite & limestone marble (.SEDCHMD.)
Heterogeneous limestone & dolomite marble (.SEDCHML.)
Non-metamorphosed (.SEDCHN.)
Heterogeneous dolomite & limestone (.SEDCHND.)
Heterogeneous limestone & dolomite (.SEDCHNL.)
DOLOMITIC (.SEDCD.)
Metamorphosed (.SEDCDM.)
Dolomite marble (.SEDCDMD.)
Calcareous dolomite marble (.SEDCDMDC.)
Heterogeneous dolomite marble (.SEDCDMDH.)
Non-metamorphosed (.SEDCDN.)
Dolomite (.SEDCDND.)
Calcareous dolomite (.SEDCDNDC.)
Heterogeneous dolomite (.SEDCDNDH.)
CALCAREOUS (.SEDCC.)
Metamorphosed (.SEDCCM.)
Limestone marble (.SEDCCML.)
Dolomitic limestone marble (.SEDCCMLD.)
Heterogeneous limestone marble (.SEDCCMLH.)
Non-metamorphosed (.SEDCCN.)
Limestone (.SEDCCNL.)
Dolomitic limestone (.SEDCCNLD.)
Heterogeneous limestone (.SEDCCNLH.)
IMPURE (.SEDCI.)
Metamorphosed (.SEDCIM.)
Argillaceous carbonate (.SEDCIMA.)
Silty carbonate (.SEDCIMM.)
Sandy carbonate (.SEDCIMS.)
Conglomeratic carbonate (.SEDCIMG.)
Cherty carbonate (.SEDCIMC.)
Non-metamorphosed (.SEDCIN.)
Argillaceous carbonate (.SEDCINA.)
Silty carbonate (.SEDCINM.)
Sandy carbonate (.SEDCINS.)
Conglomeratic carbonate (.SEDCING.)
Cherty carbonate (.SEDCINC.)
PURE & IMPURE MIXED (.SEDCX.)
Metamorphosed (.SEDCXM.)
Pure dominant over impure (.SEDCXMP.)
Impure dominant over pure (.SEDCXMI.)
Non-metamorphosed (.SEDCXN.)
Pure dominant over impure (.SEDCXNP.)
Impure dominant over pure (.SEDCXNI.)
INTERBEDDED CARBONATE & NON-CARBONATE ROCK (.SEDCB.)
Metamorphosed (.SEDCBM.)
Interbedded chert (.SEDCBMC.)
Intermingled intrusive rock (.SEDCBMI.)
Interbedded siliclastic rock (.SEDCBMS.)
Interbedded volcanic rock (.SEDCBMV.)
Interbedded volcaniclastic rock (.SEDCBMK.)
Non-metamorphosed (.SEDCBN.)
Interbedded chert (.SEDCBNC.)
Intermingled intrusive rock (.SEDCBNI.)
Interbedded siliclastic rock (.SEDCBNS.)
Interbedded volcanic rock (.SEDCBNV.)
Interbedded volcaniclastic rock (.SEDCBNK.)
SECONDARY CODES
Locally chert-bearing (-LCB-)
Carbonate impurities (-CIM-)
Disseminated pyrite (-CIMDP-)
Disseminated graphite (-CIMDG-)
Graphite streaks (-CIMGS-)
Fetid odor (-CIMF-)
Argillaceous limestone marble (.SEDCIMAL.)
Argillaceous dolomite marble (.SEDCIMAD.)
Silty limestone marble (.SEDCIMML.)
Silty dolomite marble (.SEDCIMMD.)
Sandy limestone marble (.SEDCIMSL.)
Sandy dolomite marble (.SEDCIMSD.)
Conglomeratic limestone marble (.SEDCIMGL.)
Conglomeratic dolomite marble (.SEDCIMGD.)
Cherty limestone marble (.SEDCIMCL.)
Cherty dolomite marble (.SEDCIMCD.)
Argillaceous limestone (.SEDCINAL.)
Argillaceous dolomite (.SEDCINAD.)
Silty limestone (.SEDCINML.)
Silty dolomite (.SEDCINMD.)
Sandy limestone (.SEDCINSL.)
Sandy dolomite (.SEDCINSD.)
Conglomeratic limestone (.SEDCINGL.)
Conglomeratic dolomite (.SEDCINGD.)
Cherty limestone (.SEDCINCL.)
Cherty dolomite (.SEDCINCD.)
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OUTCROP-SCALE ATTRIBUTES, sedimentary rocks and surficial materials

OUTCROP GEOMORPHOLOGY (.OGM.)

Blocky	(.OGMB.)
Cliff forming	(.OGMC.)
Fissil	(.OGMF.)
Interbedded ledge-forming & slope-forming	(.OGMI.)
Ledgeforming	(.OGML.)
Massive, blocky	(.OGMMB.)
Massive, rounded	(.OGMMR.)
Recessive	(.OGMR.)
Regolith	(.OGMH.)
Rib-forming	(.OGMG.)
Rounded	(.OGMD.)
Slope-forming	(.OGMS.)
Weathered, slightly	(.OGMWSL.)
Weathered, substantially	(.OGMWSU.)
Weathered, strongly	(.OGMWST.)

SURFICIAL MATERIALS

CONSOLIDATION (.CON.)

Unconsolidated	(.CONU.)
Unconsolidated to consolidated	(.CONUC.)
Unconsolidated to slightly consolidated	(.CONUCS.)
Unconsolidated to moderately consolidated	(.CONUCM.)
Unconsolidated to well consolidated	(.CONUCW.)
Unconsolidated to cemented	(.CONUE.)
Consolidated	(.CONC.)
Consolidated, slightly	(.CONCS.)
Consolidated, slightly to moderately	(.CONCSM.)
Consolidated, moderately	(.CONCM.)
Consolidated, moderately to well	(.CONCMW.)
Consolidated, well	(.CONCW.)
Consolidated, well, to indurated	(.CONCWI.)
Consolidated, variably	(.CONCV.)
Consolidated to cemented	(.CONCE.)
Cemented, locally	(.CONEL.)

SEDIMENTARY ROCKS

INDURATION (.IND.)

Consolidated	(.INDC.)
Consolidated to indurated	(.INDCI.)
Indurated	(.INDI.)
Indurated to cemented	(.INDIE.)
Consolidated to cemented	(.INDCE.)
Cemented	(.INDE.)
calcite cement	(-CEMC-)
clay cement	(-CEMCY-)
hematite cement	(-CEMH-)
silica cement	(-CEMS-)
zeolitic cement	(-CEMZ-)
Crystalline	(.INDY.)
Variable	(.INDV.)

SURFICIAL MATERIALS AND SEDIMENTARY ROCKS

BEDDING

Laminated	(.BEDL.)
Thin	(.BEDT.)
Thin to medium	(.BEDTM.)
Thin to thick	(.BEDTK.)
Thin to very thick	(.BEDTKV.)
Medium	(.BEDM.)
Medium to thick	(.BEDMK.)
Medium to very thick	(.BEDMKV.)
Thick	(.BEDK.)
Thick to very thick	(.BEDKKV.)
Very thick	(.BEDKV.)
Cross bedded	(.BEDX.)
Crude	(.BEDC.)
Indistinct	(.BEDI.)
Non-bedded	(.BEDN.)
Variable	(.BEDV.)

COLOR

Banded (cm to dm)	(.COLZ.)	Gray, olive	(.COLGO.)
Black	(.COLK.)	Gray, olive, light	(.COLGOL.)
Brownish	(.COLB.)	Gray, olive, pale	(.COLGOP.)
Brown, grayish	(.COLBG.)	Gray, pinkish	(.COLGP.)
Brown, greenish	(.COLBE.)	Gray, reddish	(.COLGR.)
Brown, orange	(.COLBO.)	Gray, yellowish	(.COLGY.)
Brown, pale	(.COLBP.)	Greenish	(.COLE.)
Brown, pale, very	(.COLBPV.)	Light colored	(.COLL.)
Brown, reddish	(.COLBR.)	Medium colored	(.COLM.)
Brown, yellowish	(.COLBY.)	Olive	(.COLO.)
Brown, yellowish, light	(.COLBYL.)	Olive, pale	(.COLOP.)
Dark colored	(.COLD.)	Pinkish	(.COLP.)
Grayish	(.COLG.)	Pale pink	(.COLPP.)
Gray, brownish	(.COLGB.)	Purplish	(.COLU.)
Gray, brownish, light	(.COLGBL.)	Purple, grayish red	(.COLURG.)
Gray, greenish	(.COLGE.)	Reddish	(.COLR.)
Gray, light	(.COLGL.)	Red, pale	(.COLRP.)
Gray, light to medium	(.COLGLM.)	Striped (mm to cm)	(.COLS.)
Gray, light to dark	(.COLGLD.)	Variable	(.COLV.)
Gray, medium	(.COLGM.)	White	(.COLW.)
Gray, medium to dark	(.COLGMD.)	White to light gray	(.COLWGL.)
Gray, dark	(.COLGD.)	Yellow	(.COLY.)
Gray, mottled	(.COLGT.)	Yellow, pale	(.COLYP.)

SUPPLEMENTAL CODES

Asphaltic blebs	(-ASP-)
Calcrete bodies	(-CALC-)
Caliche	(-CLC-)
Pedogenic caliche	(-CLCP-)
Non-pedogenic caliche	(-CLCN-)
Caliche filaments	(-CLCNF-)
Caliche filled fractures	(-CLCNR-)
Caliche nodules	(-CLCNN-)
Caliche seams	(-CLCNS-)
Evaporite minerals	(-EVA-)
Paleosols, interbedded	(-IPS-)
Organic material, intercalated	(-IOM-)

Post-depositional structures (.SPD.)

Calcite fillings	(.SPDC.)
Blebs	(.SPDCB.)
Fractures	(.SPDCF.)
Stringers	(.SPDCS.)
Vugs	(.SPDCV.)
Dewatering structures	(.SPDW.)
Dissolution breccia	(.SPDD.)
Fenestrae	(.SPDF.)
Karst collapse structures	(.SPDK.)
Tepee structures	(.SPDT.)

FOSSILS

None observed	(.FZLN.)
Sparse	(.FZLS.)
Moderately abundant	(.FZLM.)
Abundant	(.FZLA.)
Localized	(.FZLL.)

DEPOSITIONAL STRUCTURES (.SDS.)

Bedding, amalgamated	(.SDSBA.)	Bouma ABCD	(-BSABCD-)	Lamination, cross, planar	(.SDSLXP.)	Pillow and ball	(.SDSPB.)
Bedding, channelate	(.SDSBC.)	Bouma BC	(-BSBC-)	Lamination, cross, trough	(.SDSLXT.)	Sole marks	(.SDSSM.)
Bedding, graded	(.SDSBG.)	Bouma BCD	(-BSBCD-)	Lamination, cryptalgal	(.SDSLAC.)	Unconformities, local	(.SDSU.)
Bedding, graded, inverse	(.SDSBGI.)	Bouma CD	(-BSCD-)	Lamination, flat	(.SDSLF.)	Variable	(.SDSV.)
Bedding, lenticular	(.SDSBL.)	Clast imbrication	(.SDSCI.)	Lamination, flat to cross laminated	(.SDSLFX.)		
Bedding, parallel	(.SDSBP.)	Fenestrate	(.SDSFS.)	Lamination, rippie	(.SDSLR.)		
Bedding, non-parallel	(.SDSBN.)	Flaser structures	(.SDSZ.)	Lamination, rippie, climbing	(.SDSLRC.)		
Bioturbated	(.SDSBT.)	Lamination, algal	(.SDSLA.)	Massive	(.SDSM.)		
Bouma sequences	(.SDSBS.)	Lamination, algal, laterally linked columnar heads	(.SDSLAL.)	Massive to flat laminated	(.SDSMFL.)		
Bouma A	(-BSA-)	Lamination, convolute	(.SDSLC.)	Massive to mottled	(.SDSMT.)		
Bouma B	(-BSB-)	Lamination, cross	(.SDSLX.)	Mottled	(.SDST.)		
Bouma C	(-BSC-)	Lamination, cross, hummocky	(.SDSLXH.)	Mud cracks	(.SDSMK.)		
Bouma D	(-BSD-)						
Bouma AB	(-BSAB-)						
Bouma ABC	(-BSABC-)						

GO TO:
HAND SPECIMEN-SCALE ATTRIBUTES—PAGES B-10 & B-11

HAND SPECIMEN-SCALE ATTRIBUTES, sedimentary rocks and surficial materials

CLAST—MATRIX RELATIONS (.CMX.)

Clast supported	(.CMXCS.)
Matrix <25%	(.CMX25.)
Matrix >25%<50%	(.CMX50.)
Matrix supported	(.CMXMS.)
Matrix >50%<75%	(.CMX75.)
Matrix >75%	(.CMX76.)
Clast support dominant over matrix support	(.CMXCM.)
Matrix support dominant over clast support	(.CMXMC.)
Clast support & matrix support subequal	(.CMXQ.)
Matrix character	
Clay matrix	(-MCL-)
Mud matrix	(-MMD-)
Silty matrix	(-MSL-)
Sandy matrix	(-MSD-)
Sandy granule matrix	(-MSG-)
Sandy granule-pebble matrix	(-MSGP-)
Granule-pebble matrix	(-MGP-)
Pebble matrix	(-MPB-)
Pebble-cobble matrix	(-MPBC-)

GRAIN SORTING (.GSO.)

Well sorted	(.GSOW.)
Moderately to well sorted	(.GSOMW.)
Poorly to well sorted	(.GSOPW.)
Moderately sorted	(.GSOM.)
Poorly to moderately sorted	(.GSOPM.)
Poorly sorted	(.GSOP.)
Variably sorted	(.GSOV.)

PARTICLE ATTRIBUTES

PARTICLE SIZE (as used by Wentworth, 1922)
(sedimentary rocks; for surficial materials, go to p. B-4, then return)

GRAIN SIZE (.GSZ.)

Sand	(.GSZS.)
Sand, very coarse (1mm-2mm)	(.GSZSVC.)
Sand, coarse to very coarse	(.GSZSCVC.)
Sand, medium to very coarse	(.GSZSMVC.)
Sand, fine to very coarse	(.GSZSFVC.)
Sand, very fine to very coarse	(.GSZSVFVC.)
Sand, coarse (0.5mm-1mm)	(.GSZSC.)
Sand, medium to coarse	(.GSZSMC.)
Sand, fine to coarse	(.GSZSFC.)
Sand, very fine to coarse	(.GSZSVFC.)
Sand, medium (0.25mm-0.50mm)	(.GSZSM.)
Sand, fine to medium	(.GSZSFM.)
Sand, very fine to medium	(.GSZSVFM.)
Sand, fine (0.125mm-0.25mm)	(.GSZSF.)
Sand, very fine to fine	(.GSZSVFF.)
Sand, very fine (0.0625mm-0.125mm)	(.GSZSVF.)
Silt (0.004mm-0.0625mm)	(.GSZML.)
Clay	(.GSZCL.)
Variable grain size	(.GSZSV.)
Uncertain due to grain overgrowths	(.GSZUG.)
Uncertain due to re-crystallization	(.GSZUX.)
Uncertain due to deformation	(.GSZUD.)

CLAST SIZE (.CSZ.)

Boulder	(.CSZB.)
large (1m-2m)	(.CSZBL.)
medium (512mm-1m)	(.CSZBM.)
small (256mm-512mm)	(.CSZBS.)
Cobble-boulder	(.CSZCB.)
Pebble-boulder	(.CSZPB.)
Granule-boulder	(.CSZGB.)
Cobble (64mm-256mm)	(.CSZC.)
large (128mm-256mm)	(.CSZCL.)
small (64mm-128mm)	(.CSZCS.)
Pebble-cobble	(.CSZPC.)
Pebble-large cobble	(.CSZPCL.)
Pebble-small cobble	(.CSZPCS.)
Granule-cobble	(.CSZGC.)
Pebble (4mm-64mm)	(.CSZP.)
Granule-pebble	(.CSZGP.)
Granule (2mm-4mm)	(.CSZG.)
Uncertain due to recrystallization	(.CSZUX.)
Uncertain due to deformation	(.CSZUD.)

PARTICLE COMPOSITION

GRAIN COMPOSITION (.GCO.)

Quartz dominant	(.GCOQ.)
Quartz 95-100%	(-Q95-)
Quartz >75<95%	(-Q75-)
Polycrystalline quartz	(-QPC-)
Strained quartz	(-QST-)
Quartz & feldspar subequal	(.GCOQF.)
Quartz, feldspar, & lithics subequal	(.GCOQFL.)
Feldspar dominant	(.GCOF.)
Lithics dominant	(.GCOL.)
Igneous rock fragments	(.GCOLI.)
Granitic rock fragments	(.GCOLIG.)
Volcanic rock fragments	(.GCOLIV.)
Andesite	(.GCOLIVA.)
Basalt	(.GCOLIVB.)
Siliceous	(.GCOLIVS.)
Tuffaceous	(.GCOLIVT.)
Sedimentary rock frags	(.GCOLS.)
Carbonate rock frags	(.GCOLSC.)
Chert rock frags	(.GCOLSH.)
Mudrock frags	(.GCOLSM.)
Metamorphic rock frags	(.GCOLM.)
Gneiss fragments	(.GCOLMG.)
Marble fragments	(.GCOLMM.)
Schist fragments	(.GCOLMS.)
Metaquartzite frags	(.GCOLMQ.)
Metavolcanic frags	(.GCOLMV.)
Mylonite	(.GCOLMY.)
Carbonate minerals	(.GCOC.)
Glauconite	(.GCOG.)
Micas	(.GCOA.)
Biotite	(.GCOAB.)
Muscovite	(.GCOAM.)
Intraclasts	(.GCOI.)
Ooids	(.GCOO.)
Peloids	(.GCOP.)
Phosphatic peloids	(.GCOPP.)
Skeletal fragments	(.GCOK.)
Algal fragments	(.GCOKA.)
Brachiopod fragments	(.GCOKBR.)
Bryozoan fragments	(.GCOKBZ.)
Coral fragments	(.GCOKC.)
Fusulinid fragments	(.GCOKF.)
Mollusk fragments	(.GCOKM.)
Pelmatozoan fragments	(.GCOKP.)
Trilobite fragments	(.GCOKT.)
Grain composition unspecified	(.GCOU.)
Grain composition variable	(.GCOV.)
Other	(.GCOTH.)

CLAST COMPOSITION (.CCO.)

Igneous	(.CCOI.)
Hypabyssal	(.CCOIH.)
Plutonic	(.CCOIP.)
Mafic plutonic	(.CCOIPM.)
dioritic-gabbroic	(.CCOIPMD.)
Granitic	(.CCOIPG.)
granodioritic	(.CCOIPGG.)
muscovite leucogranite	(.CCOIPGL.)
monzodioritic	(.CCOIPGZD.)
monzogranitic	(.CCOIPGM.)
monzonitic	(.CCOIPGZ.)
quartz monzonitic	(.CCOIPGZQ.)
Aplite	(.CCOIA.)
Pegmatite	(.CCOIG.)
Volcanic	(.CCOIV.)
andesite	(.CCOIVA.)
basalt	(.CCOIVB.)
dacite-latite	(.CCOIVD.)
felsic	(.CCOIVF.)
lapilli	(.CCOIVL.)
mafic	(.CCOIVM.)
porphyry	(.CCOIVP.)
rhyolite	(.CCOIVR.)
tuff fragments	(.CCOIVT.)
ash-flow tuff	(.CCOIVTF.)
tuff-breccia	(.CCOIVTB.)
Metamorphic	(.CCOM.)
Gneiss	(.CCOMG.)
Metaigneous	(.CCOMI.)
amphibolite	(.CCOMIA.)
metavolcanic	(.CCOMIV.)
agglomerate	(.CCOMIVA.)
metatuff	(.CCOMIVT.)
Metasedimentary	(.CCOMS.)
marble	(.CCOMSM.)
marble, dolomite	(.CCOMSMD.)
marble, limestone	(.CCOMSML.)
metaquartzite	(.CCOMSQ.)
Schist	(.CCOMC.)
Sedimentary	(.CCOS.)
Carbonate rock	(.CCOSC.)
dolomite	(.CCOSCD.)
limestone	(.CCOSCL.)
Chert	(.CCOSH.)
Conglomerate	(.CCOSG.)
Mudrock	(.CCOSM.)
Quartzite	(.CCOSQ.)
Sandstone	(.CCOSS.)
Shale	(.CCOSL.)
Strain dominated	(.CCOD.)
Mylonite	(.CCODM.)
Cataclasite	(.CCODC.)
Clast affinities	(.CCOA.)
Mojave Desert type	(.CCOAM.)
Transverse Ranges type	(.CCOAT.)
San Bernardino Mtn type	(.CCOATB.)
Bighorn/Arrastre type	(.CCOATBB.)
Chocolate Mtn type type	(.CCOATC.)
San Gabriel Mtn type	(.CCOATG.)
Pelona-type schist	(.CCOATGP.)
Lowe-type plutonic	(.CCOATGL.)
Little San Bernardino Mts type	(.CCOATL.)
Cataiina-type schist	(.CCOAC.)
Peninsular Ranges type	(.CCOAP.)

PARTICLE SHAPE

GRAIN SHAPE (.GSH.)

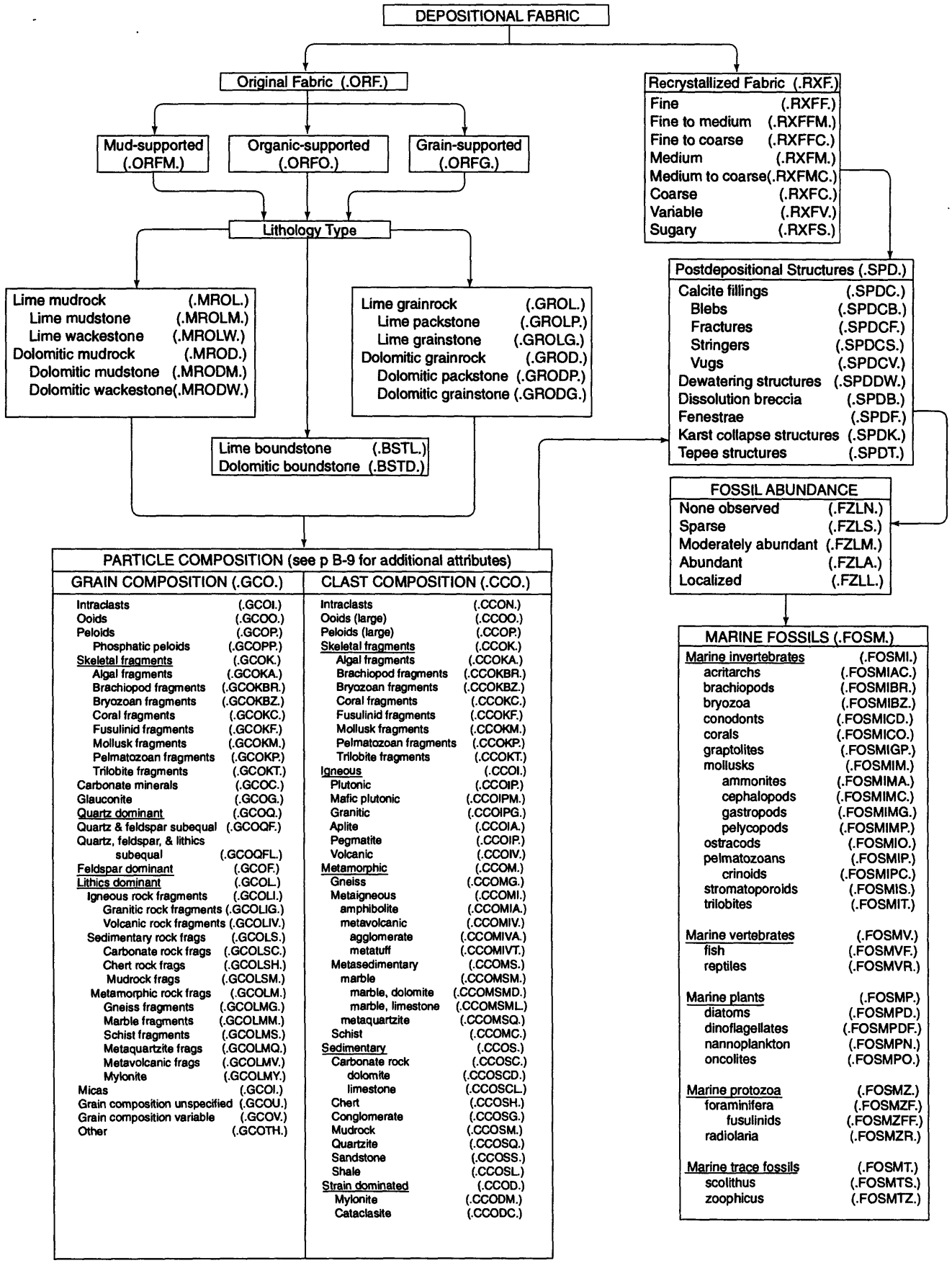
Angular	(.GSHA.)
Subangular	(.GSHG.)
Subrounded	(.GSHD.)
Rounded	(.GSHR.)
Angular to subangular	(.GSHAG.)
Angular to subrounded	(.GSHAD.)
Angular to rounded	(.GSHAR.)
Subangular to subrounded	(.GSHGD.)
Subangular to rounded	(.GSHGR.)
Subrounded to rounded	(.GSHDR.)
Shape variable	(.GSHV.)
Uncertain due to grain overgrowths	(.GSHUG.)
Uncertain due to recrystallization	(.GSHUX.)
Uncertain due to deformation	(.GSHUD.)

CLAST SHAPE (.CSH.)

Angular	(.CSHA.)
Subangular	(.CSHG.)
Subrounded	(.CSHD.)
Rounded	(.CSHR.)
Angular to subangular	(.CSHAG.)
Angular to subrounded	(.CSHAD.)
Angular to rounded	(.CSHAR.)
Subangular to subrounded	(.CSHGD.)
Subangular to rounded	(.CSHGR.)
Subrounded to rounded	(.CSHDR.)
Shape variable	(.CSHV.)
Uncertain due to recrystallization	(.CSHUX.)
Uncertain due to deformation	(.CSHUD.)

Clasts of a specific map unit	(.CCOU.)
Pelona-type Schist	(.CCOUP.)
greenstone unit	(.CCOUPE.)
grayschist unit	(.CCOUPS.)
Triassic megaporphyry	(.CCOUT.)
Keller Peak granodiorite	(.CCOUK.)
Wildhorse Quartzite	(.CCOUW.)
Mill Creek Formation	(.CCOUM.)
Clasts recycled from older unit	(.CCOR.)
Source formation known	(.CCORK.)
Crowder Fm	(.CCORKC.)
San Timoteo Fm	(.CCORKS.)
Source formation unknown	(.CCORUK.)

CARBONATE ROCKS: Hand specimen-scale attributes



SEDIMENTARY ROCKS AND SURFICIAL MATERIALS: ADDITIONAL ATTRIBUTES

FOSSIL TYPES

MARINE FOSSILS (.FOSM.)		NONMARINE FOSSILS (.FOSN.)	
Marine invertebrates	(.FOSMI.)	Nonmarine invertebrates	(.FOSNI.)
acritarchs	(.FOSMIAC.)	mollusks	(.FOSNIM.)
brachiopods	(.FOSMIBR.)	gastropods	(.FOSNIMG.)
bryozoa	(.FOSMIBZ.)	pelecypods	(.FOSNIMP.)
conodonts	(.FOSMICD.)	ostracods	(.FOSNIO.)
corals	(.FOSMICO.)		
graptolites	(.FOSMIGP.)	Nonmarine vertebrates	(.FOSNV.)
mollusks	(.FOSMIM.)	fish	(.FOSNVF.)
ammonites	(.FOSMIMA.)	scales	
cephalopods	(.FOSMIMC.)	otoliths	
gastropods	(.FOSMIMG.)		
pelycopods	(.FOSMIMP.)	mammals	(.FOSNVM.)
ostracods	(.FOSMIO.)	large mammals	(.FOSNVML.)
pelmatozoans	(.FOSMIP.)	camel	(.FOSNVMLCM.)
crinoids	(.FOSMIPC.)	cat	(.FOSNVMLCA.)
stromatoporoids	(.FOSMIS.)	dog	(.FOSNVMLD.)
trilobites	(.FOSMIT.)	elephant	(.FOSNVMLE.)
		horse	(.FOSNVMLH.)
Marine vertebrates	(.FOSMV.)	rhinoceras	(.FOSNVMLR.)
fish	(.FOSMVF.)		
reptiles	(.FOSMVR.)	small mammals	(.FOSNVMS.)
		beaver	(.FOSNVMSB.)
Marine plants	(.FOSMP.)	rodent	(.FOSNVMSR.)
diatoms	(.FOSMPD.)	shrew	(.FOSNVMSS.)
dinoflagellates	(.FOSMPDF.)		
nannoplankton	(.FOSMPN.)	reptiles	(.FOSNVR.)
oncolites	(.FOSMPO.)	crocodile	(.FOSNVRC.)
		turtles	(.FOSNVRT.)
Marine protozoa	(.FOSMZ.)		
foraminifera	(.FOSMZF.)	Nonmarine plants	(.FOSNP.)
fusulinids	(.FOSMZFF.)	algae	(.FOSNPA.)
radiolaria	(.FOSMZR.)	plants, coniferous	(.FOSNPC.)
		plants, deciduous	(.FOSNPD.)
Marine trace fossils	(.FOSMT.)	plants, flowering	(.FOSNPF.)
scolithus	(.FOSMTS.)	wood	(.FOSNPW.)
zoophicus	(.FOSMTZ.)		
		Trace fossils	(.FOSNT.)
		tracks	(.FOSNTT.)

Fossil abundance indicators

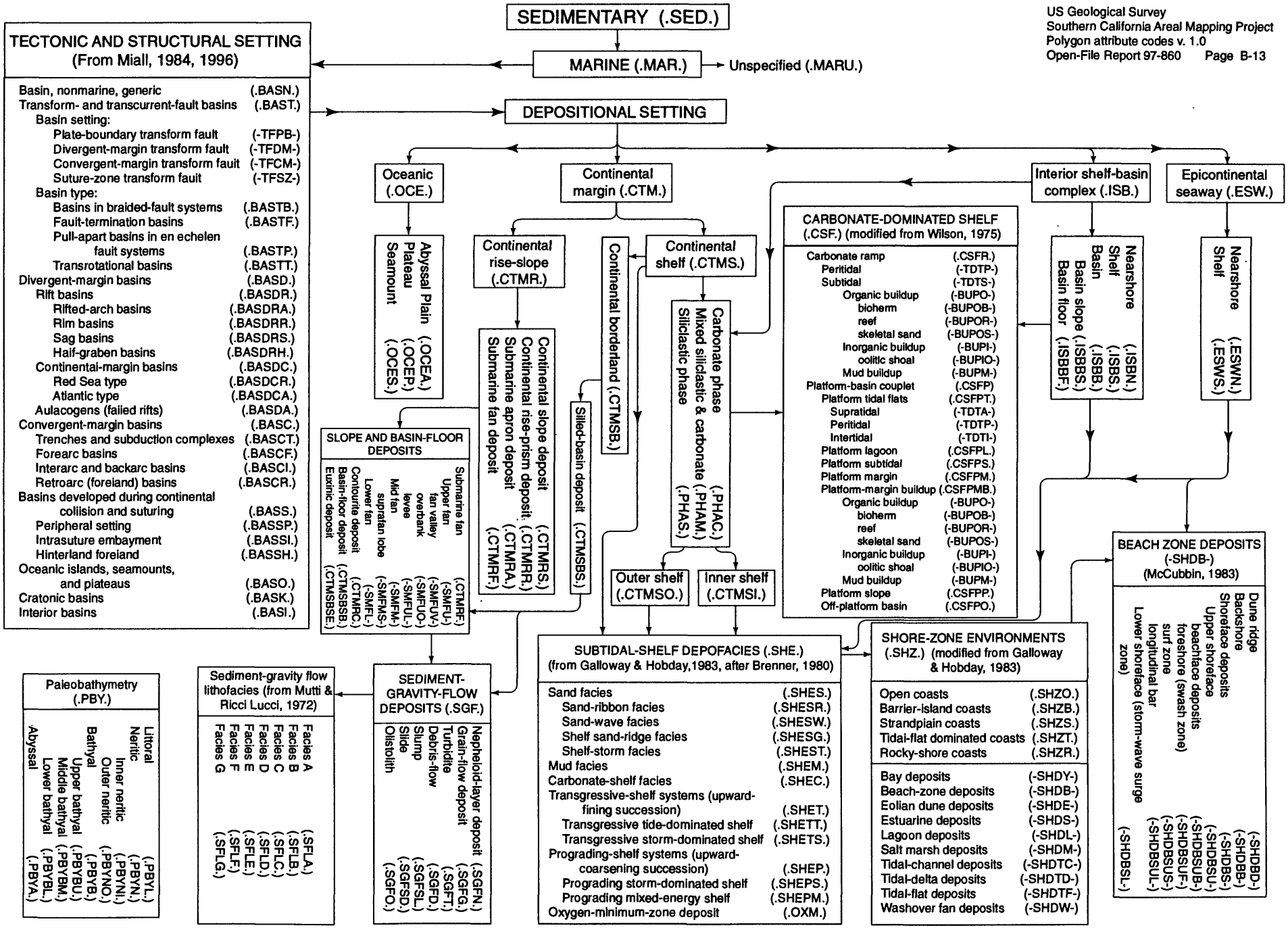
None observed	(.FZLN.)
Sparse	(.FZLS.)
Moderately abundant	(.FZLM.)
Abundant	(.FZLA.)
Localized	(.FZLL.)

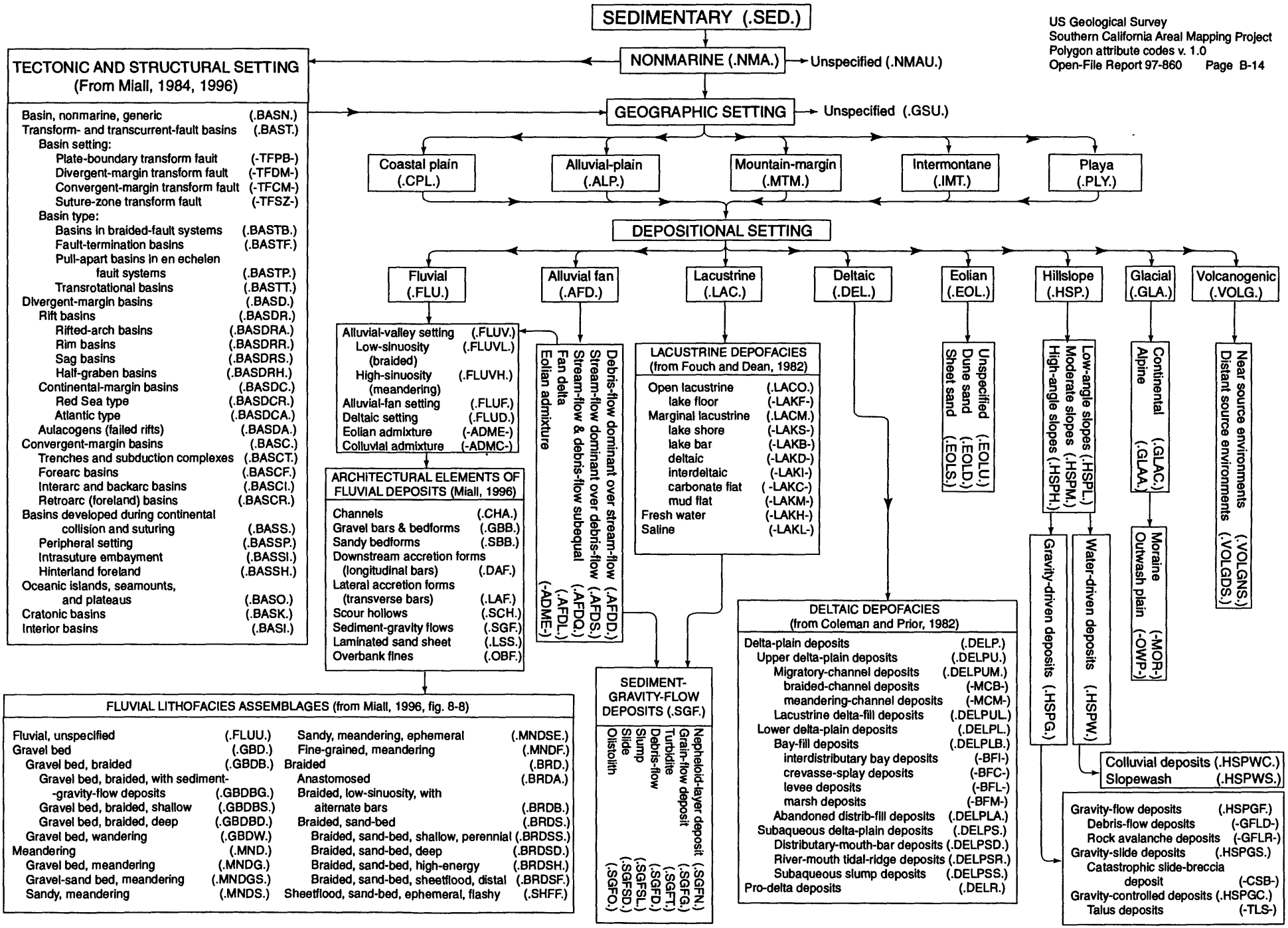
PALEOCURRENT INDICATORS (.PCI.)

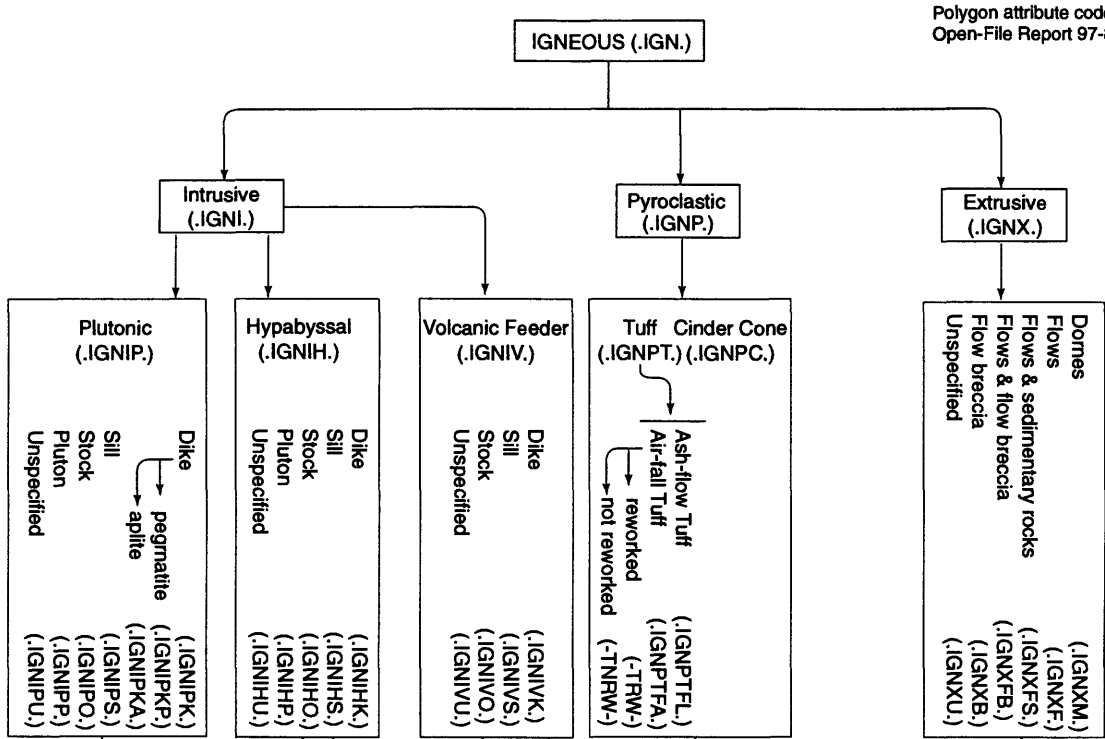
Azimuth and direction	(.PCID.)
Out of the north hemisphere	(.PCIDN.)
Out of the northwest quadrant	(.PCIDNW.)
Out of the northeast quadrant	(.PCIDNE.)
Out of the south hemisphere	(.PCIDS.)
Out of the southwest quadrant	(.PCIDSW.)
Out of the southeast quadrant	(.PCIDSE.)
Out of the east hemisphere	(.PCIDE.)
Out of the west hemisphere	(.PCIDW.)
Indicator:	
clast imbrications	(.IDKIM.)
cross lamination	(.IDKXL.)
Azimuth only	(.PCIA.)
Azimuthal direction N-S	(.PCIAN.)
Azimuthal direction E-W	(.PCIAE.)
Azimuthal direction NW-SE	(.PCIANW.)
Azimuthal direction NE-SW	(.PCIANE.)
Indicator:	
channel geometry	(.IDKC.)

ISOTOPIC AGE (.ISO.)

Age determined from sedimentary unit	(.ISOS.)	ash-flow tuff	(.ISOVF.)
glauconite	(.ISOSG.)	K-Ar age determination	(.ISOVFK.)
cathodoluminescence	(.ISOSL.)	Ar-Ar age determination	(.ISOVFA.)
paleomagnetism	(.ISOSP.)	air-fall tuff	(.ISOVA.)
fission track	(.ISOSF.)	Tephrochronology	(.ISOVAT.)
C14	(.ISOSC.)	K-Ar age determination	(.ISOVAK.)
Sr age from fossil shells	(.ISOSS.)	Ar-Ar age determination	(.ISOVAA.)
Amino-acid racimitization	(.ISOSR.)	Age from clasts in sedimentary unit	(.ISOC.)
uranium-thorium	(.ISOSU.)	U-Pb age determination	(.ISOCU.)
determination from bone	(.ISOSUB.)	K-Ar age determination	(.ISOCK.)
determination from petrocalcite	(.ISOSUP.)	Ar-Ar age determination	(.ISOCA.)
Age from interbedded volcanic deposit	(.ISOV.)		
basalt flow	(.ISOVB.)	Interpretation of isotopic age uncertain	(.ISOIU.)
K-Ar age determination	(.ISOVBK.)	Age from inside map area	(.ISOAI.)
Ar-Ar age determination	(.ISOVBA.)	Age from outside map area	(.ISOAO.)
		Age determined by other workers	(.ISOW.)


SEDIMENTARY (.SED.)
MARINE (.MAR.)
Unspecified (.MARU.)
TECTONIC AND STRUCTURAL SETTING (From Miall, 1984, 1996)
Basin, nonmarine, generic (.BASN.)
Transform- and transcurrent-fault basins (.BAST.)
Basin setting:
Plate-boundary transform fault (-TFPB-)
Divergent-margin transform fault (-TFDM-)
Convergent-margin transform fault (-TFCM-)
Suture-zone transform fault (-TFSZ-)
Basin type:
Basins in braided-fault systems (.BASTB.)
Fault-termination basins (.BASTF.)
Pull-apart basins in en echelen fault systems (.BASTP.)
Transrotational basins (.BASTT.)
Divergent-margin basins (.BASD.)
Rift basins (.BASDR.)
Rifted-arch basins (.BASDRA.)
Rim basins (.BASDRR.)
Sag basins (.BASDRS.)
Half-graben basins (.BASDRH.)
Continental-margin basins (.BASDC.)
Red Sea type (.BASDCR.)
Atlantic type (.BASDCA.)
Aulacogens (failed rifts) (.BASDA.)
Convergent-margin basins (.BASC.)
Trenches and subduction complexes (.BASCT.)
Forearc basins (.BASCF.)
Interarc and backarc basins (.BASCI.)
Retroarc (foreland) basins (.BASCR.)
Basins developed during continental collision and suturing (.BASS.)
Peripheral setting (.BASSP.)
Intrasuture embayment (.BASSI.)
Hinterland foreland (.BASSH.)
Oceanic islands, seamounts, and plateaus (.BASO.)
Cratonic basins (.BASK.)
Interior basins (.BASI.)
DEPOSITIONAL SETTING
Oceanic (.OCE.)
Abyssal Plain (.OCEA.)
Plateau (.OCEP.)
Seamount (.OCES.)
Continental margin (.CTM.)
Continental rise-slope (.CTMR.)
Continental slope deposit (.CTMRS.)
Continental rise-prism deposit (.CTMRR.)
Submarine apron deposit (.CTMRA.)
Submarine fan deposit (.CTMRF.)
Continental borderland (.CTMSB.)
Continental shelf (.CTMS.)
Carbonate phase (.PHAC.)
Mixed siliclastic & carbonate (.PHAM.)
Siliclastic phase (.PHAS.)
Sililed-basin deposit (.CTMSBS.)
Outer shelf (.CTMSO.)
Inner shelf (.CTMSI.)
Interior shelf-basin complex (.ISB.)
Nearshore (.ISBN.)
Shelf (.ISBS.)
Basin (.ISBB.)
Basin slope (.ISBBS.)
Basin floor (.ISBBF.)
Epicontinental seaway (.ESW.)
Nearshore (.ESWN.)
Shelf (.ESWS.)
CARBONATE-DOMINATED SHELF (.CSF.) (modified from Wilson, 1975)
Carbonate ramp (.CSFR.)
Peritidal (-TDTP-)
Subtidal (-TDTS-)
Organic buildup (-BUPO-)
bioherm (-BUPOB-)
reef (-BUPOR-)
skeletal sand (-BUPOS-)
Inorganic buildup (-BUPI-)
oolitic shoal (-BUPIO-)
Mud buildup (-BUPM-)
Platform-basin couplet (.CSFP)
Platform tidal flats (.CSFPT.)
Supratidal (-TDTA-)
Peritidal (-TDTP-)
Intertidal (-TDTI-)
Platform lagoon (.CSFPL.)
Platform subtidal (.CSFPS.)
Platform margin (.CSFPM.)
Platform-margin buildup (.CSFPMB.)
Organic buildup (-BUPO-)
bioherm (-BUPOB-)
reef (-BUPOR-)
skeletal sand (-BUPOS-)
Inorganic buildup (-BUPI-)
oolitic shoal (-BUPIO-)
Mud buildup (-BUPM-)
Platform slope (.CSFPP.)
Off-platform basin (.CSFPO.)
SLOPE AND BASIN-FLOOR DEPOSITS
Submarine fan (.CTMRF.)
Upper fan (-SMFU-)
fan valley (-SMFUV-)
overbank (-SMFUO-)
levee (-SMFUL-)
Mid fan (-SMFM-)
suprafan lobe (-SMFMS-)
Lower fan (-SMFL-)
Contourite deposit (.CTMRC.)
Basin-floor deposit (.CTMSBSB.)
Euxinic deposit (.CTMSBSE.)
BEACH ZONE DEPOSITS (-SHDB-) (McCubbin, 1983)
Dune ridge (-SHDBD-)
Backshore (-SHDBB-)
Shoreface deposits (-SHDBS-)
Upper shoreface (-SHDBSU-)
beachface deposits (-SHDBSUB-)
foreshore (swash zone) (-SHDBSUF-)
surf zone (-SHDBSUS-)
longitudinal bar (-SHDBSUL-)
Lower shoreface (storm-wave surge zone) (-SHDBSL-)
SUBTIDAL-SHELF DEPOFACIES (.SHE.) (from Galloway & Hobday,1983, after Brenner, 1980)
Sand facies (.SHES.)
Sand-ribbon facies (.SHESR.)
Sand-wave facies (.SHESW.)
Shelf sand-ridge facies (.SHESG.)
Shelf-storm facies (.SHEST.)
Mud facies (.SHEM.)
Carbonate-shelf facies (.SHEC.)
Transgressive-shelf systems (upward-fining succession) (.SHET.)
Transgressive tide-dominated shelf (.SHETT.)
Transgressive storm-dominated shelf (.SHETS.)
Prograding-shelf systems (upward-coarsening succession) (.SHEP.)
Prograding storm-dominated shelf (.SHEPS.)
Prograding mixed-energy shelf (.SHEPM.)
Oxygen-minimum-zone deposit (.OXM.)
SHORE-ZONE ENVIRONMENTS (.SHZ.) (modified from Galloway & Hobday, 1983)
Open coasts (.SHZO.)
Barrier-island coasts (.SHZB.)
Strandplain coasts (.SHZS.)
Tidal-flat dominated coasts (.SHZT.)
Rocky-shore coasts (.SHZR.)
Bay deposits (-SHDY-)
Beach-zone deposits (-SHDB-)
Eolian dune deposits (-SHDE-)
Estuarine deposits (-SHDS-)
Lagoon deposits (-SHDL-)
Salt marsh deposits (-SHDM-)
Tidal-channel deposits (-SHDTC-)
Tidal-delta deposits (-SHDTD-)
Tidal-flat deposits (-SHDTF-)
Washover fan deposits (-SHDW-)
SEDIMENT-GRAVITY-FLOW DEPOSITS (.SGF.)
Nepheloid-layer deposit (.SGFN.)
Grain-flow deposit (.SGFG.)
Turbidite (.SGFT.)
Debris-flow (.SGFD.)
Slump (.SGFSL.)
Slide (.SGFSD.)
Olistolith (.SGFO.)
Sediment-gravity flow lithofacies (from Mutti & Ricci Lucci, 1972)
Facies A (.SFLA.)
Facies B (.SFLB.)
Facies C (.SFLC.)
Facies D (.SFLD.)
Facies E (.SFLE.)
Facies F (.SFLF.)
Facies G (.SFLG.)
Paleobathymetry (.PBY.)
Littoral (.PBYL.)
Neritic (.PBYN.)
Inner neritic (.PBYNI.)
Outer neritic (.PBYNO.)
Bathyal (.PBYB.)
Upper bathyal (.PBYBU.)
Middle bathyal (.PBYBM.)
Lower bathyal (.PBYBL.)
Abyssal (.PBYA.)


SEDIMENTARY (.SED.)
NONMARINE (.NMA.)
Unspecified (.NMAU.)
GEOGRAPHIC SETTING
Unspecified (.GSU.)
Coastal plain (.CPL.)
Alluvial-plain (.ALP.)
Mountain-margin (.MTM.)
Intermontane (.IMT.)
Playa (.PLY.)
DEPOSITIONAL SETTING
Fluvial (.FLU.)
Alluvial fan (.AFD.)
Lacustrine (.LAC.)
Deltaic (.DEL.)
Eolian (.EOL.)
Hillslope (.HSP.)
Glacial (.GLA.)
Volcanogenic (.VOLG.)
TECTONIC AND STRUCTURAL SETTING (From Miall, 1984, 1996)
Basin, nonmarine, generic (.BASN.)
Transform- and transcurrent-fault basins (.BAST.)
Basin setting:
Plate-boundary transform fault (-TFPB-)
Divergent-margin transform fault (-TFDM-)
Convergent-margin transform fault (-TFCM-)
Suture-zone transform fault (-TFSZ-)
Basin type:
Basins in braided-fault systems (.BASTB.)
Fault-termination basins (.BASTF.)
Pull-apart basins in en echelen fault systems (.BASTP.)
Transrotational basins (.BASTT.)
Divergent-margin basins (.BASD.)
Rift basins (.BASDR.)
Rifted-arch basins (.BASDRA.)
Rim basins (.BASDRR.)
Sag basins (.BASDRS.)
Half-graben basins (.BASDRH.)
Continental-margin basins (.BASDC.)
Red Sea type (.BASDCR.)
Atlantic type (.BASDCA.)
Aulacogens (failed rifts) (.BASDA.)
Convergent-margin basins (.BASC.)
Trenches and subduction complexes (.BASCT.)
Forearc basins (.BASCF.)
Interarc and backarc basins (.BASCI.)
Retroarc (foreland) basins (.BASCR.)
Basins developed during continental collision and suturing (.BASS.)
Peripheral setting (.BASSP.)
Intrasuture embayment (.BASSI.)
Hinterland foreland (.BASSH.)
Oceanic islands, seamounts, and plateaus (.BASO.)
Cratonic basins (.BASK.)
Interior basins (.BASI.)
Alluvial-valley setting (.FLUV.)
Low-sinuosity (braided) (.FLUVL.)
High-sinuosity (meandering) (.FLUVH.)
Alluvial-fan setting (.FLUF.)
Deltaic setting (.FLUD.)
Eolian admixture (-ADME-)
Colluvial admixture (-ADMC-)
Eolian admixture (-ADME-)
Fan delta (.AFDL.)
Stream-flow & debris-flow subequal (.AFDQ.)
Stream-flow dominant over debris-flow (.AFDS.)
Debris-flow dominant over stream-flow (.AFDD.)
LACUSTRINE DEPOFACIES (from Fouch and Dean, 1982)
Open lacustrine (.LACO.)
lake floor (-LAKF-)
Marginal lacustrine (.LACM.)
lake shore (-LAKS-)
lake bar (-LAKB-)
deltaic (-LAKD-)
interdeltaic (-LAKI-)
carbonate flat (-LAKC-)
mud flat (-LAKM-)
Fresh water (-LAKH-)
Saline (-LAKL-)
Unspecified (.EOLU.)
Dune sand (.EOLD.)
Sheet sand (.EOLS.)
Low-angle slopes (.HSPL.)
Moderate slopes (.HSPM.)
High-angle slopes (.HSPH.)
Continental (.GLAC.)
Alpine (.GLAA.)
Moraine (-MOR-)
Outwash plain (-OWP-)
Near source environments (.VOLGNS.)
Distant source environments (.VOLGDS.)
ARCHITECTURAL ELEMENTS OF FLUVIAL DEPOSITS (Miall, 1996)
Channels (.CHA.)
Gravel bars & bedforms (.GBB.)
Sandy bedforms (.SBB.)
Downstream accretion forms (longitudinal bars) (.DAF.)
Lateral accretion forms (transverse bars) (.LAF.)
Scour hollows (.SCH.)
Sediment-gravity flows (.SGF.)
Laminated sand sheet (.LSS.)
Overbank fines (.OBF.)
SEDIMENT-GRAVITY-FLOW DEPOSITS (.SGF.)
Olistolith (.SGFO.)
Slide (.SGFSD.)
Slump (.SGFSL.)
Debris-flow (.SGFD.)
Turbidite (.SGFT.)
Grain-flow deposit (.SGFG.)
Nephelold-layer deposit (.SGFN.)
DELTAIC DEPOFACIES (from Coleman and Prior, 1982)
Delta-plain deposits (.DELP.)
Upper delta-plain deposits (.DELPU.)
Migratory-channel deposits (.DELPUM.)
braided-channel deposits (-MCB-)
meandering-channel deposits (-MCM-)
Lacustrine delta-fill deposits (.DELPUL.)
Lower delta-plain deposits (.DELPL.)
Bay-fill deposits (.DELPLB.)
interdistributary bay deposits (-BFI-)
crevasse-splay deposits (-BFC-)
levee deposits (-BFL-)
marsh deposits (-BFM-)
Abandoned distrib-fill deposits (.DELPLA.)
Subaqueous delta-plain deposits (.DELPS.)
Distributary-mouth-bar deposits (.DELPSD.)
River-mouth tidal-ridge deposits (.DELPSR.)
Subaqueous slump deposits (.DELPSS.)
Pro-delta deposits (.DELR.)
Gravity-driven deposits (.HSPG.)
Water-driven deposits (.HSPW.)
Colluvial deposits (.HSPWC.)
Slopewash (.HSPWS.)
Gravity-flow deposits (.HSPGF.)
Debris-flow deposits (-GFLD-)
Rock avalanche deposits (-GFLR-)
Gravity-slide deposits (.HSPGS.)
Catastrophic slide-breccia deposit (-CSB-)
Gravity-controlled deposits (.HSPGC.)
Talus deposits (-TLS-)
FLUVIAL LITHOFACIES ASSEMBLAGES (from Miall, 1996, fig. 8-8)
Fluvial, unspecified (.FLUU.)
Gravel bed (.GBD.)
Gravel bed, braided (.GBDB.)
Gravel bed, braided, with sediment-gravity-flow deposits (.GBDBG.)
Gravel bed, braided, shallow (.GBDBS.)
Gravel bed, braided, deep (.GBDBD.)
Gravel bed, wandering (.GBDW.)
Meandering (.MND.)
Gravel bed, meandering (.MNDG.)
Gravel-sand bed, meandering (.MNDGS.)
Sandy, meandering (.MNDS.)
Sandy, meandering, ephemeral (.MNDSE.)
Fine-grained, meandering (.MNDF.)
Braided (.BRD.)
Anastomosed (.BRDA.)
Braided, low-sinuosity, with alternate bars (.BRDB.)
Braided, sand-bed (.BRDS.)
Braided, sand-bed, shallow, perennial (.BRDSS.)
Braided, sand-bed, deep (.BRDSD.)
Braided, sand-bed, high-energy (.BRDSH.)
Braided, sand-bed, sheetflood, distal (.BRDSF.)
Sheetflood, sand-bed, ephemeral, flashy (.SHFF.)



Granitic rock	(.GRN.)
Granitic rock unspecified	(.GRNU.)
Granitic rock heterogeneous	(GRNH.)
Granitic rock variable	(.GRNV.)

Quartz-rich [>20%]	(.GRNQR.)
Granodiorite	(.GDR.)
Monzogranite	(.MGR.)
Syenogranite	(.SGR.)
Tonalite	(.TON.)
Trondhjemite	(.TRJ.)
Quartz-deficient [5-20%]	(.GRNQD.)
Diorite, quartz	(.DIOQ.)
Monzonite, quartz	(.MZNQ.)
Monzodiorite, quartz	(.MZDQ.)
Syenite, quartz	(.SYNQ.)
Quartz-poor [<5%]	(.GRNQP.)
Diorite	(.DIO.)
unspecified	(.DIOU.)
heterogeneous	(.DIOH.)
variable	(.DIOV.)
Monzonite	(.MZN.)
Gabbro	(.GAB.)
Gabbro, quartz	(.GABQ.)
Monzodiorite	(.MZD.)
Syenite	(.SYN.)

Specialized plutonic and hypabyssal rocks

Anorthosite	(.ANA.)
Chamokite	(.CHK.)
Jotunite [pyroxene diorite/gabbro]	(.JOT.)
Lamprophyres	(.LPH.)
Mangerite [pyroxene monzonite]	(.MAN.)
Norite	(.NOR.)
Ultramafic rocks	(.UMR.)
Dunite	(.UMRN.)
Peridotite	(.UMRP.)
Pyroxenite	(.UMRY.)

Volcanic rock, variable	(.VOLV.)
Volcanic rock, unspecified	(.VOLU.)
Volcanic rock, heterogeneous	(.VOLV.)

Quartz-rich [>20%]	(.VOLQR.)
Alkalic rhyolite	(.RHYA.)
Rhyolite	(.RHY.)
Rhyodacite	(.DACR.)
Dacite	(.DAC.)
Unspecified	(.VOLQRU.)
Variable	(.VOLQRV.)
Quartz-poor [<20%]	(.VOLQP.)
Andesite	(.AND.)
Andesite, quartz	(.ANDQ.)
Basalt	(.BSL.)
Latite	(.LAT.)
Latite, quartz	(.LATQ.)
Trachyte	(.TRC.)
Trachyte, alkalic	(.TRCA.)
Trachyte, alkalic quartz	(.TRCQA.)
Trachyte, quartz	(.TRCQ.)
Unspecified	(.VOLQPU.)
Variable	(.VOLQPV.)

IGNEOUS (.IGN.)

ROCK NAME (from p. B-16)

OUTCROP GEOMORPHOLOGY (.OGM.)

Blocky	(.OGMB.)	Massive, rounded	(.OGMMR.)
Cliff forming	(.OGMC.)	Recessive	(.OGMR.)
Fissil	(.OGMF.)	Rounded	(.OGMD.)
Interbedded ledgeforming & slopeforming	(.OGMI.)	Slope forming	(.OGMS.)
		Weathered slightly	(.OGMWSL.)
Ledgeforming	(.OGML.)	Weathered substantially	(.OGMWSU.)
Massive, blocky	(.OGMMB.)	Weathered strongly	(.OGMWST.)

STRUCTURES AND FABRICS RESULTING FROM IGNEOUS EMPLACEMENT (.SFE.)

Cumulate layering	(.SFEC.)	Fabric, foliated, moderately	(.SFEFFM.)	Inclusion-rich	(.SFEIR.)	Lineated, well	(.SFELW.)
Fabric, massive	(.SFEFM.)	Fabric, foliated, mod to well	(.SFEFFMW.)	Inclusions, local	(.SFEIL.)	Magmatic migmatite	(.SFEM.)
Fabric, massive to foliated	(.SFEFMF.)	Fabric, foliated, well	(.SFEFFW.)	Intermingled igneous rock and country rock	(.SFER.)	Schlieren	(.SFES.)
Fabric, massive to foliated slightly	(.SFEFMFS.)	Fabric, heterogeneous	(.SFEFE.)			Variable	(.SFEV.)
Fabric, foliated	(.SFEFF.)	Fabric, homogeneous	(.SFEFO.)	Lineated	(.SFEL.)		
Fabric, foliated, slightly	(.SFEFFS.)	Flow banding	(.SFEB.)	Lineated, slightly	(.SFELS.)		
Fabric, foliated, slightly to mod	(.SFEFFSM.)	Gneissose compositional layering	(.SFEBG.)	Lineated, moderately	(.SFELM.)		

GRAIN TEXTURE (.TIG.)

Amygdaloidal	(.TIGA.)	Variable	(.TIGV.)
Equigranular	(.TIGE.)		
Granitic	(.TIGG.)		
Porphyritic	(.TIGP.)		
Porphyritic locally	(.TIGPL.)		
Seriate	(.TIGS.)		

GRAIN SHAPE

Groundmass (.GMS.)		Phenocrysts (.PHS.)	
Euhedral	(.GMSU.)	Euhedral	(.PHSU.)
Subhedral	(.GMSS.)	Subhedral	(.PHSS.)
Anhedral	(.GMSA.)	Anhedral	(.PHSA.)
Variable	(.GMSV.)	Variable	(.PHSV.)
		Diffuse	(.PHSF.)

COLOR INDEX

Average color index	(.CIN[nn].)
{nn = % dark minerals[2 numbers] ie, (.CIN07) for CI = 7}	
Color index variable	(.CINV.)

GRAIN SIZE

Groundmass (.GMI.)		Phenocrysts (.PHZ.)		
Aphanitic	(.GMIA.)	Fine	(1mm to <2mm)	(.PHZF.)
Fine	(< 1.0m) (.GMIF.)	Medium	(5mm to <3cm)	(.PHZM.)
Medium	(1mm to 5mm) (.GMIM.)	Coarse	(3cm to <6cm)	(.PHZC.)
Coarse	(5mm to 3cm) (.GMIC.)	Very coarse	(>6cm)	(.PHZVC.)
Very coarse	(>3cm) (.GMIVC.)	Fine to medium	(1mm to <3cm)	(.PHZFM.)
Aphanitic to fine	(.GMIAF.)	Medium to coarse	(5mm to <6cm)	(.PHZMC.)
Fine to Medium	(.GMIFM.)	Variable		(.PHZV.)
Fine to coarse	(.GMIFC.)			
Medium to coarse	(.GMIMC.)			
Coarse to very coarse	(.GMICVC.)			
Variable	(.GMIV.)			

Provincial affinity and included rocks

Provincial affinity	(.PAF.)
Chocolate Mts affinity	(.PAFC.)
Mojave Desert affinity	(.PAFM.)
San Bernardino Mts type	(.PAFMB.)
Little San Bernardino Mts type	(.PAFML.)
Peninsular Ranges affinity	(.PAFP.)
Santa Rosa Mts type	(.PAFPR.)
San Gabriel Mts affinity	(.PAFG.)
Xenoliths	(.XEN.)
Local country rock	(.XENL.)
Olivine	(.XENO.)
Ultramafic	(.XENU.)
Inclusions, mafic	(.INCM.)
Unmapped rocks contained in mapped unit	(.URC.)
Older included rocks	(.URCO.)
Undifferentiated country rock	(.URCOC.)
Igneous	(.URCOI.)
Granitic rock	(.URCOIG.)
Lowe pluton	(.URCOIGL.)
monzogranite	(.URCOIGM.)
granodiorite	(.URCOIGG.)
Dioritic rock	(.URCOID.)
Metamorphic	(.URCOM.)
Metasedimentary	(.URCOMS.)
marble	(.URCOMSM.)
metaquartzite	(.URCOMSQ.)
schist	(.URCOMSS.)
Metaigneous	(.URCOMI.)
amphibolite	(.URCOMIA.)
Strain-dominated rock	(.URCOD.)
cataclastic rock	(.URCODC.)
mylonitic rock	(.URCODM.)
sheared rock	(.URCODS.)
Younger included rocks	(.URCY.)
Igneous rock	(.URCYI.)
Aplite dikes	(.URCYIA.)
Basalt dikes	(.URCYIB.)
Dioritic rock	(.URCYID.)
Granitic rock	(.URCYIG.)
monzogrenite	(.URCYIGM.)
granodiorite	(.URCYIGG.)
Sedimentary rock	(.URCYS.)
Strain-dominated rock	(.URCYD.)
cataclastic rock	(.URCYDC.)
mylonitic rock	(.URCYDM.)
sheared rock	(.URCYDS.)

Characterizing minerals (.MCH.)

Biotite	(.MCHB.)
Biotite-hornblende	(.MCHBH.)
Biotite-muscovite	(.MCHBM.)
Garnet	(.MCHG.)
Hornblende	(.MCHH.)
Hornblende-biotite	(.MCHHB.)
Hornblende-pyroxene	(.MCHHP.)
Muscovite	(.MCHM.)
Muscovite-biotite	(.MCHMB.)
Muscovite-garnet	(.MCHMG.)
Pyroxene	(.MCHP.)
Pyroxene-hornblende	(.MCHPH.)

Accessory minerals (.MAC.)

Allanite	(.MACAL.)
Apatite	(.MACAP.)
Clinozoisite	(.MACCL.)
Epidote	(.MACE.)
Fluorite	(.MACF.)
Ilmenite	(.MACI.)
Magnetite	(.MACMG.)
Monazite	(.MACMO.)
Opaque minerals	(.MAO.)
Sphene	(.MACS.)
Zircon	(.MACZ.)

Phenocrysts (.PHM.)

Amphibole	(.PHMAM.)
Augite	(.PHMAU.)
Biotite	(.PHMB.)
Hornblende	(.PHMH.)
Muscovite	(.PHMM.)
Olivine	(.PHMO.)
Orthopyroxene	(.PHMPO.)
Plagioclase	(.PHMPL.)
Potassium feldspar	(.PHMKS.)
Pyroxene	(.PHMPY.)
Quartz	(.PHMQ.)
Quartz, beta habit	(.PHMQB.)
Rimmed	(.PHMR.)
Reaction rims	(.PHMRR.)
Zoned	(.PHMZ.)

ISOTOPIC AGE (.ISO.)

Isotopic age is emplacement age	(.ISOE.)	U-Pb other	(.ISOUPO.)	K-Ar is 40-39	(.KSOFT.)
Isotopic age not emplacement age	(.ISON.)	Rb-Sr is isochron age	(.ISORSI.)	K-Ar Biotite	(.ISOKAB.)
Interpretation of isotopic age uncertain	(.ISOIU.)	Rb-Sr is not isochron age	(.ISORSN.)	K-Ar Muscovite	(.ISOKAM.)
		Rb-Sr K-spar	(.ISORSK.)	K-Ar Hornblende	(.ISOKAH.)
Age from inside map area	(.ISOAI.)	Rb-Sr Plagioclase	(.ISORSP.)	K-Ar Sanidine	(.ISOKAS.)
Age from outside map area	(.ISOAO.)	Rb-Sr Biotite	(.ISORSB.)	K-Ar K-spar	(.ISOKAK.)
Age determined by other workers	(.ISOW.)	Rb-Sr Muscovite	(.ISORSM.)	K-Ar Glauconite	(.ISOKAG.)
U-Pb is isochron age	(.ISOUPI.)	Rb-Sr Glauconite	(.ISORSG.)	K-Ar Whole rock	(.ISOKAW.)
U-Pb is not isochron age	(.ISOUPN.)	Rb-Sr Whole rock	(.ISORSW.)	Fission-track	(.ISOF.)
U-Pb zircon	(.ISOUPZ.)	K-Ar is conventional	(.ISOKAC.)	Tephrochronology	(.ISOT.)
U-Pb sphene	(.ISOUPS.)	K-Ar is conventional	(.ISOKAC.)		
U-Pb monazite	(.ISOUPM.)	K-Ar is incremental	(.ISOKAI.)		

METAMORPHIC (.MET.)

METAMORPHIC STYLE

Contact	(.METC.)
Regional	(.METR.)
Strain dominant	(.METS.)
Type unspecified	(.METU.)

LITHOLOGY

METAMORPHIC ROCK GENERIC (.MMG.)

Calcsilicate rock	(.MMGC.)
Gneiss	(.MMGG.)
Gneiss, augen	(.MMGGA.)
Gneiss, banded	(.MMGGB.)
Gneiss, granitic	(MMGGG.)
Gneiss, laminated	(.MMGGL.)
Gneiss, layered	(.MMGGLY.)
Gneiss, quartzo-feldspathic	(.MMGGQF.)
Hornfels	(.MMGH.)
Phyllite	(.MMGP.)
Phyllonite	(.MMGPH.)
Schist	(.MMGS.)

METASEDIMENTARY (.MSD.)

Argillite	(.MSDA.)
Banded gneiss	(.MSDBG.)
Calcsilicate	(.MSDC.)
Gneiss	(.MSDG.)
Hornfels	(.MSDF.)
Marble, undifferen	(.MSDM.)
Metachert	(.MSDHM.)
Metaconglomerate	(.MSDOM.)
Metagraywacke	(.MSDWM.)
Metamudstone	(.MSDUM.)
Metaquartzite	(.MSDQM.)
Metasandstone	(.MSDTM.)
Metasiltstone	(.MSDLM.)
Paragneiss	(.MSDPG.)
Phyllite	(.MSDY.)
Schist	(.MSDS.)
Slate	(.MSDE.)

For metasedimentary rocks that have recognizable primary sedimentary features, add code from appropriate sedimentary code tree.

METAIGNEOUS (.MIG.)

Amphibolite	(.MIGA.)
Gneiss	(.MIGG.)
Gneiss, augen	(.MIGGA.)
Gneiss, banded	(.MIGGB.)
Gneiss, laminated	(.MIGGL.)
Gneiss, ortho	(. MIGGO.)
Granitic rock, gneissic	(.MIGRG.)
Greenstone	(.MIGE.)
Hornfels	(.MIGH.)
Metaplutonic	(. MIGPM.)
Metatuff	(. MIGTM.)
Metavolcanic	(. MIGVM.)
Serpentinite	(.MIGSP.)

For metaigneous rocks that have recognizable primary igneous features, add code from appropriate igneous code tree.

STRAIN-DOMINATED (.METS.)

Gneiss, cataclastic	(.METGC.)
Gneiss, mylonitic	(.METGM.)
Phyllonite	(.METSP.)

POLYMETAMORPHIC (.MPM.)

Amphibolite	(.MPMA.)
Calcsilicate	(.MPMC.)
Cataclasite	(.MPMCA.)
Gneiss	(.MPMG.)
Gneiss, augen	(.MPMGA.)
Gneiss, banded	(.MPMGB.)
Gneiss, ortho	(.MPMGO.)
Gneiss, para	(.MPMGP.)
Hornfels	(.MPMH.)
Marble	(.MPMM.)
Metaquartzite	(.MPMQ.)
Mylonite	(.MPMY.)
Phyllite	(.MPMP.)
Phyllonite	(.MPMPH.)
Schist	(.MPMS.)
Serpentinite	(.MPMSP.)
Slate	(.MPMSL.)

OUTCROP GEOMORPHOLOGY (.OGM.)

Blocky	(.OGMB.)
Cliff forming	(.OGMC.)
Fissil	(.OGMF.)
Interbedded ledge forming & recessive	(.OGMI.)
Ledge forming	(.OGML.)
Massive, blocky	(.OGMMB.)
Massive, rounded	(.OGMMR.)
Recessive	(.OGMR.)
Rounded	(.OGMD.)
Slope forming	(.OGMS.)
Weathered slightly	(.OGMWSL.)
Weathered substantially	(.OGMWSU)
Weathered strongly	(.OGMWST.)

GRAIN SIZE (.GZM.)

Groundmass	(.GZMG.)
Fine	(.GZMGF.)
Fine - medium	(.GZMGFM.)
Fine- coarse	(.GZMGFC.)
Medium	(.GZMGM.)
Medium - coarse	(.GZMGMC.)
Coarse	(.GZMGC.)
Variable	(.GZMGV.)

Porphyroblasts (crystal growth during metamorphism)	
2mm to <5mm	(.GZMPF.)
5mm to <1cm	(.GZMPM.)
1cm to <3cm	(.GZMPMC.)
3cm to <6cm	(.GZMPC.)
>6cm	(.GZMPVC.)
Variable	(.GZMPV.)

GRAIN SHAPE (.MGS.)

Idioblastic	(.MGSI.)
Xenoblastic	(.MGSX.)

METAMORPHIC MINERALS (.MMM.)

Actinolite (.MMMAC.)	Dolomite (.MMMD.)	Microcline (.MMMMI.)	Sericite (.MMMSE.)
Albite (.MMMAL.)	Epidote (.MMME.)	Muscovite (.MMMMU.)	Sillimanite (.MMMSI.)
Andalusite (.MMMA.)	Forsterite (.MMMF.)	Orthoclase (.MMMO.)	Staurolite (.MMMST.)
Biotite (.MMMB.)	Garnet (.MMMG.)	Piemontite (.MMMPI.)	Stilpnomelane (.MMMS.)
Calcite (.MMMCA.)	Hornblende(.MMMH.)	Prehnite (.MMMPR.)	Talc (.MMMTA.)
Chlorite (.MMMCH.)	Jadeite (.MMMJ.)	Pumpellyite (.MMMP.)	Tourmaline (.MMMT.)
Clinozoisite (.MMMC.)	Kyanite (.MMMK.)	Pyroxene (.MMMPX.)	Tremolite (.MMMTR.)
Cordierite (.MMMCO.)	Lawsonite (.MMML.)	Rutile (.MMMR.)	Wollastonite (.MMMW.)
Corundum (.MMMCR.)	Magnetite (.MMMM.)	Scapolite (.MMMSC.)	Zoisite (.MMMZ.)
Diopside (.MMMDI.)			

Porphyroblast phase (-PBL-) Porphyroclast phase (-PCL-) Groundmass phase (-GMS-)

PROTOLITH (.PLI.)

Protolith heterogeneous	(.PLIH.)
Protolith unspecified	(.PLIUN.)
Protolith unknown	(.PLIUK.)
Sedimentary protolith	(.PLIS.)
Marine protolith	(.PLISM.)
Nonmarine protolith	(.PLISN.)
Carbonate protolith	(.PLISC.)
Dolomite	(.PLISCD.)
Dolomite, calcareous	(.PLISCDC.)
Limestone	(.PLISCL.)
Limestone, cherty	(.PLISCLC.)
Limestone, sandy	(.PLISCLS.)
Limestone, silty	(.PLISCLM.)
Limestone, dolomitic	(.PLISCLD.)
Siliciclastic protolith	(.PLISS.)
Conglomerate	(.PLISSC.)
Conglomerate, sandy	(.PLISSCS.)
Mudrock	(.PLISSM.)
Mudrock, calcareous	(.PLISSMC.)
Mudrock, siliceous	(.PLISSMS.)
Quartzite	(.PLISSQ.)
Sandstone	(.PLISSS.)
Sandstone, conglomeratic	(.PLISSSC.)
Sandstone, muddy	(.PLISSSM.)
Sandstone, pebbly	(.PLISSSP.)
Shale	(.PLISSH.)
Siltstone	(.PLISSL.)
Igneous protolith	(.PLII.)
Plutonic protolith	(.PLIIP.)
Granitic	(.PLIIPG.)
Equigranular granitoid	(.PLIIPGE.)
Leucocratic granitoid	(.PLIIPGL.)
Mafic Granitoid	(.PLIIPGM.)
Porphyritic granitoid	(.PLIIPGP.)
Dioritic	(.PLIIPD.)
Volcanic protolith	(.PLIIV.)
Basalt	(.PLIIVB.)
Felsic volcanic rock	(.PLIIVF.)
Lava	(.PLIIVL.)
Mafic volcanic rock	(.PLIIVM.)
Pyroclastic rocks	(.PLIIVP.)
Qtz-rich volcanic rock	(.PLIIVQR.)
Qtz-poor volcanic rock	(.PLIIVQP.)
Metamorphic protolith	(.PLIM.)

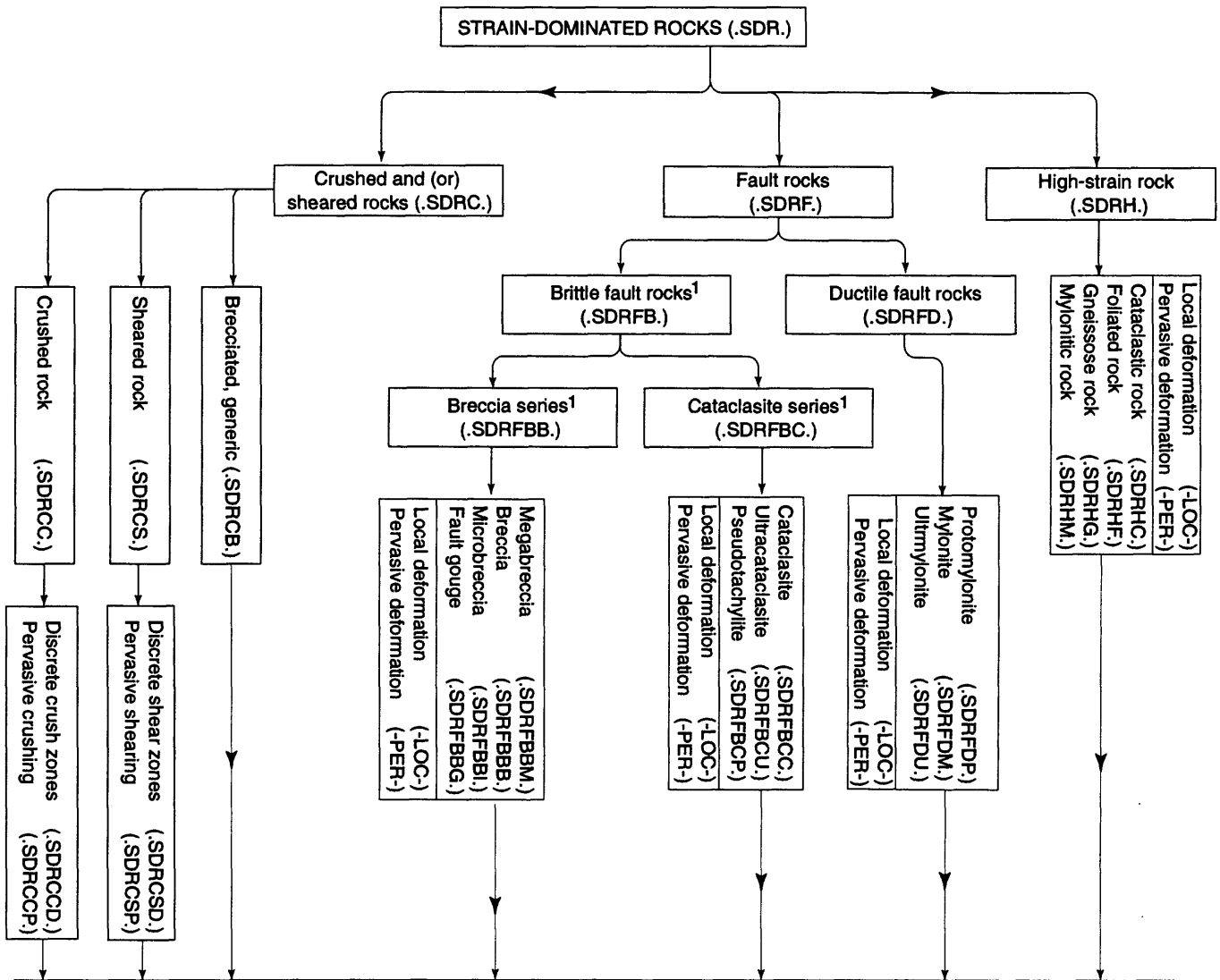
STRUCTURE AND FABRIC (.SFM.)

Boudinage	(.SFMBD.)	Foliation, schistose	(.SFMOS.)
Cataclasis, intergranular	(.SFMCI.)	Grain flattening	(.SFMGF.)
Fabric, blastoporphyritic	(.SFMFT.)	Grain lenticulation	(.SFMGL.)
Fabric, brittle	(.SFMFB.)	Grain-size reduction, brittle	(.SFMGRB.)
Fabric, brittle-ductile	(.SFMFBD.)	Grain-size reduction, ductile	(.SFMGRD.)
Fabric, ductile	(.SFMFD.)	Layering	(.SFMY.)
Fabric, granoblastic	(.SFMFG.)	Layering, migmatitic	(.SFMYM.)
Fabric, laminated	(.SFMFL.)	Layering, mineral-segregation	(.SFMYS.)
Fabric, massive	(.SFMFM.)	Lineate	(.SFML.)
Fabric, poikiloblastic	(.SFMFK.)	Mineral over-growths	(.SFMV.)
Fabric porphyroblastic	(.SFMFP.)	Mullions	(.SFMM.)
Fabric porphyroclastic	(.SFMFC.)		
Foliate	(.SFMO.)		
Foliation, cataclastic	(.SFMOC.)		
Foliation, gneissic	(.SFMOG.)		
Foliation, mylonitic	(.SFMOM.)		

Recrystallization	(.SFMR.)		
slight	(.SFMRS.)		
slight to moderate	(.SFMRSM.)		
moderate	(.SFMRM.)		
moderate to high	(.SFMRMH.)		
high	(.SFMRH.)		
S-C structures	(.SFMSC.)		
Slaty cleavage	(.SFMK.)		

METAMORPHIC HISTORY

Metamorphic grade	(.MGD.)
Zeolite	(.MGDZ.)
Prehnite-pumpellyite	(.MGDPP.)
Blueschist	(.MGDB.)
Lower greenschist	(.MGDGL.)
Upper greenschist	(.MGDGU.)
Lower amphibolite	(.MGDAL.)
Upper amphibolite	(.MGDAU.)
Pyroxene hornfels	(.MGDPY.)
Retrograde metamorphism	(.RTO.)
Yes	(.RTOY.)
No	(.RTON.)
Multi	(.RTOM.)
Unknown	(.RTOUN.)
Probably	(.RTOP.)
Age of metamorphism	(.AAM.)
Age unknown	(.AAMU.)
Age known	(.AAMK.)
Age certain	(.AAMKC.)
Age likely, but not certain	(.AAMKL.)
Age questionable	(.AAMKQ.)



STRUCTURE AND FABRIC OF STRAINED ROCKS

NON-PENETRATIVE STRUCTURE & FABRIC	
Brecciated, locally	(.SDFNB.)
Fissures	(.SDFNU.)
Fractures	(.SDFNR.)
Fractures, open	(.SDFNRO.)
Fractures, partly closed	(.SDFNRC.)
Fractures, closed	(.SDFNRCP.)
Fractures, caliche-filled	(-FRACA-)
Fractures, conjugate	(-FRACON-)
Fractures, locally abundant	(-FRALA-)
Fractures, oriented	(-FRAO-)
Fractures, orthogonal	(-FRAORT-)
Fractures, pervasive	(-FRAP-)
Fractures, random	(-FRAR-)
Fractures, sparse	(-FRAS-)
Fractures, tension	(-FRAT-)
Faults, local, small	(.SDFNFL.)
Faults, pervasive, small	(.SDFNFP.)
Shear planes, local	(.SDFNSPL.)
PENETRATIVE STRUCTURE & FABRIC	
Boudinage	(.SDFPBD.)
Cataclasis, intergranular	(.SDFPCI.)
Cataclastic seams	(.SDFPC.)
Cataclastic seams, local	(.SDFPCL.)
Cataclastic seams, pervasive	(.SDFPCP.)
Cleavage, slaty	(.SDFPKS.)
Fabric, brittle	(.SDFPFB.)
Fabric, brittle-ductile	(.SDFPFBD.)
Fabric, ductile	(.SDFPFD.)
Fabric, heterogeneous	(.SDFPFHE.)
Fabric, homogeneous	(.SDFPFHO.)
Fabric, laminated	(.SDFPFL.)
Fabric, porphyroclastic	(.SDFPFP.)
Fabric, porphyroclastic, locally	(.SDFPFPL.)
Fabric, recrystallized	(.SDFPR.)
Slight	(-RCRS-)
Slight to moderate	(-RCRSM-)
Moderate	(-RCRM-)
Moderate to high	(-RCRMH-)
High	(-RCRH-)
Foliation, penetrative	(.SDFPO.)
Weak	(-PFOLW-)
Weak to moderate	(-PFOLWM-)
Moderate	(-PFOLM-)
Moderate to strong	(-PFOLMS-)
Strong	(-PFOLS)
Foliation, cataclastic	(.SDFPOC.)
Foliation, gneissose	(.SDFPOG.)
Foliation, mylonitic	(.SDFPOM.)
Fractures, penetrative	(.SDFPR.)
Fractures, open	(.SDFPRO.)
Fractures, partly closed	(.SDFPRCP.)
Fractures, closed	(.SDFPRC.)
Grain flattening	(.SDFPGF.)
Grain lenticulation	(.SDFPGL.)
Grain-size reduction, brittle	(.SDFPGRB.)
Grain-size reduction, ductile	(.SDFPGRD.)
Layering, mineral segregation	(.SDFPY.)
Lineation	(.SDFPL.)
Weak	(-PLINW-)
Moderate	(-PLINM-)
Strong	(-PLINS-)
Microtectonite features[1]	(.SDFPT.)
Foliation fish	(.SDFPTF.)
Mica fish	(.SDFPTM.)
Pressure shadows	(.SDFPTP.)
S-C fabrics	(.SDFPTS.)
Winged porphyroclasts	(.SDFPTW.)
Milled grains	(.SDFPX.)
Mylonitic seams	(.SDFPM.)
Pseudotachylite seams	(.SDFPU.)
S-C structures	(.SDFPSC.)
Shear planes, local	(.SDFPPL.)

[1]From Davis and Reynolds, 1996

STRAIN-DOMINATED IGNEOUS ROCKS

IGNEOUS (.IGND.)

Intrusive	(.IGNID.)
Extrusive	(.IGNXD.)
Pyroclastic	(.IGNPD.)

DEFORMED IGNEOUS ROCK

Plutonic	(.PLUD.)	Hypabyssal	(.HYPD.)	Sill	(.VOLFSD.)	Domes	(.EXTMD.)
Dike	(.PLUKD.)	Dike	(.HYPKD.)	Stock	(.VOLFOD.)	Flows & Sedimentary Rocks	(.EXTFSD.)
pegmatite	(.PLUKPD.)	Sill	(.HYPSD.)	Unspecified	(.VOLFUD.)	Flows & Flow Breccia	(.EXTFFBD.)
aplite	(PLUKAD.)	Stock	(.HYPOD.)	Tuff	(.PYRTD.)	Flow Breccia	(.EXTFBD.)
Sill	(.PLUSD.)	Pluton	(.HYPPD.)	Ash-flow tuff	(.PYRTASD.)	Lava flow	(.EXTLD.)
Stock	(.PLUOD.)	Unspecified	(.HYPUD.)	Air-fall tuff	(PYRTAFD.)		
Pluton	(.PLUPD.)	Volcanic Feeder	(.VOLFD.)	reworked	(-TRWD-)		
Unspecified	(.PLUUD.)	Dike	(.VOLFKD.)	not reworked	(-TNRWD-)		

DEFORMED PLUTONIC, HYPABYSSAL, AND VOLCANIC ROCK (PARENT IGNEOUS-ROCK TYPE)

PLUTONIC AND HYPABYSSAL		Gabbro	(.GABD.)	Norite	(.NORD.)	Basalt	(.BSLD.)
Granitic Rock	(.GRND.)	Gabbro, quartz	(.GABQD.)	Ultramafic rocks	(.UMRD.)	Latite	(.LATD.)
Quartz-rich [>20%]	(.GRNQRD.)	Monzodiorite	(.MZDD.)	Dunite	(.UMRND.)	Latite, quartz	(.LATQD.)
Granodiorite	(.GDRD.)	Syenite	(.SYND.)	Peridotite	(.UMRPD.)	Trachyte	(.TRCD.)
Monzogranite	(.MGRD.)	Granitic rock unspecified	(.GRNUD.)	Pyroxenite	(.UMRYD.)	Trachyte, alkalic	(.TRCAD.)
Syenogranite	(.SGRD.)	Granitic rock heterogeneous	(GRNHD.)	VOLCANIC		Trachyte, alkalic quartz	(.TRCQAD.)
Tonalite	(.TOND.)	Granitic rock variable	(.GRNVD.)	Quartz-rich [>20%]	(.VOLQRD.)	Trachyte, quartz	(.TRCQD.)
Trondhjemite	(.TRJD.)	Dioritic rock unspecified	(.DIOUD.)	Alkalic rhyolite	(.RHYAD.)	Unspecified	(.VOLQPUD.)
Quartz-deficient [5-20%]	(.GRNQD.)	Dioritic rock heterogeneous	(.DIOHD.)	Rhyolite	(.RHYD.)	Variable	(.VOLQPVD.)
Diorite, quartz	(.DIOQD.)	Dioritic rock variable	(.DIOVD.)	Rhyodacite	(.DACRD.)	Variable	(.VOLVD.)
Monzonite, quartz	(.MZNQD.)	SPECIALIZED PLUTONIC ROCKS		Dacite	(.DACD.)	Unspecified	(.VOLUD.)
Monzodiorite, quartz	(.MZDQD.)	Anorthosite	(.ANAD.)	Unspecified	(.VOLQRUD.)		
Syenite, quartz	(.SYNQD.)	Charnokite	(.CHKD.)	Variable	(.VOLQRVD.)		
Quartz-poor [<5%]	(.GRNQPD.)	Jotunite [pyroxene diorite/gabbro]	(.JOTD.)	Quartz-poor [<20%]	(.VOLQPD.)		
Diorite	(.DIOD.)	Lamprophyres	(.LPHD.)	Andesite	(.ANDD.)		
Monzonite	(.MZND.)	Mangerite [pyroxene monzonite]	(.MAND.)	Andesite, quartz	(.ANDQD.)		

OUTCROP GEOMORPHOLOGY (.OGM root)

Blocky	(.OGMB.)	Massive, rounded	(.OGMMR.)
Cliff forming	(.OGMC.)	Recessive	(.OGMR.)
Fissil	(.OGMF.)	Rounded	(.OGMD.)
Interbedded ledgeforming & slopeforming	(.OGMI.)	Slope forming	(.OGMS.)
Ledgeforming	(.OGML.)	Weathered slightly	(.OGMWSL.)
Massive, blocky	(.OGMMB.)	Weathered substantially	(.OGMWSU.)
		Weathered strongly	(.OGMWST.)

COLOR INDEX

Average color index {nn = % dark minerals[2 numbers] ie, (.CIN07) for CI = 7}	(.CIN[nn].)
Color index variable	(.CINV.)

RELICT STRUCTURES AND FABRICS RESULTING FROM IGNEOUS EMPLACEMENT (.SFED.)

Cumulate layering	(.SFECD.)	Fabric, foliated, moderately	(.SFEFFMD.)	Inclusion-rich	(.SFEIRD.)	Lineated, well	(.SFELWD.)
Fabric, massive	(.SFEFMD.)	Fabric, foliated, mod to well	(.SFEFFMWD.)	Inclusions, local	(.SFEILD.)	Magmatic migmatite	(.SFEMD.)
Fabric, massive to foliated	(.SFEFMFD.)	Fabric, foliated, well	(.SFEFFWD.)	Intermingled igneous rock and country rock	(.SFERD.)	Schlieren	(.SFESD.)
Fabric, massive to foliated slightly	(.SFEFMFSD.)	Fabric, heterogeneous	(.SHEFED.)			Variable	(.SFEVD.)
Fabric, foliated	(.SFEFFD.)	Fabric, homogeneous	(.SFEFOD.)	Lineated	(.SFELD.)		
Fabric, foliated, slightly	(.SFEFFSD.)	Flow banding	(.SFEBD.)	Lineated, slightly	(.SFELSD.)		
Fabric, foliated, slightly to mod	(.SFEFFSMD.)	Gneissose compositional layering	(.SFEBGD.)	Lineated, moderately	(.SFELMD.)		

HIGH-STRAIN GRAIN TEXTURE

Amygdaloidal	(.TIGAD.)
Granitic	(.TIGGD.)
Equigranular	(.TIGED.)
Seriate	(.TIGSD.)
Porphyroclastic	(.TIGPD.)
Porphyroclastic locally	(.TIGPLD.)
Variable	(.TIGVD.)

HIGH-STRAIN ROCK GRAIN SIZE

Groundmass			Porphyroclasts		
Fine	(< 1.0m)	(.GMIFD.)	Fine	(1mm to <2mm)	(.PHZFD.)
Medium	(1mm to 5mm)	(.GMIMD.)	Medium	(5mm to <3cm)	(.PHZMD.)
Coarse	(5mm to 3cm)	(.GMICD.)	Coarse	(3cm to <6cm)	(.PHZCD.)
Very coarse	(>3cm)	(.GMIVCD.)	Very coarse	(>6cm)	(.PHZVCD.)
Fine to Medium		(.GMIFMD.)	Fine to medium	(1mm to <3cm)	(.PHZFMD.)
Fine to coarse		(.GMIFCD.)	Medium to coarse	(5mm to <6cm)	(.PHZMCD.)
Medium to coarse		(.GMIMCD.)	Variable		(.PHZVD.)
Coarse to very coarse		(.GMICVCD.)			
Variable		(.GMIVD.)			

GRAIN SHAPE

Groundmass	(.GMSD.)
Euhedral	(.GMSUD.)
Subhedral	(.GMSSD.)
Anhedral	(.GMSAD.)
Variable	(.GMSVD.)
Porphyroclasts	(.PHSD.)
Euhedral	(.PHSUD.)
Subhedral	(.PHSSD.)
Anhedral	(.PHSAD.)
Variable	(.PHSVD.)
Diffuse	(.PHSFD.)

STRAIN-DOMINATED IGNEOUS ROCKS: PARENTAGE & DEFORMATIONAL HISTORY

Characterizing minerals

Biotite	(.MCHBD.)
Biotite-hornblende	(.MCHBHD.)
Biotite-muscovite	(.MCHBMD.)
Garnet	(.MCHGD.)
Hornblende	(.MCHHD.)
Hornblende-biotite	(.MCHHBD.)
Hornblende-pyroxene	(.MCHHPD.)
Muscovite	(.MCHMD.)
Muscovite-biotite	(.MCHMBD.)
Muscovite-garnet	(.MCHMGD.)
Pyroxene	(.MCHPD.)
Pyroxene-hornblende	(.MCHPHD.)

Accessory minerals

Allanite	(.MACALD.)
Apatite	(.MACAPD.)
Clinozoisite	(.MACCLD.)
Epidote	(.MACED.)
Fluorite	(.MACFD.)
Ilmenite	(.MACID.)
Magnetite	(.MACMGD.)
Monazite	(.MACMOD.)
Opaque minerals	(.MAOD.)
Sphene	(.MACSD.)
Zircon	(.MACZD.)

Porphyroclast mineralogy

Amphibole	(.PHMAMD.)
Augite	(.PHMAUD.)
Beta quartz crystals	(.PHMQBD.)
Biotite	(.PHMBD.)
Hornblende	(.PHMHD.)
Muscovite	(.PHMMD.)
Olivine	(.PHMOD.)
Orthopyroxene	(.PHMOPD.)
Plagioclase	(.PHMPLD.)
Potassium feldspar	(.PHMKSD.)
Pyroxene	(.PHMPD.)
Quartz	(.PHMQD.)
Rimmed	(.PHMRD.)
Reaction rims	(.PHMRRD.)
Zoned	(.PHMZD.)

DEFORMATIONAL HISTORY (.DEF.)

Rock deformed under low-strain conditions	(.DEFL.)	Rock deformed within extensional strain field	(.DEFE.)	Rock intruded under ductile conditions	(.DEFID.)
Rock deformed under high-strain conditions	(.DEFH.)	Rock deformed within contractional strain field	(.DEFC.)	Rock recrystallized under plutonic conditions	(.DEFRP.)
Rock deformed under brittle conditions	(.DEFB.)	Rock deformed within transtensional strain field	(.DEFT.)		
Rock deformed under brittle-ductile conditions	(.DEFBD.)	Rock intruded under low-strain conditions	(.DEFIL.)		
Rock deformed under ductile conditions	(.DEFD.)	Rock intruded under high-strain conditions	(.DEFIH.)		
Rock deformed during pluton emplacement	(.DEFP.)	Rock intruded under brittle conditions	(.DEFIB.)		
Rock deformed within shear zone	(.DEFS.)	Rock intruded under brittle-ductile conditions	(.DEFIBD.)		
Rock deformed within fault zone	(.DEFF.)				

PROVINCIAL AFFINITY OF MAPPED IGNEOUS UNIT AND CHARACTER OF INCLUDED UNMAPPED ROCKS

Provincial affinity	(.PAF.)	granodiorite	(.URCOIGG.)	Sedimentary rock	(.URCYS.)
Chocolate Mts affinity	(.PAFC.)	Dioritic rock	(.URCOID.)	Strain-dominated rock	(.URCYD.)
Mojave Desert affinity	(.PAFM.)	Metamorphic	(.URCOM.)	cataclastic rock	(.URCYDC.)
San Bernardino Mts type	(.PAFMB.)	Metasedimentary	(.URCOMS.)	mylonitic rock	(.URCYDM.)
Little San Bernardino Mts type	(.PAFML.)	marble	(.URCOMSM.)	sheared rock	(.URCYDS.)
Peninsular Ranges affinity	(.PAFP.)	metaquartzite	(.URCOMSQ.)		
Santa Rosa Mts type	(.PAFPR.)	schist	(.URCOMSS.)		
San Gabriel Mts affinity	(.PAFG.)	Metaigneous	(.URCOMI.)		
Xenoliths	(.XEN.)	amphibolite	(.URCOMIA.)		
Local country rock	(.XENL.)	Strain-dominated rock	(.URCOD.)		
Olivine	(.XENO.)	cataclastic rock	(.URCODC.)		
Ultramafic	(.XENU.)	mylonitic rock	(.URCODM.)		
Inclusions, mafic	(.INCM.)	sheared rock	(.URCODS.)		
Unmapped rocks contained in mapped unit	(.URC.)	Younger included rocks	(.URCY.)		
Older included rocks	(.URCO.)	Igneous rock	(.URCYI.)		
Undifferentiated country rock	(.URCOC.)	Aplite dikes	(.URCYIA.)		
Igneous	(.URCOI.)	Basalt dikes	(.URCYIB.)		
Granitic rock	(.URCOIG.)	Dioritic rock	(.URCYID.)		
Lowe pluton	(.URCOIGL.)	Granitic rock	(.URCYIG.)		
monzogranite	(.URCOIGM.)	monzogranite	(.URCYIG.)		
		granodiorite	(.URCYIGG.)		

ISOTOPIC AGE (.ISO.)

Isotopic age is emplacement age	(.ISOE.)	U-Pb other	(.ISOUPO.)	K-Ar is 40-39	(.KSOFT.)
Isotopic age not emplacement age	(.ISON.)	Rb-Sr is isochron age	(.ISORSI.)	K-Ar Biotite	(.ISOKAB.)
Interpretation of isotopic age uncertain	(.ISOIU.)	Rb-Sr is not isochron age	(.ISORSN.)	K-Ar Muscovite	(.ISOKAM.)
Age from inside map area	(.ISOAI)	Rb-Sr K-spar	(.ISORSK.)	K-Ar Hornblende	(.ISOKAH.)
Age from outside map area	(.ISOAO)	Rb-Sr Plagioclase	(.ISORSP.)	K-Ar Sanidine	(.ISOKAS.)
U-Pb is isochron age	(.ISOUPI.)	Rb-Sr Biotite	(.ISORSB.)	K-Ar K-spar	(.ISOKAK.)
U-Pb is not isochron age	(.ISOUPN.)	Rb-Sr Muscovite	(.ISORSM.)	K-Ar Glauconite	(.ISOKAG.)
U-Pb zircon	(.ISOUPZ.)	Rb-Sr Glauconite	(.ISORSG.)	K-Ar Whole rock	(.ISOKAW.)
U-Pb sphene	(.ISOUPS.)	Rb-Sr Whole rock	(.ISORSW.)	Fission track	(.ISOF.)
U-Pb monazite	(.ISOUPM.)	K-Ar is conventional	(.ISOKAC.)	Fission track=emplacement age	(.ISOFE.)
		K-Ar is incremental	(.ISOKAI.)	Fission track=uplift age	(.ISOFU.)

GEOLOGIC STRUCTURES

STRUCTURES RELATED TO DEPOSITIONAL ORIGIN (.SDS.)

Bedding, amalgamated	(.SDSBA.)	Bouma BC	(-BSBC-)	Lamination, flat	(.SDSLF.)
Bedding, channelate	(.SDSBC.)	Bouma BCD	(-BSBCD-)	Laminations, flat to cross laminated	(.SDSLFX.)
Bedding, graded	(.SDSBG.)	Bouma CD	(-BSCD-)	Lamination, ripple	(.SDSLR.)
Bedding, graded, inverse	(.SDSBGI.)	Clast imbrication	(.SDSCI.)	Lamination, ripple, climbing	(.SDSLRC.)
Bedding, lenticular	(.SDSBL.)	Fenestrate	(.SDSFS.)	Massive	(.SDSM.)
Bedding, parallel	(.SDSBP.)	Flaser structures	(.SDSFL.)	Massive to flat laminated	(.SDSMFL.)
Bedding, non-parallel	(.SDSBN.)	Lamination, algal	(.SDSLA.)	Massive to mottled	(.SDSMT.)
Bioturbated	(.SDSBB.)	Lamination, algal, laterally linked columnar heads	(.SDSLAL.)	Mottled	(.SDST.)
Bouma sequences	(.SDSBS.)	Lamination, convolute	(.SDSLC.)	Mud cracks	(.SDSK.)
Bouma A	(-BSA-)	Lamination, cross	(.SDSLX.)	Pillow and ball	(.SDSPB.)
Bouma B	(-BSB-)	Lamination, cross,hummocky	(.SDSLXH.)	Sole marks	(.SDSSM.)
Bouma C	(-BSC-)	Lamination, cross, planar	(.SDSLXP.)	Unconformities locally present	(.SDSUNC.)
Bouma D	(-BSD-)	Lamination, cross, trough	(.SDSLXT.)	Variable	(.SDSV.)
Bouma AB	(-BSAB-)	Lamination, cryptalgal	(.SDSLAC.)		
Bouma ABC	(-BSABC-)				
Bouma ABCD	(-BSABCD-)				

STRUCTURES AND FABRICS RESULTING FROM IGNEOUS EMPLACEMENT (.SFE.)

Cumulate layering	(.SFEC.)	Fabric, foliated, moderately	(.SFEFFM.)	Inclusion-rich	(.SFEIR.)	Lineated, well	(.SFELW.)
Fabric, massive	(.SFEFM.)	Fabric, foliated, mod to well	(.SFEFFMW.)	Inclusions, local	(.SFEIL.)	Magmatic migmatite	(.SFEM.)
Fabric, massive to foliated	(.SFEFMF.)	Fabric, foliated, well	(.SFEFFW.)	Intermingled igneous rock and country rock	(.SFER.)	Schlieren	(.SFES.)
Fabric, massive to foliated slightly	(.SFEFMFS.)	Fabric, heterogeneous	(.FABHT.)	Lineated	(.SFEL.)	Variable	(.SFEV.)
Fabric, foliated	(.SFEFF.)	Fabric, homogeneous	(.FABHO.)	Lineated, slightly	(.SFELS.)		
Fabric, foliated, slightly	(.SFEFFS.)	Flow banding	(.SFEB.)	Lineated, moderately	(.SFELM.)		
Fabric, foliated, slightly to mod	(.SFEFFSM.)	Gneissose compositional layering	(.SFEBG.)				

STRUCTURES RESULTING FROM METAMORPHISM (.SFM.)

Boudinage	(.SFMBD.)	Foliation, schistose	(.SFMOS.)	Recrystallization	(.SFMR.)
Cataclasis, intergranular	(.SFMCI.)	Grain flattening	(.SFMGF.)	slight	(.SFMRS.)
Fabric, blastoporphyritic	(.SFMFT.)	Grain lenticulation	(.SFMGL.)	slight to moderate	(.SFMRSM.)
Fabric, brittle	(.SFMFB.)	Grain-size reduction, brittle	(.SFMGRB.)	moderate	(.SFMRM.)
Fabric, brittle-ductile	(.SFMFBD.)	Grain-size reduction, ductile	(.SFMGRD.)	moderate to high	(.SFMRMH.)
Fabric, ductile	(.SFMFD.)	Layering, migmatitic	(.SFMYM.)	high	(.SFMRH.)
Fabric, granoblastic	(.SFMFG.)	Layering, mineral-segregation	(.SFMYS.)	S-C structures	(.SFMSC.)
Fabric, laminated	(.SFMFL.)	Lineate	(.SFML.)	Slaty cleavage	(.SFMVG.)
Fabric, massive	(.SFMFM.)	Mineral over-growths	(.SFMO.)		
Fabric, poikiloblastic	(.SFMFK.)	Mullions	(.SFMM.)		
Fabric porphyroblastic	(.SFMFP.)				
Fabric porphyroclastic	(.SFMFC.)				
Foliate	(.SFMO.)				
Foliation, cataclastic	(.SFMOC.)				
Foliation, gneissic	(.SFMOG.)				
Foliation, mylonitic	(.SFMOM.)				

Postdepositional Structures (.SPD.)

Calcite fillings	(.SPDC.)
Blebs	(.SPDCB.)
Fractures	(.SPDCF.)
Stringers	(.SPDCS.)
Vugs	(.SPDCV.)
Dewatering structures	(.SPDDW.)
Dissolution breccia	(.SPDDB.)
Fenestrae	(.SPDF.)
Karst collapse structures	(.SPDK.)
Tepee structures	(.SPDT.)

STRUCTURES RESULTING FROM DEFORMATION (.SDF.)

Non-penetrative structural elements (.SDFN.)

Brecciation	(.SDFNB.)	Fractures, oriented	(-FRAO-)
Cataclasis, intergranular	(.SDFNCI.)	Fractures, orthogonal	(-FRAORT-)
Fissures	(.SDFNU.)	Fractures, pervasive	(-FRAP-)
Fractures	(.SDFNR.)	Fractures, random	(-FRAR-)
Fractures, open	(.SDFNRO.)	Fractures, sparse	(-FRAS-)
Fractures, partly closed	(.SDFNRCP.)	Fractures, tension	(-FRAT-)
Fractures, closed	(.SDFNRC.)	Fauits, local small	(.SDFNFL.)
Fractures, caliche-filled	(-FRACA-)	Joints	(.SDFNJ.)
Fractures, conjugate	(-FRACON-)	Mullions	(.SDFNM.)
Fractures, locally abundant	(-FRALA-)	Shear planes, local small	(.SDFNSPL.)

Penetrative structural elements (.SDFP.)

Boudinage	(.SDFPBD.)
Cataclasis, intergranular	(.SDFPCI.)
Cataclastic seams	(.SDFPC.)
Cataclastic seams, local	(.SDFPCL.)
Cataclastic seams, pervasive	(.SDFPCP.)
Cleavage, slaty	(.SDFPKS.)
Fabric, brittle	(.SDFPFB.)
Fabric, brittle-ductile	(.SDFPFBD.)
Fabric, ductile	(.SDFPFD.)
Fabric, laminated	(.SDFPFL.)
Fabric, porphyroclastic	(.SDFPFP.)
Fabric, porphyroclastic, locally	(.SDFPFPL.)
Foliation, penetrative	(.SDFPO.)
Weak	(-PFOLW-)
Weak to moderate	(-PFOLWM-)
Moderate	(-PFOLM-)
Moderate to strong	(-PFOLMS-)
Strong	(-PFOLS)
Foliation, cataclastic	(.SDFPOC.)
Foliation, gneissose	(.SDFPOG.)
Foliation, mylonitic	(.SDFPOM.)
Grain flattening	(.SDFPGF.)
Grain lenticulation	(.SDFPGL.)
Grain-size reduction, brittle	(.SDFPGRB.)
Grain-size reduction, ductile	(.SDFPGRD.)
Layering, mineral segregation	(.SDFPY.)
Lineation	(.SDFPL.)
Microtectonite features	(.SDFPT.)
Foliation fish	(.SDFPTF.)
Mica fish	(.SDFPTM.)
Pressure shadows	(.SDFPTP.)
S-C fabrics	(.SDFPTS.)
Winged porphyroclasts	(.SDFPTW.)
Milled grains	(.SDFPX.)
Mylonitic seams	(.SDFPM.)
Pseudotachylite seams	(.SDFPU.)
S-C structures	(.SDFPSC.)
Shear planes, local	(.SDFPSPL.)

GEOLOGIC STRUCTURES, ORIGIN UNSPECIFIED (.SOU.)

Banding	(.SOUB.)
Cataclastic fabric	(.SOUFC.)
Foliation, generic	(.SOUFO.)
Weak	(-GFOW-)
Moderate	(-GFOM-)
Strong	(-GFOS-)
Gneissose layering	(.SOUG.)
Lineation	(.SOUL.)
Mylonitic fabric	(.SOUFM.)

DEFORMATION HISTORY OF STRAINED ROCKS

ROCK-UNIT DEFORMATIONAL HISTORY (.DEF.)

- Rock deformed under low-strain conditions (.DEFL.)
- Rock deformed under high-strain conditions (.DEFH.)
- Rock deformed under brittle conditions (.DEFB.)
- Rock deformed under brittle-ductile conditions (.DEFBD.)
- Rock deformed under ductile conditions (.DEFD.)
- Rock deformed during pluton emplacement (.DEFP.)
- Rock deformed within shear zone (.DEFS.)
- Rock deformed within fault zone (.DEFF.)
  - deformed within normal-slip fault zone (.DEFFN.)
  - deformed within strike-slip fault zone (.DEFFS.)
  - deformed within thrust-slip fault zone (.DEFFT.)
    - deformed beneath thrust fault (.DEFFTB.)
    - deformed above thrust fault (.DEFFTA.)
- Rock deformed within fold belt (.DEFO.)
- Rock deformed within fold-and-thrust belt (.DEFOT.)
- Rock deformed within extensional strain field (.DEFE.)
- Rock deformed within contractional strain field (.DEFC.)
- Rock deformed within transtensional strain field (.DEFT.)
- Rock deformed during metamorphism (.DEFM.)
- Rock has multiple deformations (.DEFU.)
- Rock intruded under low-strain conditions (.DEFIL.)
- Rock intruded under high-strain conditions (.DEFIH.)
- Deformation style (.DEFY.)
  - rock is folded (.DEFYO.)
    - open folds (-FLDO-)
    - tight folds (-FLDT-)
    - tight folds broken by thrust faults (-FLDTT-)
    - overturned folds (-FLDV-)
    - assymetric folds folds (-FLDA-)
  - rock is folded and faulted (.DEFYOF.)
  - rock is faulted (.DEFYF.)
- Rock intruded under brittle conditions (.DEFIB.)
- Rock intruded under brittle-ductile conditions (.DEFIBD.)
- Rock intruded under ductile conditions (.DEFID.)
- Rock recrystallized under plutonic conditions (.DEFRP.)

Age of Deformation (.ADF.)

- Age of deformation unknown (.ADFU.)
- Age of deformation known (.ADFK.)
  - Age of faulting (.ADFKF.)
    - Age of faulting certain (.ADFKFC.)
    - Age of faulting likely, but not certain (.ADFKFL.)
    - Age of faulting questionable (.ADFKFQ.)
  - Age of folding (.ADFKO.)
    - Age of folding certain (.ADFKOC.)
    - Age of folding likely, but not certain (.ADFKOL.)
    - Age of folding questionable (.ADFKOQ.)
  - Age of penetrative deformation (.ADFKP.)
    - Age of penetrative deformation certain (.ADFKPC.)
    - Age of penetrative deformation likely, but not certain (.ADFKPL.)
    - Age of penetrative deformation questionable (.ADFKPQ.)
  - Age of brecciation or shearing (.ADFKB.)
    - Age of brecciation or shearing certain (.ADFKBC.)
    - Age of brecciation or shearing likely, but not certain (.ADFKBL.)
    - Age of brecciation or shearing questionable (.ADFKBQ.)
  - Age of fracturing (.ADFKR.)
    - Age of fracturing certain (.ADFKRC.)
    - Age of fracturing likely, but not certain (.ADFKRL.)
    - Age of fracturing questionable (.ADFKRQ.)

- deformation Cenozoic (.DCZO.)
  - deformation Neogene (-DNGN-)
  - deformation Paleogene (-DPGN-)
  - deformation Quaternary (.DCZOQ.)
    - deformation Holocene (.DCZOQH.)
      - deformation Modern (.DCZOQHD.)
      - deformation Holocene, late (.DCZOQHL.)
      - deformation Holocene, middle (.DCZOQHM.)
      - deformation Holocene, early (.DCZOQHE.)
    - deformation Pleistocene (.DCZOQP.)
      - deformation Pleistocene, late (.DCZOQPL.)
      - deformation Pleistocene, middle (.DCZOQPM.)
      - deformation Pleistocene, early (.DCZOQPE.)
  - deformation Tertiary (.DCZOT.)
    - deformation Tertiary, late (-DCZOTL-)
    - deformation Tertiary, middle (-DCZOTM-)
    - deformation Tertiary, early (-DCZOTE-)
      - deformation Pliocene (.DCZOTP.)
        - deformation Pliocene, late (.DCZOTPL.)
        - deformation Pliocene, early (.DCZOTPE.)
      - deformation Miocene (.DCZOTM.)
        - deformation Miocene, late (.DCZOTML.)
        - deformation Miocene, middle (.DCZOTMM.)
        - deformation Miocene, early (.DCZOTME.)
      - deformation Oligocene (.DCZOTO.)
        - deformation Oligocene, late (.DCZOTOL.)
        - deformation Oligocene, early (.DCZOTOE.)
      - deformation Eocene (.DCZOTE.)
        - deformation Eocene, late (.DCZOTEL.)
        - deformation Eocene, middle (.DCZOTEM.)
        - deformation Eocene, early (.DCZOTEE.)
      - deformation Paleocene (.DCZOTA.)
        - deformation Paleocene, late (.DCZOTAL.)
        - deformation Paleocene, early (.DCZOTAE.)
- deformation Mesozoic (.DMZO.)
  - deformation Mesozoic, late (-DMZOL-)
  - deformation Mesozoic, middle (-DMZOM-)
  - deformation Mesozoic, early (-DMZOE-)
    - deformation Cretaceous (.DMZOK.)
      - deformation Cretaceous, late (.DMZOKL.)
      - deformation Cretaceous, early (.DMZOKE.)
    - deformation Jurassic (.DMZOJ.)
      - deformation Jurassic, late (.DMZOJL.)
      - deformation Jurassic, early (.DMZOJE.)
    - deformation Triassic (.DMZOT.)
      - deformation Triassic, late (.DMZOTL.)
      - deformation Triassic, early (.DMZOTE.)
- deformation Paleozoic (.DPZO.)
  - deformation Paleozoic, late (-DPZOL-)
  - deformation Paleozoic, middle (-DPZOM-)
  - deformation Paleozoic, early (-DPZOE-)
    - deformation Permian (.DPZOR.)
      - deformation Permian, late (.DPZORL.)
      - deformation Permian early (.DPZORE.)
    - deformation Pennsylvanian (.DPZOP.)
      - deformation Pennsylvanian, late (.DPZOPL.)
      - deformation Pennsylvanian, early (.DPZOPE.)
    - deformation Mississippian (.DPZOM.)
      - deformation Mississippian, late (.DPZOML.)
      - deformation Mississippian, early (.DPZOME.)
    - deformation Devonian (.DPZOD.)
      - deformation Devonian, late (.DPZODL.)
      - deformation Devonian, early (.DPZODE.)
    - deformation Silurian (.DPZOS.)
      - deformation Silurian, late (.DPZOSL.)
      - deformation Silurian, early (.DPZOSE.)
    - deformation Ordovician (.DPZOO.)
      - deformation Ordovician, late (.DPZOOL.)
      - deformation Ordovician, early (.DPZOOE.)
    - deformation Cambrian (.DPZOC.)
      - deformation Cambrian, late (.DPZOCL.)
      - deformation Cambrian, early (.DPZOCE.)
- deformation Precambrian (.DPRC.)
  - deformation Proterozoic (.DPRCP.)
    - deformation Proterozoic, late (.DPRCPL.)
    - deformation Proterozoic, middle (.DPRCPM.)
    - deformation Proterozoic, early (.DPRCPE.)
  - deformation Archean (.DPRCA.)
    - deformation Archean, late (.DPRCAL.)
    - deformation Archean, middle (.DPRCAM.)
    - deformation Archean, early (.DPRCAE.)

CONTINUE STRUCTURAL HISTORY ON p. B-23

DEFORMATION HISTORY OF STRAINED ROCKS

(continued from p. B-22

Age of Deformation (.ADF.)

Age of deformation unknown	(.ADFU.)
Age of deformation known	(.ADFK.)
Age of faulting	(.ADFKF.)
Age of faulting certain	(.ADFKFC.)
Age of faulting likely, but not certain	(.ADFKFL.)
Age of faulting questionable	(.ADFKFQ.)
Age of folding	(.ADFKO.)
Age of folding certain	(.ADFKOC.)
Age of folding likely, but not certain	(.ADFKOL.)
Age of folding questionable	(.ADFKOQ.)
Age of penetrative deformation	(.ADFKP.)
Age of penetrative deformation certain	(.ADFKPC.)
Age of penetrative deformation likely, but not certain	(.ADFKPL.)
Age of penetrative deformation questionable	(.ADFKPQ.)
Age of brecciation or shearing	(.ADFKB.)
Age of brecciation or shearing certain	(.ADFKBC.)
Age of brecciation or shearing likely, but not certain	(.ADFKBL.)
Age of brecciation or shearing questionable	(.ADFKBQ.)
Age of fracturing	(.ADFKR.)
Age of fracturing certain	(.ADFKRC.)
Age of fracturing likely, but not certain	(.ADFKRL.)
Age of fracturing questionable	(.ADFKRQ.)

UPPER LIMITING AGE DETERMINED (.ADFLU.)

deformation pre-Modern	(.ADFLUD.)
deformation pre-late Holocene	(.ADFLULH.)
deformation pre-middle Holocene	(.ADFLUMH.)
deformation pre-Holocene	(.ADFLUH.)
deformation pre-late Pleistocene	(.ADFLUHLP.)
deformation pre-middle Pleistocene	(.ADFLUHMP.)
deformation pre-Quaternary (pre-early Pleistocene)	(.ADFLUQ.)
deformation pre-late Pliocene	(.ADFLUQLP.)
deformation pre-Pliocene	(.ADFLUQP.)
deformation pre- late Miocene	(.ADFLUQPML.)
deformation pre-middle Miocene	(.ADFLUQPMM.)
deformation pre-Miocene	(.ADFLUQM.)
deformation pre-late Oligocene	(.ADFLUQMLO.)
deformation pre-Oligocene	(.ADFLUQO.)
deformation pre- late Eocene	(.ADFLUQOLE.)
deformation pre-middle Eocene	(.ADFLUQOME.)
deformation pre-Eocene	(.ADFLUQE.)
deformation pre-late Paleocene	(.ADFLUQELA.)
deformation pre-Cenozoic (pre-Paleocene)	(.ADFLUC.)
deformation pre-late Cretaceous	(.ADFLUCLK.)
deformation pre-Cretaceous	(.ADFLUCK.)
deformation pre-late Jurassic	(.ADFLUCKLJ.)
deformation pre-Jurassic	(.ADFLUCJ.)
deformation pre-late Triassic	(.ADFLUCJLT.)
deformation pre-Mesozoic	(.ADFLUM.)
deformation pre-late Permian	(.ADFLUMLR.)
deformation pre-Permian	(.ADFLUMR.)
deformation pre-late Pennsylvanian	(.ADFLUMRLP.)
deformation pre-Pennsylvanian	(.ADFLUMP.)
deformation pre-late Mississippian	(.ADFLUMPLM.)
deformation pre-Mississippian	(.ADFLUMM.)
deformation pre-late Devonian	(.ADFLUMMLD.)
deformation pre-Devonian	(.ADFLUMD.)
deformation pre-late Silurian	(.ADFLUMDLD.)
deformation pre-Silurian	(.ADFLUMS.)
deformation pre-late Ordovician	(.ADFLUMSLO.)
deformation pre-Ordovician)	(.ADFLUMO.)
deformation pre-late Cambrian	(.ADFLUMOLC.)
deformation pre-Paleozoic (pre-early Cambrian)	(.ADFLUP.)
deformation pre-late Proterozoic	(.ADFLUPLP.)
deformation pre-middle Proterozoic	(.ADFLUPMP.)
deformation pre-Proterozoic (pre-early Proterozoic)	(.ADFLUR.)

LOWER LIMITING AGE DETERMINED (.ADFLL.)

deformation post-middle Holocene	(.ADFLLTPMH.)
deformation post-early Holocene	(.ADFLLTPEH.)
deformation post-Pleistocene	(.ADFLLTP.)
deformation post-middle Pleistocene	(.ADFLLTMP.)
deformation post-early Pleistocene	(.ADFLLTEP.)
deformation post-Tertiary (post-late Pliocene)	(.ADFLLT.)
deformation post-early Pliocene	(.ADFLLMMEP.)
deformation post-Miocene	(.ADFLLMM.)
deformation post- middle Miocene	(.ADFLLMOMM.)
deformation post-early Miocene	(.ADFLLMOEM.)
deformation post-Oligocene	(.ADFLLMO.)
deformation post-early Oligocene	(.ADFLLMEEO.)
deformation post-Eocene	(.ADFLLME.)
deformation post- middle Eocene	(.ADFLLMAME.)
deformation post-early Eocene	(.ADFLLMAEO.)
deformation post-Paleocene	(.ADFLLMA.)
deformation post-early Paleocene	(.ADFLLMEA.)
deformation post-Mesozoic (post-Cretaceous)	(.ADFLLM.)
deformation post-early Cretaceous	(.ADFLLPJEK.)
deformation post-Jurassic	(.ADFLLPJ.)
deformation post-early Jurassic	(.ADFLLPTEJ.)
deformation post-Triassic	(.ADFLLPT.)
deformation post-early Triassic	(.ADFLLPET.)
deformation post-Paleozoic	(.ADFLLP.)
deformation post-early Permian	(.ADFLLRPER.)
deformation post-Pennsylvanian	(.ADFLLRP.)
deformation post-early Pennsylvanian	(.ADFLLRMEP.)
deformation post-Mississippian	(.ADFLLRM.)
deformation post-early Mississippian	(.ADFLLRDEM.)
deformation post-Devonian	(.ADFLLRD.)
deformation post-early Devonian	(.ADFLLRSED.)
deformation post-Silurian	(.ADFLLRS.)
deformation post-early Silurian	(.ADFLLROES.)
deformation post-Ordovician	(.ADFLLRO.)
deformation post-early Ordovician	(.ADFLLRCEO.)
deformation post-Cambrian)	(.ADFLLRC.)
deformation post-early Cambrian	(.ADFLLREC.)
deformation post-Proterozoic (post-late Proterozoic)	(.ADFLLR.)
deformation post-middle Proterozoic	(.ADFLLAMR.)
deformation post-early Proterozoic	(.ADFLLAER.)
deformation post-Archean (post-late Archean)	(.ADFLLA.)

METAMORPHIC HISTORY

ROCK-UNIT METAMORPHIC AND DEFORMATIONAL HISTORY (.MDF.)

Rock metamorphosed under low-strain conditions	(.MDFL.)	Rock metamorphosed under plutonic conditions	(.MDFRP.)
Rock metamorphosed under high-strain conditions	(.MDFH.)	Rock has more than one metamorphism	(.MDFM.)
Rock metamorphosed under brittle conditions	(.MDFB.)	Prograde followed by retrograde	(.MDFME.)
Rock metamorphosed under brittle-ductile conditions	(.MDFBD.)	Retrograde followed by prograde	(.MDFMO.)
Rock metamorphosed under ductile conditions	(.MDFD.)	Regional followed by contact	(.MDFMR.)
Rock metamorphosed during pluton emplacement	(.MDFP.)	Regional followed by strain-dominant	(.MDFMS.)
Rock metamorphosed within shear zone	(.MDFS.)	Metamorphism synchronous with deformation	(.MDFX.)
Rock metamorphosed within fault zone	(.MDFF.)	Metamorphism synchronous with folding	(.MDFXO.)
Rock metamorphosed within normal-slip fault zone	(.MDFFN.)	Metamorphism synchronous with faulting	(.MDFXF.)
Rock metamorphosed within strike-slip fault zone	(.MDFFS.)		
Rock metamorphosed within thrust-slip fault zone	(.MDFFT.)		
metamorphosed beneath thrust fault	(.MDFFTB.)		
metamorphosed above thrust fault	(.MDFFTA.)		
Rock metamorphosed within extensional strain field	(.MDFE.)		
Rock metamorphosed within contractional strain field	(.MDFC.)		
Rock metamorphosed within transtensional strain field	(.MDFT.)		

AGE OF METAMORPHISM (.AMM.)

AGE OF METAMORPHISM UNKNOWN	(.AMMU.)
AGE OF METAMORPHISM KNOWN	(.AMMK.)
age certain	(.AMMKC.)
age likely but not certain	(.AMMKL.)
age questionable	(.AMMKQ.)
metamorphism Cenozoic	(.MCZO.)
metamorphism Neogene	(-MNGN-)
metamorphism Paleogene	(-MPGN-)
metamorphism Quaternary	(.MCZOQ.)
metamorphism Holocene	(.MCZOQH.)
metamorphism Modern	(.MCZOQHD.)
metamorphism Holocene, late	(.MCZOQHL.)
metamorphism Holocene, middle	(.MCZOQHM.)
metamorphism Holocene, early	(.MCZOQHE.)
metamorphism Pleistocene	(.MCZOQP.)
metamorphism Pleistocene, late	(.MCZOQPL.)
metamorphism Pleistocene, middle	(.MCZOQPM.)
metamorphism Pleistocene, early	(.MCZOQPE.)
metamorphism Tertiary	(.MCZOT.)
metamorphism Tertiary, late	(-MCZOL-)
metamorphism Tertiary, middle	(-MCZOM-)
metamorphism Tertiary, early	(-MCZOE-)
metamorphism Pliocene	(.MCZOTP.)
metamorphism Pliocene, late	(.MCZOTPL.)
metamorphism Pliocene, early	(.MCZOTPE.)
metamorphism Miocene	(.MCZOTM.)
metamorphism Miocene, late	(.MCZOTML.)
metamorphism Miocene, middle	(.MCZOTMM.)
metamorphism Miocene, early	(.MCZOTME.)
metamorphism Oligocene	(.MCZOTO.)
metamorphism Oligocene, late	(.MCZOTOL.)
metamorphism Oligocene, early	(.MCZOTOE.)
metamorphism Eocene	(.MCZOTE.)
metamorphism Eocene, late	(.MCZOTEL.)
metamorphism Eocene, middle	(.MCZOTEM.)
metamorphism Eocene, early	(.MCZOTEE.)
metamorphism Paleocene	(.MCZOTA.)
metamorphism Paleocene, late	(.MCZOTAL.)
metamorphism Paleocene, early	(.MCZOTAE.)
metamorphism Mesozoic	(.MMZO.)
metamorphism Mesozoic, late	(-MMZOL-)
metamorphism Mesozoic, middle	(-MMZOM-)
metamorphism Mesozoic, early	(-MMZOE-)
metamorphism Cretaceous	(.MMZOK.)
metamorphism Cretaceous, late	(.MMZOKL.)
metamorphism Cretaceous, early	(.MMZOKE.)
metamorphism Jurassic	(.MMZOJ.)
metamorphism Jurassic, late	(.MMZOJL.)
metamorphism Jurassic, early	(.MMZOJE.)
metamorphism Triassic	(.MMZOT.)
metamorphism Triassic, late	(.MMZOTL.)
metamorphism Triassic, early	(.MMZOTE.)
metamorphism Paleozoic	(.MPZO.)
metamorphism Paleozoic, late	(-MPZOL-)
metamorphism Paleozoic, middle	(-MPZOM-)
metamorphism Paleozoic, early	(-MPZOE-)
metamorphism Permian	(.MPZOR.)
metamorphism Permian, late	(.MPZORL.)
metamorphism Permian early	(.MPZORE.)
metamorphism Pennsylvanian	(.MPZOP.)
metamorphism Pennsylvanian, late	(.MPZOPL.)
metamorphism Pennsylvanian, early	(.MPZOPE.)
metamorphism Mississippian	(.MPZOM.)
metamorphism Mississippian, late	(.MPZOML.)
deformetamorphism mation Mississippian, early	(.MPZOME.)
metamorphism Devonian	(.MPZOD.)
metamorphism Devonian, late	(.MPZODL.)
metamorphism Devonian, early	(.MPZODE.)
metamorphism Silurian	(.MPZOS.)
metamorphism Silurian, late	(.MPZOSL.)
metamorphism Silurian, early	(.MPZOSE.)
metamorphism Ordovician	(.MPZOO.)
metamorphism Ordovician, late	(.MPZOOL.)
metamorphism Ordovician, early	(.MPZOOE.)
metamorphism Cambrian	(.MPZOC.)
metamorphism Cambrian, late	(.MPZOCL.)
metamorphism Cambrian, early	(.MPZOCE.)
metamorphism Precambrian	(.MPRC.)
metamorphism Proterozoic	(.MPRCP.)
metamorphism Proterozoic, late	(.MPRCPL.)
metamorphism Proterozoic, middle	(.MPRCPM.)
metamorphism Proterozoic, early	(.MPRCPE.)
metamorphism Archean	(.MPRCA.)
metamorphism Archean, late	(.MPRCAL.)
metamorphism Archean, middle	(.MPRCAM.)
metamorphism Archean, early	(.MPRCAE.)

CONTINUE METAMORPHIC HISTORY ON p. B-25

METAMORPHIC HISTORY
(continued from p. B-24)

Age of Metamorphism (.AMM.)

Age of metamorphism unknown	(.AMMU.)
Age of metamorphism known	(.AMMK.)
age certain	(.AMMKC.)
age likely but not certain	(.AMMKL.)
age questionable	(.AMMKQ.)

UPPER LIMITING METAMORPHIC AGE DETERMINED (.AMMLU.)

metamorphism pre-Modern	(.AMMLUD.)	metamorphism pre-Jurassic	(.AMMLUCJ.)
metamorphism pre-late Holocene	(.AMMLULH.)	metamorphism pre-late Triassic	(.AMMLUCJLT.)
metamorphism pre-middle Holocene	(.AMMLUMH.)	metamorphism pre-Mesozoic	(.AMMLUM.)
metamorphism pre-Holocene	(.AMMLUH.)	metamorphism pre-late Permian	(.AMMLUMLR.)
metamorphism pre-late Pleistocene	(.AMMLUHLP.)	metamorphism pre-Permian	(.AMMLUMR.)
metamorphism pre-middle Pleistocene	(.AMMLUHMP.)	metamorphism pre-late Pennsylvanian	(.AMMLUMRLP.)
metamorphism pre-Quaternary	(.AMMLUQ.)	metamorphism pre-Pennsylvanian	(.AMMLUMP.)
metamorphism pre-late Pliocene	(.AMMLUQLP.)	metamorphism pre-late Mississippian	(.AMMLUMPLM.)
metamorphism pre-Pliocene	(.AMMLUQP.)	metamorphism pre-Mississippian	(.AMMLUMM.)
metamorphism pre- late Miocene	(.AMMLUQPML.)	metamorphism pre-late Devonian	(.AMMLUMMLD.)
metamorphism pre-middle Miocene	(.AMMLUQPMM.)	metamorphism pre-Devonian	(.AMMLUMD.)
metamorphism pre-Miocene	(.AMMLUQM.)	metamorphism pre-late Silurian	(.AMMLUMDLD.)
metamorphism pre-late Oligocene	(.AMMLUQMLO.)	metamorphism pre-Silurian	(.AMMLUMS.)
metamorphism pre-Oligocene	(.AMMLUQO.)	metamorphism pre-late Ordovician	(.AMMLUMSLO.)
metamorphism pre- late Eocene	(.AMMLUQOLE.)	metamorphism pre-Ordovician	(.AMMLUMO.)
metamorphism pre-middle Eocene	(.AMMLUQOME.)	metamorphism pre-late Cambrian	(.AMMLUMOLC.)
metamorphism pre-Eocene	(.AMMLUQE.)	metamorphism pre-Paleozoic	(.AMMLUP.)
metamorphism pre-late Paleocene	(.AMMLUQELA.)	metamorphism pre-late Proterozoic	(.AMMLUPLP.)
metamorphism pre-Cenozoic	(.AMMLUC.)	metamorphism pre-middle Proterozoic	(.AMMLUPMP.)
metamorphism pre-late Cretaceous	(.AMMLUCLK.)	metamorphism pre-Proterozoic	(.AMMLUR.)
metamorphism pre-Cretaceous	(.AMMLUCK.)		
metamorphism pre-late Jurassic	(.AMMLUCKLJ.)		

LOWER LIMITING METAMORPHIC AGE DETERMINED (.AMMLL.)

metamorphism post-middle Holocene	(.AMMLLTPMH.)	metamorphism post-Jurassic	(.AMMLLPJ.)
metamorphism post-early Holocene	(.AMMLLTPEH.)	metamorphism post-early Jurassic	(.AMMLLPTEJ.)
metamorphism post-Pleistocene	(.AMMLLTP.)	metamorphism post-Triassic	(.AMMLLPT.)
metamorphism post-middle Pleistocene	(.AMMLLTMP.)	metamorphism post-early Triassic	(.AMMLLPET.)
metamorphism post-esrly Pleistocene	(.AMMLLTEP.)	metamorphism post-Paleozoic	(.AMMLLP.)
metamorphism post-Tertiary	(.AMMLLT.)	metamorphism post-early Permian	(.AMMLLRPER.)
metamorphism post-early Pliocene	(.AMMLLMMEP.)	metamorphism post-Pennsylvanian	(.AMMLLRP.)
metamorphism post-Miocene	(.AMMLLMM.)	metamorphism post-early Pennsylvanian	(.AMMLLRMEP.)
metamorphism post- middle Miocene	(.AMMLLMOMM.)	metamorphism post-Mississippian	(.AMMLLRM.)
metamorphism post-early Miocene	(.AMMLLMOEM.)	metamorphism post-early Mississippian	(.AMMLLRDEM.)
metamorphism post-Oligocene	(.AMMLLMO.)	metamorphism post-Devonian	(.AMMLLRD.)
metamorphism post-early Oligocene	(.AMMLLMEEO.)	metamorphism post-early Devonian	(.AMMLLRSED.)
metamorphism post-Eocene	(.AMMLLME.)	metamorphism post-Silurian	(.AMMLLRS.)
metamorphism post- middle Eocene	(.AMMLLMAME.)	metamorphism post-early Silurian	(.AMMLLROES.)
metamorphism post-early Eocene	(.AMMLLMAEO.)	metamorphism post-Ordovician	(.AMMLLRO.)
metamorphism post-Paleocene	(.AMMLLMA.)	metamorphism post-early Ordovician	(.AMMLLRCEO.)
metamorphism post-early Paleocene	(.AMMLLMEA.)	metamorphism post-Cambrian)	(.AMMLLRC.)
metamorphism post-Mesozoic	(.AMMLLM.)	metamorphism post-early Cambrian	(.AMMLLREC.)
metamorphism post-early Cretaceous	(.AMMLLPJEK.)	metamorphism post-Proterozoic	(.AMMLLR.)
		metamorphism post-middle Proterozoic	(.AMMLLAMR.)
		metamorphism post-early Proterozoic	(.AMMLLAER.)
		metamorphism post-Archean	(.AMMLLA.)

BEDROCKS AND SURFICIAL MATERIALS: STRATIGRAPHIC CLASSIFICATION

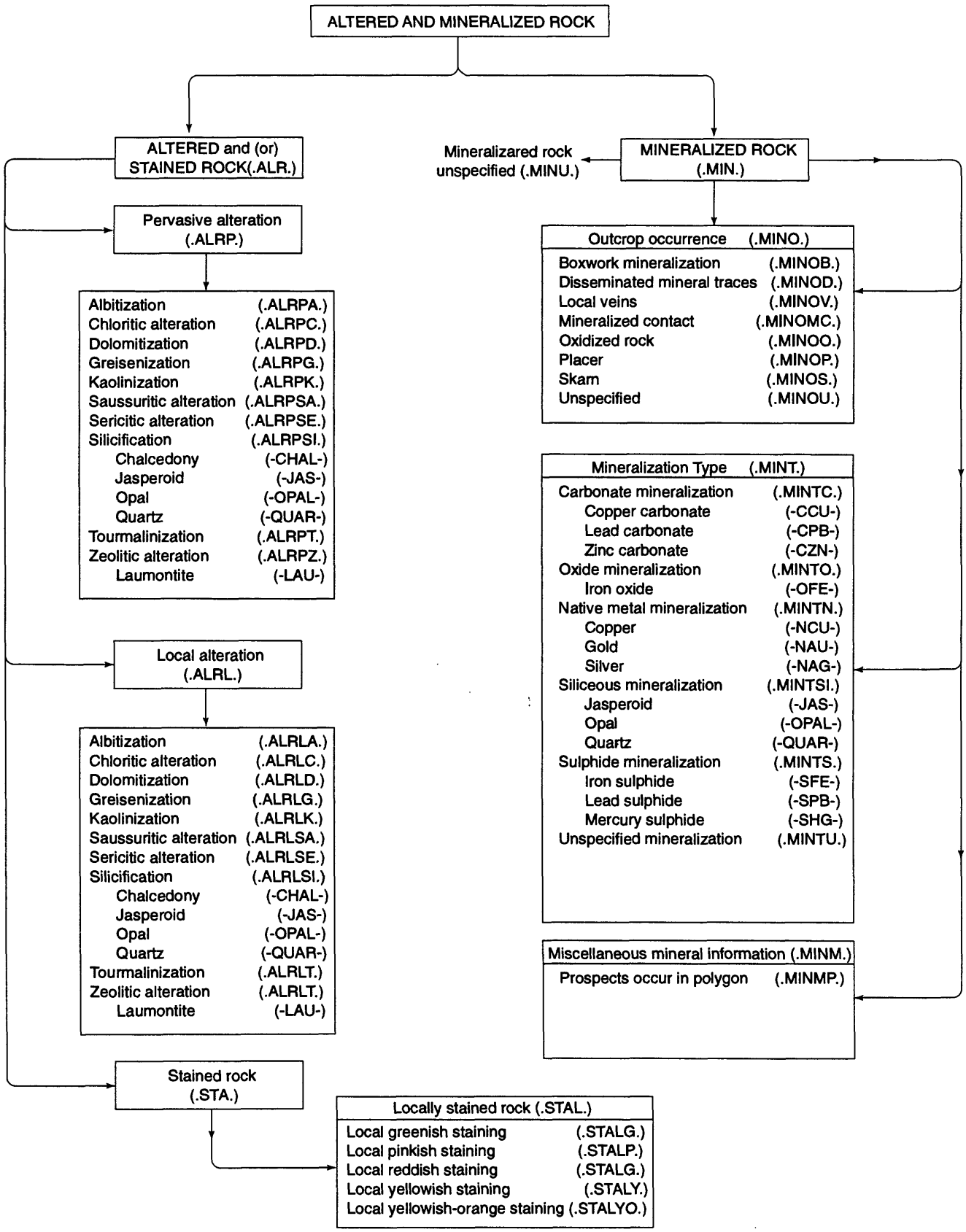
Rock-stratigraphic classification (.RSC.)

Surficial stratigraphic units (.RSCS.)

Informal surficial units	(.RSCSI.)
Alluvial units	(.RSCSIA.)
alluvial-fan units	(.RSCSIAF.)
alluvial-fan deposits, modern	(.RSCSIAFM.)
alluvial-fan deposits, young	(.RSCSIAFY.)
alluvial-fan deposits, old	(.RSCSIAFO.)
alluvial-fan deposits, very old	(.RSCSIAFV.)
alluvial-valley units	(.RSCSIAV.)
alluvial-valley deposits, modern	(.RSCSIAVM.)
alluvial-valley deposits, young	(.RSCSIAVY.)
alluvial-valley deposits, old	(.RSCSIAVO.)
alluvial-valley deposits, very old	(.RSCSIAVV.)
wash units	(.RSCSIAW.)
wash deposits, modern	(.RSCSIAWM.)
active	(.RSCSIAWMA.)
intermittently active	(.RSCSIAWMI.)
older	(.RSCSIAWMO.)
wash deposits, young	(.RSCSIAWY.)
wash deposits, old	(.RSCSIAWO.)
wash deposits, very old	(.RSCSIAWV.)
pediment veneer units	(.RSCSIAP.)
pediment-veneer deposits, modern	(.RSCSIAPM.)
pediment-veneer deposits, young	(.RSCSIAPY.)
pediment-veneer deposits, old	(.RSCSIAPO.)
pediment-veneer deposits, very old	(.RSCSIAPV.)
Eolian units	(.RSCSIE.)
eolian deposits, modern	(.RSCSIEM.)
eolian deposits, young	(.RSCSIEY.)
eolian deposits, old	(.RSCSIEO.)
eolian deposits, very old	(.RSCSIEV.)
Glacial units	(.RSCSIG.)
glacial deposits, modern	(.RSCSIGM.)
glacial deposits, young	(.RSCSIGY.)
glacial deposits, old	(.RSCSIGO.)
glacial deposits, very old	(.RSCSIGV.)
Hillslope units	(.RSCSIH.)
talus units	(.RSCSIHT.)
talus deposits, modern	(.RSCSIHTM.)
talus deposits, young	(.RSCSIHTY.)
talus deposits, old	(.RSCSIHTO.)
talus deposits, very old	(.RSCSIHTV.)
colluvium units	(.RSCSIHC.)
colluvium deposits, modern	(.RSCSIHCM.)
colluvium deposits, young	(.RSCSIHCY.)
colluvium deposits, old	(.RSCSIHCO.)
colluvium deposits, very old	(.RSCSIHCV.)
slope-wash units	(.RSCSIHS.)
slope-wash deposits, modern	(.RSCSIHSM.)
slope-wash deposits, young	(.RSCSIHSY.)
slope-wash deposits, old	(.RSCSIHSO.)
slope-wash deposits, very old	(.RSCSIHSV.)
Lacustrine units	(.RSCSIL.)
lacustrine deposits, modern	(.RSCSILM.)
lacustrine deposits, young	(.RSCSILY.)
lacustrine deposits, old	(.RSCSILO.)
lacustrine deposits, very old	(.RSCSILV.)
Marine units	(.RSCSIM.)
marine deposits, modern	(.RSCSIMM.)
marine deposits, young	(.RSCSIMY.)
marine deposits, old	(.RSCSIMO.)
marine deposits, very old	(.RSCSIMV.)
Playa units	(.RSCSIP.)
playa deposits, modern	(.RSCSIPM.)
playa deposits, young	(.RSCSIPY.)
playa deposits, old	(.RSCSIPO.)
playa deposits, very old	(.RSCSIPV.)
Regolith or pedogenic-soil units	(.RSCSIR.)
regolith or pedogenic-soil deposits, modern	(.RSCSIRM.)
regolith or pedogenic-soil deposits, young	(.RSCSIRY.)
regolith or pedogenic-soil deposits, old	(.RSCSIRO.)
regolith or pedogenic-soil deposits, very old	(.RSCSIRV.)
Slope-failure units	(.RSCSIS.)
slope-failure deposits, modern	(.RSCSISM.)
slope-failure deposits, young	(.RSCSISY.)
slope-failure deposits, old	(.RSCSISO.)
slope-failure deposits, very old	(.RSCSISV.)
Surficial units, undifferentiated	(.RSCSIU.)
slope-failure deposits, modern	(.RSCSIUM.)
slope-failure deposits, young	(.RSCSIUY.)
slope-failure deposits, old	(.RSCSIUO.)
slope-failure deposits, very old	(.RSCSIUV.)

Bedrock stratigraphic units (.RSCB.)

Formal bedrock unit	(.RSCBF.)
Formation-rank unit	(.RSCBFF.)
Sedimentary Formation	(.RSCBFFS.)
Member	(.RSCBFFSM.)
Tongue	(.RSCBFFST.)
Lentil	(.RSCBFFSL.)
facies	(.RSCBFFSF.)
Plutonic Formation	(.RSCBFFP.)
Volcanic Formation	(.RSCBFFV.)
Tectonic Formation	(.RSCBFFT.)
Catastrophic Formation	(.RSCBFFC.)
Metamorphic Formation	(.RSCBFFM.)
Group	(.RSCBFG.)
Formation	(.RSCBFGF.)
Member	(.RSCBFGFM.)
Tongue	(.RSCBFGFT.)
Lentil	(.RSCBFGFL.)
facies	(.RSCBFGFF.)
Supergroup	(.RSCBFS.)
Group	(.RSCBFSG.)
Formation	(.RSCBFSGF.)
Member	(.RSCBFSGFM.)
Tongue	(.RSCBFSGFT.)
Lentil	(.RSCBFSGFL.)
facies	(.RSCBFSGFF.)
Formal bedrock unit with informal subunit	(.RSCBFI.)
Formation-rank unit	(.RSCBFIF.)
Sedimentary Formation	(.RSCBFIFS.)
informal member	(.RSCBFIFSM.)
informal tongue	(.RSCBFIFST.)
informal lentil	(.RSCBFIFSL.)
informal facies	(.RSCBFIFSF.)
Informal bedrock unit	(.RSCBI.)
formation-rank unit	(.RSCBIF.)
sedimentary formation	(.RSCBIFS.)
member	(.RSCBIFSM.)
tongue	(.RSCBIFST.)
lentil	(.RSCBIFSL.)
facies	(.RSCBIFSF.)
plutonic formation	(.SCRBIFP.)
volcanic formation	(.SCRBIFV.)
tectonic formation	(.SCRBIFT.)
metamorphic formation	(.SCRBIFM.)
catastrophic formation	(.SCRBIFC.)


ALTERED AND MINERALIZED ROCK
ALTERED and (or) STAINED ROCK(.ALR.)
Mineralizared rock unspecified (.MINU.)
MINERALIZED ROCK (.MIN.)
Pervasive alteration (.ALRP.)
Albitization (.ALRPA.)
Chloritic alteration (.ALRPC.)
Dolomitization (.ALRPD.)
Greisenization (.ALRPG.)
Kaolinization (.ALRPK.)
Saussuritic alteration (.ALRPSA.)
Sericitic alteration (.ALRPSE.)
Silicification (.ALRPSI.)
Chalcedony (-CHAL-)
Jasperoid (-JAS-)
Opal (-OPAL-)
Quartz (-QUAR-)
Tourmalinization (.ALRPT.)
Zeolitic alteration (.ALRPZ.)
Laumontite (-LAU-)
Outcrop occurrence (.MINO.)
Boxwork mineralization (.MINOB.)
Disseminated mineral traces (.MINOD.)
Local veins (.MINOV.)
Mineralized contact (.MINOMC.)
Oxidized rock (.MINOO.)
Placer (.MINOP.)
Skarn (.MINOS.)
Unspecified (.MINOU.)
Mineralization Type (.MINT.)
Carbonate mineralization (.MINTC.)
Copper carbonate (-CCU-)
Lead carbonate (-CPB-)
Zinc carbonate (-CZN-)
Oxide mineralization (.MINTO.)
Iron oxide (-OFE-)
Native metal mineralization (.MINTN.)
Copper (-NCU-)
Gold (-NAU-)
Silver (-NAG-)
Siliceous mineralization (.MINTSI.)
Jasperoid (-JAS-)
Opal (-OPAL-)
Quartz (-QUAR-)
Sulphide mineralization (.MINTS.)
Iron sulphide (-SFE-)
Lead sulphide (-SPB-)
Mercury sulphide (-SHG-)
Unspecified mineralization (.MINTU.)
Local alteration (.ALRL.)
Albitization (.ALRLA.)
Chloritic alteration (.ALRLC.)
Dolomitization (.ALRLD.)
Greisenization (.ALRLG.)
Kaolinization (.ALRLK.)
Saussuritic alteration (.ALRLSA.)
Sericitic alteration (.ALRLSE.)
Silicification (.ALRLSI.)
Chalcedony (-CHAL-)
Jasperoid (-JAS-)
Opal (-OPAL-)
Quartz (-QUAR-)
Tourmalinization (.ALRLT.)
Zeolitic alteration (.ALRLT.)
Laumontite (-LAU-)
Miscellaneous mineral information (.MINM.)
Prospects occur in polygon (.MINMP.)
Stained rock (.STA.)
Locally stained rock (.STAL.)
Local greenish staining (.STALG.)
Local pinkish staining (.STALP.)
Local reddish staining (.STALG.)
Local yellowish staining (.STALY.)
Local yellowish-orange staining (.STALYO.)

ALTERATION HISTORY

AGE OF ALTERATION (.AAL.)

AGE OF ALTERATION UNKNOWN	(.AALU.)
AGE OF ALTERATION KNOWN	(.AALK.)
age certain	(.AALKC.)
age likely but not certain	(.AALKL.)
age questionable	(.AALKQ.)
alteration Cenozoic	(.ACZO.)
alteration Neogene	(-ANGN-)
alteration Paleogene	(-APGN-)
alteration Quaternary	(.ACZOQ.)
alteration Holocene	(.ACZOQH.)
alteration Modern	(.ACZOQHD.)
alteration Holocene, late	(.ACZOQHL.)
alteration Holocene, middle	(.ACZOQHM.)
alteration Holocene, early	(.ACZOQHE.)
alteration Pleistocene	(.ACZOQP.)
alteration Pleistocene, late	(.ACZOQPL.)
alteration Pleistocene, middle	(.ACZOQPM.)
alteration Pleistocene, early	(.ACZOQPE.)
alteration Tertiary	(.ACZOT.)
alteration Mesozoic, late	(-ACZOL-)
alteration Mesozoic, middle	(-ACZOM-)
alteration Mesozoic, early	(-ACZOE-)
alteration Pliocene	(.ACZOTP.)
alteration Pliocene, late	(.ACZOTPL.)
alteration Pliocene, early	(.ACZOTPE.)
alteration Miocene	(.ACZOTM.)
alteration Miocene, late	(.ACZOTML.)
alteration Miocene, middle	(.ACZOTMM.)
alteration Miocene, early	(.ACZOTME.)
alteration Oligocene	(.ACZOTO.)
alteration Oligocene, late	(.ACZOTOL.)
alteration Oligocene, early	(.ACZOTOE.)
alteration Eocene	(.ACZOTE.)
alteration Eocene, late	(.ACZOTEL.)
alteration Eocene, middle	(.ACZOTEM.)
alteration Eocene, early	(.ACZOTEE.)
alteration Paleocene	(.ACZOTA.)
alteration Paleocene, late	(.ACZOTAL.)
alteration Paleocene, early	(.ACZOTAE.)
alteration Mesozoic	(.AMZO.)
alteration Mesozoic, late	(-AMZOL-)
alteration Mesozoic, middle	(-AMZOM-)
alteration Mesozoic, early	(-AMZOE-)
alteration Cretaceous	(.AMZOK.)
alteration Cretaceous, late	(.AMZOKL.)
alteration Cretaceous, early	(.AMZOKE.)
alteration Jurassic	(.AMZOJ.)
alteration Jurassic, late	(.AMZOJL.)
alteration Jurassic, early	(.AMZOJE.)
alteration Triassic	(.AMZOT.)
alteration Triassic, late	(.AMZOTL.)
alteration Triassic, early	(.AMZOTE.)
alteration Paleozoic	(.APZO.)
alteration Paleozoic, late	(-APZOL-)
alteration Paleozoic, middle	(-APZOM-)
alteration Paleozoic, early	(-APZOE-)
alteration Permian	(.APZOR.)
alteration Permian, late	(.APZORL.)
alteration Permian early	(.APZORE.)
alteration Pennsylvanian	(.APZOP.)
alteration Pennsylvanian, late	(.APZOPL.)
alteration Pennsylvanian, early	(.APZOPE.)
alteration Mississippian	(.APZOM.)
alteration Mississippian, late	(.APZOML.)
alteration Mississippian, early	(.APZOME.)
alteration Devonian	(.APZOD.)
alteration Devonian, late	(.APZODL.)
alteration Devonian, early	(.APZODE.)
alteration Silurian	(.APZOS.)
alteration Silurian, late	(.APZOSL.)
alteration Silurian, early	(.APZOSE.)
alteration Ordovician	(.APZOO.)
alteration Ordovician, late	(.APZOOL.)
alteration Ordovician, early	(.APZOOE.)
alteration Cambrian	(.APZOC.)
alteration Cambrian, late	(.APZOCL.)
alteration Cambrian, early	(.APZOCE.)
alteration Precambrian	(.APRC.)
alteration Proterozoic	(.APRCP.)
alteration Proterozoic, late	(.APRCPL.)
alteration Proterozoic, middle	(.APRCPM.)
alteration Proterozoic, early	(.APRCPE.)
alteration Archean	(.APRCA.)
alteration Archean, late	(.APRCAL.)
alteration Archean, middle	(.APRCAM.)
alteration Archean, early	(.APRCAE.)

UPPER LIMITING ALTERATION AGE DETERMINED (.AALLU.)

alteration pre-Modern	(.AALLUD.)
alteration pre-late Holocene	(.AALLULH.)
alteration pre-middle Holocene	(.AALLUMH.)
alteration pre-Holocene	(.AALLUH.)
alteration pre-late Pleistocene	(.AALLUHLP.)
alteration pre-middle Pleistocene	(.AALLUHMP.)
alteration pre-Quaternary	(.AALLUQ.)
alteration pre-late Pliocene	(.AALLUQLP.)
alteration pre-Pliocene	(.AALLUQP.)
alteration pre- late Miocene	(.AALLUQPML.)
alteration pre-middle Miocene	(.AALLUQPMM.)
alteration pre-Miocene	(.AALLUQM.)
deformation pre-late Oligocene	(.AALLUQMLO.)
alteration pre-Oligocene	(.AALLUQO.)
alteration pre- late Eocene	(.AALLUQOLE.)
alteration pre-middle Eocene	(.AALLUQOME.)
alteration pre-Eocene	(.AALLUQE.)
alteration pre-late Paleocene	(.AALLUQELA.)
alteration pre-Cenozoic	(.AALLUC.)
alteration pre-late Cretaceous	(.AALLUCLK.)
alteration pre-Cretaceous	(.AALLUCK.)
alteration pre-late Jurassic	(.AALLUCKLJ.)
alteration pre-Jurassic	(.AALLUCJ.)
alteration pre-late Triassic	(.AALLUCJLT.)
alteration pre-Mesozoic	(.AALLUM.)
alteration pre-late Permian	(.AALLUMLR.)
alteration pre-Permian	(.AALLUMR.)
alteration pre-late Pennsylvanian	(.AALLUMRLP.)
alteration pre-Pennsylvanian	(.AALLUMP.)
alteration pre-late Mississippian	(.AALLUMPLM.)
alteration pre-Mississippian	(.AALLUMM.)
alteration pre-late Devonian	(.AALLUMMLD.)
alteration pre-Devonian	(.AALLUMD.)
alteration pre-late Silurian	(.AALLUMDLD.)
alteration pre-Silurian	(.AALLUMS.)
alteration pre-late Ordovician	(.AALLUMSLO.)
alteration pre-Ordovician	(.AALLUMO.)
alteration pre-late Cambrian	(.AALLUMOLC.)
alteration pre-Paleozoic	(.AALLUP.)
alteration pre-late Proterozoic	(.AALLUPLP.)
alteration pre-middle Proterozoic	(.AALLUPMP.)
alteration pre-Proterozoic	(.AALLUR.)

CONTINUE ALTERATION HISTORY ON p. B-29

ALTERATION HISTORY (continued from p. B-28)

LOWER LIMITING ALTERATION AGE DETERMINED (.AALLL.)

alteration post-middle Holocene	(.AALLLTPMH.)	alteration post-Jurassic	(.AALLLPJ.)
alteration post-early Holocene	(.AALLLTPEH.)	alteration post-early Jurassic	(.AALLLPTEJ.)
alteration post-Pleistocene	(.AALLLTP.)	alteration post-Triassic	(.AALLLPT.)
alteration post-middle Pleistocene	(.AALLLTMP.)	alteration post-early Triassic	(.AALLLPET.)
alteration post-early Pleistocene	(.AALLLTEP.)	alteration post-Paleozoic	(.AALLLP.)
alteration post-Tertiary	(.AALLLT.)	alteration post-early Permian	(.AALLLRPER.)
alteration post-early Pliocene	(.AALLLMMEP.)	alteration post-Pennsylvanian	(.AALLLRP.)
alteration post-Miocene	(.AALLLMM.)	alteration post-early Pennsylvanian	(.AALLLRMEP.)
alteration post- middle Miocene	(.AALLLMOMM.)	alteration post-Mississippian	(.AALLLRM.)
alteration post-early Miocene	(.AALLLMOEM.)	alteration post-early Mississippian	(.AALLLRDEM.)
alteration post-Oligocene	(.AALLLMO.)	alteration post-Devonian	(.AALLLRD.)
alteration post-early Oligocene	(.AALLLMEEO.)	alteration post-early Devonian	(.AALLLRSED.)
alteration post-Eocene	(.AALLLME.)	alteration post-Silurian	(.AALLLRS.)
alteration post- middle Eocene	(.AALLLMAME.)	alteration post-early Silurian	(.AALLLROES.)
alteration post-early Eocene	(.AALLLMAEO.)	alteration post-Ordovician	(.AALLLRO.)
alteration post-Paleocene	(.AALLLMA.)	alteration post-early Ordovician	(.AALLLRCEO.)
alteration post-early Paleocene	(.AALLLMEA.)	alteration post-Cambrian)	(.AALLLRC.)
alteration post-Mesozoic	(.AALLLM.)	alteration post-early Cambrian	(.AALLLREC.)
alteration post-early Cretaceous	(.AALLLPJEK.)	alteration post-Proterozoic	(.AALLLR.)
		alteration post-middle Proterozoic	(.AALLLAMR.)
		alteration post-early Proterozoic	(.AALLLAER.)
		alteration post-Archean	(.AALLLA.)

MISCELLANEOUS GEOLOGIC ATTRIBUTES

Unmapped rocks in map unit (.URC.)	
Age of unmapped rocks same as mapped unit	(.URCS.)
Igneous	(.URCSI.)
Granitic rock	(.URCSIG.)
monzogranite	(.URCSIGM.)
granodiorite	(.URCSIGG.)
Dioritic rock	(.URCSID.)
Metamorphic	(.URCSM.)
Metasedimentary	(.URCSMS.)
marble	(.URCSMSM.)
metaquartzite	(.URCSMSQ.)
schist	(.URCSMSS.)
Metaigneous	(.URCSMI.)
amphibolite	(.URCSMIA.)
metavolcanic	(.URCSMIV.)
greenstone	(.URCSMIVG.)
Strain-dominated rock	(.URCSD.)
cataclastic rock	(.URCSDC.)
mylonitic rock	(.URCSDM.)
sheared rock	(.URCSDS.)
Older included rocks	(.URCO.)
Undifferentiated country rock	(.URCOC.)
Igneous	(.URCOI.)
Granitic rock	(.URCOIG.)
Lowe pluton	(.URCOIGL.)
monzogranite	(.URCOIGM.)
granodiorite	(.URCOIGG.)
Dioritic rock	(.URCOID.)
Metamorphic	(.URCOM.)
Metasedimentary	(.URCOMS.)
marble	(.URCOMSM.)
metaquartzite	(.URCOMSQ.)
schist	(.URCOMSS.)
Metaigneous	(.URCOMI.)
amphibolite	(.URCOMIA.)
Strain-dominated rock	(.URCOD.)
cataclastic rock	(.URCODC.)
mylonitic rock	(.URCODM.)
sheared rock	(.URCODS.)
Younger included rocks	(.URCY.)
Igneous rock	(.URCYI.)
Aplite dikes	(.URCYIA.)
Basalt dikes	(.URCYIB.)
Dioritic rock	(.URCYID.)
Granitic rock	(.URCYIG.)
monzogranite	(.URCYIGM.)
granodiorite	(.URCYIGG.)
Sedimentary rock	(.URCYS.)
Strain-dominated rock	(.URCYD.)
cataclastic rock	(.URCYDC.)
mylonitic rock	(.URCYDM.)
sheared rock	(.URCYDS.)