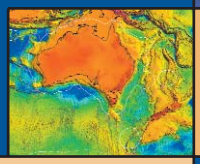
Geoscience Data DICTIONARY

*Data Structure and Definitions for **Spatial Data***



Module 3 of 4

Mineral Deposits, Mineral Potential Assessment, Survey and Field Observations Themes

Australian Government
Geoscience Australia

Module - 3 of 4

Mineral Deposits, Mineral Potential Assessment, Survey and Field Observation Themes

Geoscience Australia

Data Dictionary for Spatial Data

Version 2004.02

Australian Government

Geoscience Australia

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Introduction & Document Structure

A data dictionary is a description of fields for each feature type in a database. The Geoscience Australia Data Dictionary for Spatiial Data contains a description of all the themes currently created from GA's databases. A theme is a set of spatial objects. Some of the themes in this data dictionary have associated look-up tables. Look-up tables store an additional array of attributes that may be linked to the primary attribute table of a theme. Object type, feature definition, field type, attribute case, compulsion for data entry, a list of valid values and any rules or comments regarding the feature are also given in this data dictionary.

Data Dictionary Modules	
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Maintenance

This document is subject to periodic updates. Requests to include new themes and/or attributes into the data dictionary should be submitted to the DMQ Team Leader **by e-mailing to *dataqc@ga.gov.au*** . Please consult the work instruction below before making requests.

Click here for "Instructions for updating the Data Dictionary"

How to read this Data Dictionary

Name *The verbal name of the theme*

Name *The name of the digital theme*
Description *A short description of the type of data in this theme*
Type *Whether the theme is a point, line, polygon, region, point/line or polygon/line theme*
Linked table *Any linked look-up tables for this theme are listed here*
Linked table *The name of any linked theme*

Note *Any special notes relating to the theme*

Object	Feature Class	Feature	Feature Definition	Attributes
Whether the feature class is polygon, arc (line), or point	*The name of the feature class*	*The attribute value for the feature field*	*The definition of the feature*	*The list of fields applying to the feature*

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Wheteher the field is applying to a polygon, arc (line) or point	*The name of the field*	*The type of field and its width*	*The case for char fields - upper, lower or mixed*	*Whether it is compulsory to have entries in this field*	*The list of valid attribute values*	*A description of the meaning of the field*	*Any rules applying to the use of this field, or any comments about the field*

Mineral Deposits and Mineral Potential Assessment Themes

OZMIN mineral deposits – OZMIN Last_updated: xx/xx/xxxx

Name OZMIN
Description Mineral deposits from the OZMIN database
Type Point coverage
Linked tables OZMIN.COM, OZMIN.EXT, OZMIN.LTH and OZMIN.MIN

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Mineral deposit	OZMIN	Description of mineral deposits	feature, ufi, siteno, deposno, name, synonyms, fieldcheck, exposed, age, agemethod, comments

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	OZMIN	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	siteno	7,7,I	n/a	Yes		**Link to SITES coverage**	Unique site identifier from the OZROX database
	deposno	5,5,I	n/a	Yes		**Link to OZMIN look-up tables**	Unique deposit number from the OZMIN database
	name	80,80,C	mixed	No		Preferred name of a mineral occurrence or deposit	'Unnamed' used when no name is known
	synonyms	80,80,C	mixed	No		Alternative names for the occurrence/deposit	
	fieldcheck	1,1,C	upper	No	Y, N	Indicates whether the compiled data has been validated by field checking	
	exposed	1,1,C	upper	No	Y, N	Indicates whether the occurrence/deposit is exposed at the surface	
	age	32,32,C	mixed	No	Valid relative ages from the GEODX.GEOTIME authority table	The relative age of mineralisation e.g. *Paleo-Proterozoic*	
	agemethod	8,8,C	mixed	No	K-Ar, Ar-Ar, Rb-Sr, Sm-Nd, U-Pb, SHRIMP	The geochronological method used to determine the preferred age of mineralisation	
	comments	254,254,C	mixed	No		Any additional information i.e. absolute ages e.g. *320 Ma*	

Name OZMIN.COM
Description Commodity information for mineral deposits
Type Look-up table
Linked theme OZMIN coverage

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	deposno	5,5,I	n/a	Yes		**Link to OZMIN coverage**	Unique deposit number from the OZMIN database
	commodity	4,4,C	mixed	Yes	OZMIN.COMMODTYPES authority table	Commodity from a mineral deposit	
	production	10,10,I	n/a	No		Production of a given commmodity from a deposit	
	produnit	1,1,C	lower	No	t, g, c i.e. tonnes, grammes, carats	Units in which the production figure is quoted	
	year	4,4,I	n/a	No		Year production figures compiled	
	resources	12,12,I	n/a	No		Resources of a deposit	
	grade	7,7,N,2	n/a	No		Grade of the resources figure	
	gradeunit	1,1,C	upper	No	P, G, C i.e. percent, g/t, carats/t	Units in which the resources grade is quoted	
	totcommod	14,14,I	n/a	No		Total metal content of production and resources for a deposit	
	totunit	1,1,C	lower	No	t, g, c i.e. tonnes, grammes, carats	Units in which the total commodity figure is quoted	
	comments	64,64,C	mixed	No		Any additional commodity information	

Name OZMIN.EXT
Description Extended mineral deposit attributes
Type Look-up table
Linked theme OZMIN coverage

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	deposno	5,5,I	n/a	Yes		**Link to OZMIN coverage**	Unique deposit number from the OZMIN database
	attribute	32,32,C	lower	Yes	OZMIN.DEPOSATTRIBS authority table	Extendable attributes for mineral occurrence/deposit	
	value	32,32,C	lower	Yes	OZMIN.DEPOSATTRIBS authority table	Value describing an extended attribute	
	descript	64,64,C	mixed	No		Additional descriptive information relating to attribute/value	

Name OZMIN.LTH
Description Host rock descriptions from mineral deposits
Type Look-up table
Linked theme OZMIN coverage

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	deposno	5,5,I	n/a	Yes		**Link to OZMIN coverage**	Non-unique number that links to a unique deposit number from the OZMIN database
	regrockno	5,5,I	n/a	Yes		**Link to OZMIN.MIN lookup table**	Unique regrockno number from the OZMIN database
	qualifier	32,32,C	lower	No		A qualifying term, if any, before the lithology name field that follows	
	lithname	32,32,C	lower	No		Lithology name	
	descript	64,64,C	mixed	No		Description of the lithology	
	stratno	5,5,I	n/a	No	GEODX.STRATNAMES authority table	Stratigraphic index number	Must be unique for all rock units across Australia. Non-compulsory for Cainozoic units
	unitname	64,64,C	mixed	No	GEODX.STRATNAMES authority table	Registered stratigraphic name of the rock unit	Non-compulsory for Cainozoic units
	informal	64,64,C	mixed	No		An informal stratigraphic name used in the absence of a registered stratigraphic name	
	metamage	24,24,C	mixed	No	GEODX.GEOTIME authority table	Age of metamorphism, if any	
	metagrade	32,32,C	lower	No	OZMIN.REGATTRIBS authority table	Grade of metamorphism, if any	
	comments	64,64,C	mixed	No		Any additional information relevant to the metamorphism of the host rocks	

Name OZMIN.MIN
Description Primary and alteration mineralogy of mineral deposit host rocks
Type Look-up table
Linked table OZMIN.LTH look-up table

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	regrockno	5,5,I	n/a	Yes		**Link to OZMIN.LTH lookup table**	Unique regrockno number from the OZMIN database
	attribute	32,32,C	mixed	Yes	OZMIN.REGATTRIBMINS authority table	Extendable attributes for host rock lithology	
	value	32,32,C	lower	Yes	OZMIN.REGATTRIBMINS authority table	Value describing mineralogy	
	descript	64,64,C	mixed	No		Additional descriptive information relating to mineralogy	

Mineral deposits including historical data – DEPOSIT Last_updated: xx/xx/xxxx

Name DEPOSIT
Description Mineral deposits and costeans
Type Point coverage
Linked table DEPOSIT.COM

Object	Feature Class	Feature	Feature Definition	Attributes
Arc	Mineral deposit	COSTEAN	Costean or trench	feature, ufi, feat_code, descript, deposno, name, synonyms, comments, plotrank
Point	Mineral deposit	DEPOSIT	Description of mineral deposits	feature, ufi, feat_code, descript, deposno, name, synonyms, comments, plotrank

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Arc	feature	12,12,C	upper	Yes	COSTEAN	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	feat_code	8,8,I	n/a	Yes		An identification code assigned to the feature	
	descript	100,100,C	mixed	Yes	FEATCODE authority table	A description of the feature	
	deposno	5,5,I	n/a	Yes		Costean number	
	name	80,80,C	mixed	No		Preferred name of a costean	'Unnamed' used when name is not known
	synonyms	80,80,C	mixed	No		Alternative names for the costean	
	comments	254,254,C	mixed	No		Any additional information	
	plotrank	1,1,I	n/a	Yes	1, 2	A field used to discriminate plotting (1) from non-plotting (2) features	
Point	feature	12,12,C	upper	Yes	DEPOSIT	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	feat_code	8,8,I	n/a	Yes		An identification code assigned to the feature	
	descript	100,100,C	mixed	Yes	FEATCODE authority table	A description of the feature	
	deposno	5,5,I	n/a	Yes		Deposit number	
	name	80,80,C	mixed	No		Preferred name of a mineral occurrence or deposit	'Unnamed' used when name is not known
	synonyms	80,80,C	mixed	No		Alternative names for the occurrence/deposit	
	comments	254,254,C	mixed	No		Any additional information	
	plotrank	1,1,I	n/a	Yes	1, 2	A field used to discriminate plotting (1) from non-plotting (2) features	

Name DEPOSIT.COM
Description Commodity information for mineral deposits
Type Look-up table
Linked theme DEPOSIT coverage

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	deposno	5,5,I	n/a	Yes		**Link to DEPOSIT coverage**	Unique deposit number for the study area
	commodity	4,4,C	mixed	Yes	OZMIN.COMMODTYPES authority table	Commodity from a mineral deposit	

Mineral localities – MINLOC Last_updated: xx/xx/xxxx

Name MINLOC
Description Locations of the mineral occurrences and deposits
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Mineral localities	MINLOC	Description of mineral localities	feature, ufi, minlocno, name, commods, commdnames, class, accuracy, loc_method, source

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	MINLOC	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	minlocno	6,6,I	n/a	Yes		Unique mineral locality number	
	name	80,80,C	upper	Yes		Preferred name of the mineral locality	'UNNAMED' used when no name is known
	commods	100,100,C	upper	No		Abbreviations of the commodities associated with the mineral locality	
	commdnames	254,254,C	upper	No		Full names of commodities associated with the mineral locality	
	class	80,80,C	upper	No		Description of the type and workings of the mineral deposit	
	accuracy	6,6,I	mixed	No		Estimated positional accuracy of the site	
	loc_method	64,64,C	upper	Yes		A method used to determine position of the site	
	source	254,254,C	upper	No		Sources of information about the mineral deposit	

Open cut mines and quarries – MINES Last_updated: xx/xx/xxxx

Name MINES
Description Open cut mines and quarries
Type Polygon coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Polygon	Mine area	MINE	Open cut mine, quarry or other surface expression related to extraction of mineral resources	feature, ufi, feat_code, descript, name, commodity, plotrank
Arc	Mine boundary	MINE_BDY	The boundary of the open cut mine or quarry	feature, ufi
	Frame	FRAME	The edge of the tile or study area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Polygon	feature	12,12,C	upper	Yes	MINE	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO - 1 when the coverage is complete
	feat_code	8,8,I	n/a	Yes	FEATCODE authority table	An identification code assigned to the feature	
	descript	100,100,C	mixed	Yes	FEATCODE authority table	A description of the feature	
	name	80,80,C	upper	No		Preferred name of the mine or quarry e.g. *GOLD PEAK*	
	commodity	100,100,C	upper	No		Commodities associated with the mine or quarry	Commodity values are listed in the most significant order, otherwise in alphabetical order, separated by a comma
	plotrank	1,1,I	n/a	Yes	1, 2	A field used to discriminate plotting (1) from non-plotting (2) features	
Arc	feature	12,12,C	upper	Yes	MINE_BDY, FRAME	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete

Petroleum wells – WELLS Last_updated: xx/xx/xxxx

Name WELLS
Description Petroleum well data
Type Point coverage

Note See PEDIN well dataguide on AGSO's web page for further details about the attribute fields.

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Well	WELL	A petroleum well	feature, ufi, feat_code, descript, uno, well, operator, legsln, jurisdiction, well_type, status, class1, class2, td_date, gl/wd, datum, kb/rt, final_td

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	WELL	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	feat_code	8,8,I	n/a	Yes	FEATCODE authority table	An identification code assigned to the feature as specified in the FEATCODE table	
	descript	100,100,C	mixed	Yes	FEATCODE authority table	A description of the feature	
	uno	8,8,C	upper	Yes		A PEDIN identification number which serves to link to data in Oracle tables which are related to a particular well	A valid UNO must be unique for each well and be in the following format from left to right : Character 1 may be W for well W..... Character 2 indicates the STATE, eg. W3..... 0 for mixed 2 for ACT, NSW 3 for Vic 4 for Qld 5 for SA 6 for WA 7 for Tas 8 for NT 9 for outside Australia, including ZOC 1 for miscellaneous and synonym well names Characters 3 and 4 indicate the year spudded, eg. W385.... Characters 5 to 8 are a 4-digit sequential number W3850004 (starting at 0001 for first well recorded in a state for a given year)

	well	30,30,C	mixed	Yes		The name and number of the well. The Well Name must be unique. **Information about Sidetracked, Directional (deviated) and Relocated Wells** Sidetrack drilling is a remedial operation which results in the creation of a new section of well bore for the purpose of (1) detouring around junk, (2) redrillling lost hole, or (3) straightening key seats and crooked holes. As of 1992, **sidetracked holes** falling under the above definition will continue to be called by the original well name. A directional (deviated) well is a well purposely deviated from the vertical using controlled angles to reach an objective location other than one directly below the surface location. A directional well may be the original hole or a directional "sidetracked" hole, which deviates from the original bore at some point below the surface. If there is a common bore from which two or more wells are drilled, the first complete bore from the surface to the original objective is classified and reported as a well drilled. Each of the deviations from the common bore is reported as a separate well. As of 1992, **deviated wells** which deviated to new objectives are designated as DW1, DW2 etc, following the originally named bore, for example: Original well Henry 1 First deviation Henry 1 DW1 Previous to 1992, when a well was sidetracked from a subsurface kick off point, whether for a new objective (deviated) or for remedial operation, a separate entry and UNO were recorded for that well. The sidetrack number was added to the name of the well: Original hole: Cockell 1 Sidetrack hole: Cockell 1 ST 1 Where a hole is **redrilled** after relocation at the surface, a separate entry and UNO is recorded for the original and relocated hole. A relocation letter is added to the name of the well: Original hole: Arunta 1 Redrill: Arunta 1A **Well Name changes** Where a well name changes, the new name is referenced as a separate entry with an UNO beginning with W1, then year spudded and a sequential number starting from 0500. Original name: Lenita 1 W6840007 renamed: Harriet B 1 W1840500	
	operator	60,60,C	mixed	Yes	Must be one of the valid values in the company list in the opertr field in the PEDIN database	The operator of the permit at the time the well was drilled. The operator is usually the company responsible for exploration within the permit area. The operator may be the owner of the permit, or the nominated partner of a consortium owning a permit	
	legsln	4,4,C	upper	Yes, unless there is a null entry in the PEDIN database, in which case a null entry in the GIS layer is acceptable	PSSA, PSLA, STWT, ZOC	The type of legislation, if applicable, governing the title. These are Petroleum Search Subsidy Act (PSSA), Petroleum Submerged Lands Act (PSLA), State Waters – includes wells drilled on islands and within the 3 km limit of the shore (STWT), Zone of Cooperation between Australia and Indonesia (ZOC)	
	jurisdiction	7,7,C	mixed	Yes	ACT, NSW, VIC, TAS, WA, SA, QLD, NT, ZOCA, FIJI, PNG, VANUATU, 9	This category was originally set up to include only states of Australia, it now includes regions such as the Zone of Cooperation and overseas countries	Wells located outside Australian waters are identified by the number '9' for state

	well_type	13,13,C	mixed	Yes	Development, Appraisal, Exploration, Stratigraphic, Water Bore, BMR, Coal Bore, Scout, Methane As per the wtype field in the PEDIN database	WELL_TYPE describes the major objective of the well as it was initially designed. The Well Types definitions are as follows: **Development** - A production well drilled to develop for exploitation of a hydrocarbon accumulation discovered by previous drilling. A development well may have a pre-drill classification of DEV, SRV, or MSC. A development well may have an exploration component in its initial design to test for shallower or deeper pools. If so, this may be specified in the pre-drill classification as SPT or DPT. Note that a well drilled from a platform is usually, but not always, a development well and is directional. **Appraisal** - A well drilled primarily to assess a known or discovered area for development purposes. The pre-drill classification, if it is known, is usually EXT. However, if the well is designed to test for new pools at other stratigraphic horizons the pre-drill classification may be SPT or DPT. **Exploration** - A well drilled to explore and discover new hydrocarbon accumulations or explore the limits of a previously discovered accumulation. The pre-drill classification may be NFW or NPW if the well is testing an unknown area (also known as a WILDCAT well), or EXT if the well is designed to explore the limits of a previously discovered accumulation. Other terminology commonly used for the latter include EXTENSION, STEP OUT, OUTPOST, DELINEATION. **Stratigraphic** - An exploration well, geologically directed, to obtain information pertaining to a specific earth condition that might lead toward a possible accumulation of hydrocarbons. It must be drilled without the intention of being completed for hydrocarbon production. The pre-drill classification is STR. **Water Bore** - A well drill specifically for water or water sampling. **BMR** - A well drilled by the Bureau of Mineral Resources. This category is no longer used; some older data use this terminology. **Coal Bore** - A drillhole for coal exploration. **Scout** - QLD Department of Mines classification. This category no longer used; some older data use this terminology. **Methane** - A well drilled for methane drainage or recovery.	
	status	22,22,C	mixed	Yes	Dry; Gas Well; Gas Suspended; Oil Well; Oil Suspended; Oil and Gas Well; Oil and Gas Suspended; Shut In; Suspended; Proposed	Petroleum status of the well as per PEDIN database (with expanded abbreviations)	Dry is used in the sense of denoting no commercial hydrocarbons at the time of completion of the well and includes most wells classified as "plugged and abandoned". Other well categories, such as Water Well, Gas Injection Well, Observation Well, etc. should have a status of "Dry". Proposed wells are wells which are expected to be drilled. This status changes once the well commences drilling.

	class1	4,4,C	upper	Yes	DEV, SRV, MSC, EXT, SPT, DPT, NFW, NPW, STR	Pre-drill classification based on the AAPG/APEA well classifications and BRS/AGSO conventions. The class definitions are as follows: **DEVELOPMENT WELL (DEV)** - A well drilled to exploit a hydrocarbon accumulation discovered by previous drilling. **SERVICE WELL (SRV)** - A well that is either drilled or completed for the purpose of supporting production of an existing field through observation, injection, water supply, etc. **MISCELLANEOUS (MSC)** - Any test drilled that does not fit any of the classifications. Generally this pertains to Development well types, for example, Waste Disposal and Gas Storage tests or wells. **EXTENSION TEST (EXT)** - An extension test is located and drilled with the expectation of extending for a considerable distance the productive area of a partly developed pool. It is usually two or more locations distant from the nearest productive area. Sometimes an extension discovers a new pool. **SHALLOWER POOL TEST (SPT)** - A shallower pool test is exploratory only if drilled in search of some new productive reservoir, unknown but possibly suspected from data secured from other wells. The test must be located within the productive area of a pool, or pools, previously developed. Sometimes such a test extends a shallower pool partly developed elsewhere in the same field. **DEEPER POOL TEST (DPT)** - A deeper pool test is an exploratory hole located within a productive area of a pool, or pools, already partly or wholly developed. It is drilled below the deepest such pool penetrated by it in order to explore for deeper unknown prospects. Sometimes such a hole extends a deeper pool which has been partly developed in another part of the field. **NEW FIELD WILDCAT (NFW)** - A new field wildcat is located far from producing pools, and on a structure which has not produced before. In regions where local structure has little or no control on accumulation, these holes are generally at least two miles from the nearest productive area. Distance, however, is not the determining factor. The classification is based on the degree of risk assumed be the operator, and his intention to test a structure or stratigraphic condition not previously proven productive. **NEW POOL WILDCAT (NPW)** - A new pool wildcat is located to explore for new pools on a structure already producing, but off to one side of the presently producing area. In some regions where local structure is almost negligible as a control, exploration holes of this group may be called "near wildcat". Such will usually be less than two miles from the nearest productive area. Sometimes a new pool wildcat may extend a pool already partly developed; if so its final classification is an "Extension". **STRATIGRAPHIC TEST (STR)** - A drilling effort, geologically directed, to obtain information pertaining to a specific earth condition that might lead toward a possible accumulation of hydrocarbons. It must be drilled without the intention of being completed for hydrocarbon production. This classification includes tests identified as "core test" by some operators. **SHALLOW POOL DISCOVERY (SPD)** - A well that results in the discovery, as defined below, of a shallower pool as described in SHALLOWER POOL TEST. **DEEPER POOL DISCOVERY (DPD)** - A well that results in the discovery, as defined below, of a deeper pool as described in DEEPER POOL TEST. **NEW FIELD DISCOVERY (NFD)** - A well that results in the discovery, as defined below, of a new field as described under NEW FIELD WILDCAT. **NEW POOL DISCOVERY (NPD)** - A well that results in the discovery, as defined below, of a new pool as described under NEW POOL WILDCAT. Definition of **DISCOVERY** A discovery is defined here as a well from which any discrete and measurable amount of oil or gas is recovered from a previously unknown accumulation; no consideration of commerciality is implied. This definition has been in use since 1987. Discoveries prior to that date may be classified according to other criteria.	
	class2	4,4,C	upper	Yes	DEV, SRV, MSC, EXT, SPD, DPD, NFD, NPD, STR, SPT, DPT, NPW	Post-drill classification based on the AAPG/APEA well classifications and BRS/AGSO conventions	See the definitions given above
	td_date	8,10,D	n/a	Yes		Date drilling reached total depth	
	gl/wd	7,7,N,2	n/a	Yes		The elevation of the ground level or the sea floor (water depth), with respect to mean sea level (msl), in metres	The elevation of the seafloor should always be negative (- water depth). Decimal points may be used

	datum	4,4,N,2	n/a	Yes		The elevation of the datum, in metres with respect to sea level	This is generally 3 to 30 m above sea level (off shore) or the ground level (on shore)
	kb/rt	2,2,C	upper	Yes	KB, RT, DF	The type of datum as Kelly Bushing (KB), Rotary Table (RT) or Derrick Floor (DF)	
	final_td	7,7,N,2	n/a	Yes		The total depth in metres as measured by the drill string, with respect to the datum	

Mineral exploration and mining titles – MINRTLE Last_updated: xx/xx/xxxx

Name MINRTLE
Description Exploration and mining titles. This coverage is designed to accommodate data sourced from various State Mines Departments via ENCOM.
INTERNAL USE ONLY
Type Region coverage as REGION.MINRTLE. Topologically degraded to a polygon coverage with look-up table for MapInfo.
Linked table MINRTLE.LUT

Object	Feature Class	Feature	Feature Definition	Attributes
Region	Mineral title	MIN_TITLE	An area which is or was a subject to minerals title - it covers all types of authorities, permits, licences and leases throughout Australia, regardless of the specific names given to them by the various States and Territories	feature, ufi, name, jurisdict, type, blocks, apply_date, award_date, expirydate, status, commodity, operator
Arc	Title boundary	TITLE_BDY	Boundary of the title area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Region	feature	12,12,C	upper	Yes	MIN_TITLE	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO - 1 when the coverage is complete
	name	20,20,C	upper	Yes		Name of the licence	
	jurisdict	3,3,C	upper	Yes	QLD, NSW, VIC, TAS, SA, WA, NT	Jurisdiction that issued the title, State or Territory	
	type	12,12,C	mixed	Yes	Exploration, Mining	Type of the licence	
	blocks	5,5,I	n/a	Yes		Number of 5-minute blocks in the title	
	apply_date	8,10,D	n/a	No		Date when application for the title was made	
	award_date	8,10,D	n/a	No		Date when the title was awarded	
	expirydate	8,10,D	n/a	Yes		Date when the title expires or is due to expire	
	status	16,16,C	mixed	No	Application, Granted, Moratorium	Indication of the title status	
	commodity	16,16,C	upper	No		The primary commodities or commodity class e.g. *AU, AG, METALLIC, INDUSTRIAL*	Commodities separated by commas with no spaces allowed e.g. *AU,AG,PB,ZN*
	operator	40,40,C	mixed	Yes		The title operator	Use 'Unknown' if not known
Arc	feature	12,12,C	upper	Yes	TITLE_BDY	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete

Name MINRTLE.LUT
Description Company equities in particular licences
Type Lookup table
Linked theme MINRTLE coverage

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	name	30,30,C	n/a	Yes		**Link to MINRTLE.PAT**	
	company	40,40,C	mixed	Yes		Company name	
	equity	5,5,N,1	n/a	Yes	A decimal number between 0 and 100	Equity in the licence as a percentage	

Petroleum exploration and development titles – PETRTLE Last_updated: xx/xx/xxxx

Name PETRTLE
Description Petroleum titles, including acreage release tenements, granted by Petroleum Division of ISR (offshore) and the relevant State Mines Departmens (onshore and state waters)
INTERNAL USE ONLY
Type Region coverage as REGION.PETRTLE. Topologically degraded to a polygon coverage with look-up table for MapInfo.
Linked table PETRTLE.LUT

Object	Feature Class	Feature	Feature Definition	Attributes
Region	Petroleum title	PETRO_TITLE	An area which is or was a subject to petroleum title - it covers all types of authorities, permits, licences and leases throughout Australia, regardless of the specific names given to them by the various States and Territories	feature, ufi, name, jurisdict, on_or_off, type, blocks, apply_date, award_date, expirydate, status, operator
Arc	Title boundary	TITLE_BDY	Boundary of the title area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Region	feature	12,12,C	upper	Yes	PETRO_TITLE	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO - 1 when the coverage is complete
	name	50,50,C	upper	Yes		Name of the title	
	jurisdict	6,6,C	upper	Yes	QLD, NSW, VIC, TAS, SA, WA, NT, TACIAA, TGZC	Jurisdiction that issued the title - State or Territory, the Territory of the Ashmore and Cartier Islands Adjacent Area (TACIAA), or Timor Gap Zone of Cooperation (TGZC)	
	on_or_off	8,8,C	mixed	No	Onshore, Offshore	Indication of onshore or offshore title	
	type	12,12,C	mixed	Yes	Exploration, Retention, Production, Release	A type of the title	'Retention' is applicable only to 'Offshore' titles
	blocks	5,5,I	n/a	Yes		Number of 5-minute blocks in the title	
	apply_date	8,10,D	n/a	No		Date when application for the title was made	
	award_date	8,10,D	n/a	No		Date when the title was awarded	
	expirydate	8,10,D	n/a	Yes		Date when the title expires or is due to expire	
	status	16,16,C	mixed	No	Application, Granted, Renewal Pending	Indication of the title status	
	operator	40,40,C	mixed	Yes		The operator of the title	Use 'Unknown' if not known
Arc	feature	12,12,C	upper	Yes	TITLE_BDY	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete

Name PETRTLE.LUT
Description Company equities in particular titles
Type Lookup table
Linked theme PETRTLE coverage

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	name	30,30,C	n/a	Yes		**Link to PETRTLE.PAT**	
	company	40,40,C	mixed	Yes		Company name	
	equity	5,5,N,1	n/a	Yes	A decimal number between 0 and 100	Equity in the title as a percentage	

Mineral deposit tracts – MOD*nn*X Last_updated: xx/xx/xxxx

Name MOD*nnX (e.g. MOD36A)*
Description Mineral potential tracts for a single deposit model type
Type Polygon coverage

Note Suffix *nnX* is used to denote the deposit model number *nn* and the variation *X* (e.g. 36A which is the Slate Belt Gold model of Cox and Singer, 1986)

Object	Feature Class	Feature	Feature Definition	Attributes
Polygon	Tract unit	TRACT_UNIT	An area of land with a uniform mineral potential and certainty level	feature, ufi, modnnx_pot, modnnx_cert
	Tract void	TRACT_VOID	An area of land where the mineral potential is undefined	feature, ufi, modnnx_pot, modnnx_cert
Arc	Tract boundary	TRACT_BDY	The boundary line between mineral potential tracts	feature, ufi
	Frame	FRAME	The edge of the study area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Polygon	feature	12,12,C	upper	Yes	TRACT_UNIT, TRACT_VOID	Feature type	Tract void is used where the tract unit is undefined e.g. for a lake
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO - 1 when the coverage is complete
	modnnx_pot	2,2,I	n/a	Yes	-1, 0, 1, 2, 6, 12, 18	Indicates mineral potential value -1 Unknown 0 No potential 1 Low 2 Low to Moderate 6 Moderate 12 Moderate to High 18 High	For all tract voids modnnx_pot is always -1
	modnnx_cert	1,1,C	upper	Yes	A, B, C, D	Indicates certainty or confidence in assessment A Unknown B Low C Moderate D High	For all tract voids modnnx_pot is always 'A'
Arc	feature	12,12,C	upper	Yes	TRACT_BDY, FRAME	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete

Mineral potential (combined) – MINPOT Last_updated: xx/xx/xxxx

Name MINPOT
Description Mineral potential coverages for composite AND cumulative methods
Type Polygon coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Polygon	Tract unit	TRACT_UNIT	An area of land with a uniform mineral potential and certainty level	feature, ufi, modnnx, comp, cumu
	Tract void	TRACT_VOID	An area of land where the mineral potential is undefined	feature, ufi, modnnx, comp, cumu
Arc	Tract boundary	TRACT_BDY	The boundary line between mineral potential tracts	feature, ufi
	Frame	FRAME	The edge of the study area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Polygon	feature	12,12,C	upper	Yes	TRACT_UNIT, TRACT_VOID	Feature type	Tract void is used where the tract unit is undefined e.g. for a lake
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO - 1 when the coverage is complete
	modnnx	2,2,I	n/a	Yes	0, 1, 2, 6, 12, 18	Indicates mineral potential value, one (1) column for each model used 0 Unknown or No potential 1 Low 2 Low to Moderate 6 Moderate 12 Moderate to High 18 High	There will be as many columns as models used in the mathematical modelling
	comp	3,3,I	n/a	Yes	0, 1, 2, 6, 12, 18	Indicates composite mineral potential (selected as largest value from overlapping polygons) 0 Unknown or No potential 1 Low 2 Low to Moderate 6 Moderate 12 Moderate to High 18 High	
	cumu	3,3,I	n/a	Yes	Between 0 and 999 inclusive	Indicates cumulative or additive mineral potential (adds all values from overlapping polygons)	
Arc	feature	12,12,C	upper	Yes	TRACT_BDY, FRAME	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete

Weighted mineral potential (combined) – WMINPOT Last_updated: xx/xx/xxxx

Name WMINPOT
Description Mineral potential coverages for weighted composite AND weighted cumulative methods
Type Polygon coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Polygon	Tract unit	TRACT_UNIT	An area of land with a uniform mineral potential and certainty level	feature, ufi, modnnx, wcomp, wcumu
	Tract void	TRACT_VOID	An area of land where the mineral potential is undefined	feature, ufi, modnnx, wcomp, wcumu
Arc	Tract boundary	TRACT_BDY	The boundary line between mineral potential tracts	feature, ufi
	Frame	FRAME	The edge of the study area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Polygon	feature	12,12,C	upper	Yes	TRACT_UNIT, TRACT_VOID	Feature type	Tract void is used where the tract unit is undefined e.g. for a lake
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO - 1 when the coverage is complete
	modnnx	2,2,I	n/a	Yes	0, 1, 2, 6, 12, 18	Indicates mineral potential value, one (1) column for each model used 0 Unknown or No potential 1 Low 2 Low to Moderate 6 Moderate 12 Moderate to High 18 High	
	wcomp	3,3,I	n/a	Yes	Between 0 and 999 inclusive	Indicates weighted composite mineral potential	
	wcumu	3,3,I	n/a	Yes	Between 0 and 999 inclusive	Indicates weighted cumulative mineral potential	
Arc	feature	12,12,C	upper	Yes	TRACT_BDY, FRAME	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete

Mineral potential - COMP, WCOMP, CUMU, WCUMU Last_updated: xx/xx/xxxx

Name COMP, WCOMP, CUMU, WCUMU
Description Mineral potential coverages (**Comp**osite, **W**eighted **Comp**osite, **Cumu**lative, **W**eighted **Cumu**lative)
Type Polygon coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Polygon	Mineral potential unit	MINPOT_UNIT	An area of land with a uniform mineral potential value/score	feature, ufi, score
	Mineral potential void	MINPOT_VOID	An area of land where the mineral potential is undefined	feature, ufi, score
Arc	Mineral potential boundary	MINPOT_BDY	The mineral potential boundary line	feature, ufi
	Frame	FRAME	The edge of the study area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Polygon	feature	12,12,C	upper	Yes	MINPOT_UNIT, MINPOT_VOID	Feature type	Mineral potential void is used where the mineral potential unit is undefined e.g. for a lake
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO - 1 when the coverage is complete
	score	3,3,I	n/a	Yes	Between 0 and 999 inclusive	Indicates mineral potential score/value. For COMP it will be one of the values 0, 1, 2, 6, 12 or 18 (see definition for the mineral potential combined). For CUMU, WCOMP, WCUMU the values can be between 0 and 999	
Arc	feature	12,12,C	upper	Yes	MINPOT_BDY, FRAME	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete

Certainty of the mineral potential assessment – COMPCERT, CUMUCERT Last_updated: xx/xx/xxxx

Name COMPCERT, CUMUCERT
Description Mineral Potential Certainty coverages (**Comp**osite **Cert**ainty, **Cumu**lative **Cert**ainty)
Type Polygon coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Polygon	Certainty unit	CERT_UNIT	An area of land with a uniform mineral potential value/score	feature, ufi, score, compcert/cumucert
	Certainty void	CERT_VOID	An area of land where the mineral potential is undefined	feature, ufi, score, compcert/cumucert
Arc	Certainty boundary	CERT_BDY	The mineral potential boundary line	feature, ufi
	Frame	FRAME	The edge of the study area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Polygon	feature	12,12,C	upper	Yes	CERT_UNIT, CERT_VOID	Feature type	Certainty void is used where the certainty unit is undefined e.g. for a lake
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO - 1 when the coverage is complete
	compcert/cumucert	2,2,I	n/a	Yes	Between 1 and 10 inclusive	Indicates composite or cumulative mineral potential certainty. Values increase in certainty from 1 to 10	Use only one of the two field names for the applicable theme
Arc	feature	12,12,C	upper	Yes	CERT_BDY, FRAME	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete

Certainty (combined) of the mineral potential assessment – CERT Last_updated: xx/xx/xxxx

Name CERT
Description Certainty coverages depicting levels of certainty of the mineral potential assessment
Type Polygon coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Polygon	Certainty unit	CERT_UNIT	An area of land with a uniform mineral potential and certainty level	feature, ufi, modnnx_pot, modnnx_cert, compcert, cumucert
	Certainty void	CERT_VOID	An area of land where the mineral potential is undefined	feature, ufi, modnnx_pot, modnnx_cert, compcert, cumucert
Arc	Certainty boundary	CERT_BDY	The boundary line between tracts	feature, ufi
	Frame	FRAME	The edge of the study area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Polygon	feature	12,12,C	upper	Yes	CERT_UNIT, CERT_VOID	Feature type	Certainty void is used where the certainty unit is undefined e.g. for a lake
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO - 1 when the coverage is complete
	modnnx	2,2,I	n/a	Yes	Between 1 and 10 inclusive	Indicates mineral potential certainty value. Values increase in certainty from 1 to 10	There will be as many columns as models used in the mathematical modelling.
	compcert	2,2,I	n/a	Yes	Between 1 and 10 inclusive	Indicates composite mineral potential certainty	
	cumucert	2,2,I	n/a	Yes	Between 1 and 10 inclusive	Indicates cumulative mineral potential certainty	
Arc	feature	12,12,C	upper	Yes	CERT_BDY, FRAME	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete

Surveys and Field Observations Themes

Field sites – SITES Last_updated: xx/xx/xxxx

Name SITES
Description Ground sites location including positional accuracy and lineage information
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Site	SITE	Surface location for field geological, geochemical, drill hole collars and geophysical observations	feature, ufi, orignator, siteid, siteno, fieldid, state, geogarea, locdesc, regname, hmapno, qmapid, accuracy, method, bibref, airphoto, oc, ro, sh, st, pe, rc, oz, om, sc, rt, rp, sp

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	SITE	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	originator	22,22,C	mixed	Yes	NGMA.ORIGINATORS authority table	The person or organisation that collected the data at the site	
	siteid	16,16,C	mixed	Yes		A user-supplied number or ID for the site	Must be unique to the originator. There may be more than one sample collected from each site
	siteno	7,7,I	n/a	Yes		A unique Oracle generated number for the site. **Link to all Oracle coverages**	
	fieldid	16,16,C	upper	No		An alternative number or ID for the site	The fieldid is not necessarily unique
	state	3,3,C	upper	Yes, only if country is Australia	ACT, NSW, QLD, VIC, WA, SA, NT, TAS	An Australian state from where site is located	
	geogarea	64,64,C	mixed	No		Name of the geographic area (valley, plain, mountain range) where the site is	
	locdesc	64,64,C	mixed	No		Additional information relating to the site's location	
	regname	64,64,C	mixed	No		Geological region name in which the site is located	
	hmapno	4,4,I	n/a	Yes		An identifier for the 1:100,000 map sheet-area on which the site falls	
	qmapid	6,6,C	upper	Yes		An identifier for the 1:250,000 map sheet-area on which the site falls	
	accuracy	5,5,I	n/a	Yes		Estimate of absolute accuracy of the given coordinates in metres on the ground	
	method	64,64,C	mixed	Yes	NGMA.LOCMETHODS authority table	The method used to obtain the geographic coordinates of the site	Includes information about the datum
	bibref	9,9,C	mixed	No		An identifier to a reference in the AGSOREFS, AGSO's Bibliographic References Database, which locates or refers to the site	This column is provided principally as a means of recording the lineage or provenance of data that have come from another source
	airphoto	36,36,C	mixed	No		Identifies the airphoto on which the site is located and/or was plotted	The field is for the name of the airphoto series, the run number and the photo number
	oc	1,1,C	upper	No	X	Denotes data present in OUTCROP table	
	ro	1,1,C	upper	No	X	Denotes data present in ROCKS table	
	sh	1,1,C	upper	No	X	Denotes data present in SECTHOLES table	
	st	1,1,C	upper	No	X	Denotes data present in STRUCTURES table	
	pe	1,1,C	upper	No	X	Denotes data present in PETROGRAPHY table	
	rc	1,1,C	upper	No	X	Denotes data present in OZCHEM table	
	oz	1,1,C	upper	No	X	Denotes data present in OZCHRON table	
	om	1,1,C	upper	No	X	Denotes data present in OZMIN table	
	sc	1,1,C	upper	No	X	Denotes data present in STREAMCHEM table	
	rt	1,1,C	upper	No	X	Denotes data present in RTMAP table	
	rp	1,1,C	upper	No	X	Denotes data present in ROCKPROPERTIES table	
	sp	1,1,C	upper	No	X	Denotes data present in SPECPROPS table	

Regolith-landform site descriptions – RTSITES Last_updated: xx/xx/xxxx

Name RTSITES
Description Regolith-landform field site description data
Type Point coverage
Linked tables RTZONES.LUT and RTSITES.LUT

Object	Feature Class	Feature	Feature Definition	Attributes
Point	RTMAP site	RTSITE	A regolith-landform examined at the site	feature, ufi, originator, siteid, siteno, abst, l_desc, exp_desc, z_no, regt_desc, weath_subd, thickness, depth, z_comms, otherinfo, bedrock

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	RTSITE	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	originator	22,22,C	mixed	Yes	NGMA.ORIGINATORS authority table	The person or organisation that collected the data at the site	
	siteid	16,16,C	mixed	Yes		A user-supplied number or ID for the site	Must be unique to the originator. There may be more than one sample collected from each site
	siteno	7,7,I	n/a	Yes		A unique Oracle generated number for the site. **Back-link to RTSITES.LUT look-up table and SITES coverage**	
	abst	254,254,C	mixed	Yes		A summary description of the site, including brief comments about the zones	
	l_desc	30,30,C	lower	Yes	RTMAP.LANDF authority table	Description of the landform at the site	
	exp_desc	30,30,C	lower	Yes	RTMAP.EXPTYPE authority table	Describes the type of exposure from which the site has been described	
	z_no	2,2,I	n/a	Yes		Zone number	
	regt_desc	40,40,C	lower	Yes	RTMAP.REGTYPE authority table	A name of the main regolith type in the zone	
	weath_subd	32,32,C	lower	No	RTMAP.ZONEDATATYPES authority table	Description for the degree of weathering of the regolith type	If a regolith type displays a range of degrees of weathering use only the most dominant
	thickness	6,6,N,2	n/a	No		Average thickness of the zone in metres	Zero (null) indicates that the lover boundary of the zone was not observed
	depth	6,6,N,2	n/a	No		Depth below the ground surface of the lower boundary of the zone in metres	
	z_comms	240,240,C	mixed	No		Comments about the zone	
	otherinfo	240,240,C	mixed	No		Additional information (legacy field)	
	bedrock	1,1,C	upper	No	Y, N	Indicates whether a fresh bedrock is immediately below this zone	Use 'N' if the base of the last described regolith zone cannot be seen

Name RTZONES.LUT
Description Detailed attributes for regolith zones. This table contains information for all zones, not just principal but secondary attributes pertinent to regolith i.e. a regolith-landform unit can contain landforms ranked 1 to 9 and each landform can contain regolith types ranked from 1 to 9. This detailed attributes table can be linked to the theme in GIS packages enabling the use of the 1 to many relationship the RTMAP.UNITS database contains.
Type Look-up table
Linked theme RTSITES

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	siteid	16,16,C	mixed	Yes		A user-supplied number or ID for the site. **Link to RTSITES sites coverage**	Must be unique to the originator. There may be more than one sample collected from each site
	siteno	7,7,I	n/a	Yes		A unique Oracle generated number for the site. **Back-link to SITES coverage**	
	z_no	2,2,I	n/a	Yes		Zone number	
	regt_desc	40,40,C	lower	Yes	RTMAP.REGTYPE authority table	A name of the main regolith type in the zone	
	weath_subd	32,32,C	lower	No	RTMAP.ZONEDATATYPES authority table	Description for the degree of weathering of the regolith type	If a regolith type displays a range of degrees of weathering use only the most dominant
	thickness	6,6,N,2	n/a	No		Average thickness of the zone in metres	Zero (null) indicates that the lover boundary of the zone was not observed
	depth	6,6,N,2	n/a	No		Depth below the ground surface of the lower boundary of the zone in metres	
	z_comms	240,240,C	mixed	No		Comments about the zone	
	otherinfo	240,240,C	mixed	No		Additional information (legacy field)	
	bedrock	1,1,C	upper	No	Y, N	Indicates whether a fresh bedrock is immediately below this zone	Use 'N' if the base of the last described regolith zone cannot be seen

Name RTSITES.LUT
Description Extended attributes table for RTSITES coverage
Type Look-up table
Linked theme RTSITE

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	siteno	7,7,I	n/a	Yes		A unique Oracle generated number for the site. **Back-link to RTSITES and SITES coverage**	
	slope	2,2,I	n/a	No	Between 0 and 90 inclusive	Slope at the site in degrees	
	aspect	3,3,I	n/a	No	Between 0 and 360 inclusive	Aspect of the site in degrees from magnetic north	
	gp_desc1	32,32,C	mixed	No	RTMAP.GPROC authority table	Description of the primary (main) geomorphic processes at the site	
	gp_desc2	32,32,C	mixed	No	RTMAP.GPROC authority table	Description of the secondary geomorphic processes at the site	
	stratno	7,7,I	n/a	No	GEODX.FLATSTRAT authority table	Stratigraphic index number	Must be unique for all rock units across Australia. Non-compulsory for Cainozoic units
	stratname	50,50,C	mixed	No	GEODX.FLATSTRAT authority table	The name of a stratigraphic unit including rank terms that are part of a name	Non-compulsory for Cainozoic units
	rocktype	80,80,C	lower	No	A.LOOKUPS authority table	Identifies the general lithological type	
	qualifier	40,40,C	lower	No	NGMA.LITHNAMES authority table	A qualifying term, if any, before the lithology name field that follows	
	lithname	40,40,C	lower	No	NGMA.LITHNAMES authority table	Lithology name	
	soil	240,240,C	mixed	No		Description of the soil at the site	
	veg	240,240,C	mixed	No		Description of the vegetation characteristics at the site	
	photo	240,240,C	mixed	No		Details of photos taken at the site	
	sketch	1,1,C	upper	No	Y, N	Indicates whether a sketch was made at the site in the field book	

Outcrops – OUTCROP Last_updated: xx/xx/xxxx

Name OUTCROP
Description Outcrop-related data and biostratigraphy
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Outcrop	OUTCROP	Outcrop description as a whole and relationship between lithologies and structures in the outcrop	feature, ufi, siteid, siteno, rockrels, sketch, photo, vegetation, landform

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	OUTCROP	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	siteid	16,16,C	mixed	Yes		A user-supplied number or ID for the site	Must be unique to the originator. There may be more than one sample collected from each site
	siteno	7,7,I	n/a	Yes		A unique Oracle generated number for the site. **Back-link to SITES coverage**	
	rockrels	128,128,C	mixed	No		Description of the rock relations in the outcrop	
	sketch	64,64,C	mixed	No		Notes on any sketches made at the outcrop	
	photo	64,64,C	mixed	No		Notes on any photos taken at the outcrop	
	vegetation	64,64,C	mixed	No		Description of the vegetation at the site of the outcrop	Important for remote sensing database
	landform	64,64,C	mixed	No		Description of the landform at the site of the outcrop	

Rocks – ROCKS Last_updated: 18/08/2004

Name ROCKS
Description Rock samples and lithological data
Type Point coverage
Linked table ROCKS.LUT

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Rock	ROCK	A rock examined at the site or sampled for geochemical, geochronological, or petrographical analysis	feature, ufi, siteid, siteno, rockno, sampleid, stratno, unitname, supergroup, group, subgroup, formation, member, informal, rocktype, qualifier, lithname, grouping, description, otherinfo, age, province, subprovince, domain, map_symb, modeocc, sectholeno

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	ROCK	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	siteid	16,16,C	mixed	Yes		A user-supplied number or ID for the site	Must be unique to the originator. There may be more than one sample collected from each site
	siteno	7,7,I	n/a	Yes		A unique Oracle generated number for the site. **Back-link to SITES coverage**	
	rockno	6,6,I	n/a	Yes		**Link to STRUC and PETROG coverages**	
	sampleid	16,16,C	upper	Yes		A sample ID number. **Link to OZCHRON coverages (e.g. SHRIMP) or RCHEM coverage**	The number must be unique to the originator although it can be identical to the siteno if there is only one sample from a given site
	stratno	7,7,I	n/a	Yes	GEODX.FLATSTRAT authority table	Stratigraphic index number	Must be unique for all rock units across Australia. Non-compulsory for Cainozoic units
	unitname	64,64,C	mixed	Yes	GEODX.FLATSTRAT authority table	The name of a stratigraphic unit including rank terms that are part of a name	Non-compulsory for Cainozoic units
	supergroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	An assemblage of related groups, or of formations and groups, having significant lithological features in common	For granite bodies a supersuite is on the same hierarchy level as a supergroup
	group	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	The formal lithostratigraphic unit which includes two or more contiguous or associated formations with significant lithological features in common	For granite bodies a suite or complex is on the same hierarchy level as a group
	subgroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A formally differentiated assemblage of formations within a group	
	formation	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A body of rock strata which is unified with respect to adjacent strata by consisting dominantly of a certain lithological type or combination of types or by possessing other unifying lithological features	For granite bodies a pluton is on the same hierarchy level as a formation
	member	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A lithostratigraphic unit of subordinate rank comprising some specially developed part of a formation	
	informal	64,64,C	mixed	No		Informal stratigraphic name which is not in AGSO's STRATLEX Oracle table	
	rocktype	80,80,C	lower	No	A.LOOKUPS authority table	Identifies the general lithological type	

	qualifier	60,60,C	mixed	No		A qualifying term, if any, before the lithology name field that follows	It is a concatenation of qualifier, qualifier2 and qualifier3 fields in the ROCKS table
	lithname	32,32,C	lower	No	NGMA.LITHNAMES authority table	Lithology name	
	grouping	50,50,C	mixed	No		User-defined classification used to classify suites of rocks from particular regions into classes other than those suggested by other fields on the form	The values entered here are chosen by the originator and have No global significance
	description	64,64,C	mixed	No		Description of the lithology	If a lithology is sufficiently characterised by the previous fields, then this field can be used for additional descriptive information relating to the lithology
	otherinfo	64,64,C	mixed	No		Any other information that user may feel is relevant	
	age	54,54,C	mixed	No	GEODX.GEOTIME authority table	Geological age	
	province	64,64,C	mixed	No		An extensive region characterized throughout by similar geological history or by similar structural, petrographic, or physiographic features.	
	subprovince	64,64,C	mixed	No		A subset of the province	
	domain	64,64,C	mixed	No			
	map_symb	8,8,C	mixed	No	NGMA.LITHUNITS authority table	Recognised map symbols for lithological units	
	modeocc	32,32,C	lower	No	NGMA.LITHDATATYPES authority table	Mode of occurrence of the sample (xenolith, dyke, sill, pipe)	
	sectholeno	5,5,I	n/a	No		**Link to DHOLE.LTH, DHOLE.STR and DHOLE.SVY look-up tables**	

Name ROCKS.LUT
Description Extended attributes for rocks
Type Look-up table
Linked theme ROCKS

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
	rockno	6,6,I	n/a	Yes	A positive unique sequential integer of up to 6 digits	**Link to ROCKS coverage**	
	typedesc	32,32,C	lower	Yes	NGMA.LITHDATATYPES authority table	Extended attributes describing lithology	
	subdesc	32,32,C	lower	Yes	NGMA.LITHDATATYPES authority table	Value describing extended attributes	
	descript	64,64,C	mixed	No		Additional descriptive information	

Structural measurements – STRUC Last_updated: xx/xx/xxxx

Name STRUC
Description Mesoscopic structures at a site or outcrop
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Structure	STRUCTURE	Structural measurement	feature, ufi, siteid, siteno, strucno, rockno, feat_code, legend, azimuth, inclination, defno, defsurfno, priority, plotrank, rot_angle

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	STRUCTURE	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	siteid	16,16,C	mixed	Yes, except for historical map data capture		A user-supplied number or ID for the site	Must be unique to the originator. There may be more than one sample collected from each site
	siteno	7,7,I	n/a	Yes, except for historical map data capture		A unique Oracle generated number for the site. **Back-link to SITES coverage**	
	strucno	6,6,I	n/a	Yes, except for historical map data capture		Unique structural reading number from Oracle database	
	rockno	6,6,I	n/a	Yes, except for historical map data capture		**Back-link to ROCKS coverage**	
	feat_code	8,8,I	n/a	Yes		An identification code assigned to the feature	
	legend	100,100,C	lower	Yes	NGMA.STRUCTURE_TYPE authority table	A description of the feature	
	azimuth	3,3,I	n/a	Yes	Between 0 and 360 inclusive	Azimuth of the structural observation in degrees between 0 and 360	For planar observations the azimuth is always the direction of dip or plunge. The azimuth of horizontal planar structures is always zero
	inclination	2,2,I	n/a	Yes	Between 0 and 90 inclusive Null value is 99	Vertical inclination of the structural vector below the horizontal	
	defno	4,4,C	n/a	No		The number of the deformation event which produced the structure	
	defsurfno	4,4,C	n/a	No		Number of the surface which is being deformed by the measured structure e.g. *0* for bedding	
	facing	10,10,C	mixed	No	up, down, unknown	Sedimentary younging direction of bedding, or (structural facing) the direction of facing measured in the axial plane normal to a fold axis. The definition is context-dependent, since a downward facing fold may contain upward facing beds and vice versa	
	sense	20,20,C	lower	No	NGMA.STRUCTURE_SENSE authority table	Relative sense of movement of two blocks across some structural feature	
	vergence	20,20,C	lower	No	NGMA.STRUCTURE_VERGENCE authority table	The direction of overturning or inclination of a fold (compass points), or the angular direction from a younger fabric to an older fabric (clock-sense)	
	extent	20,20,C	lower	No	NGMA.STRUCTURE_EXTENT authority table	The scale of the observation	

	priority	3,3,I	n/a	Yes, except for historical map data capture		Indicates the importance of the structural measurement if more than one is taken at the same site	
	comments	254,254,C	mixed	No		Additional comments about the structural measurement	
	plotrank	3,3,I	n/a	Yes, except for historical map data capture		Indicates the order of importance in plotting the structure on a map	Where a number of structures have been measured at one locality, plot rank determines which structures will be plotted first
	rot_angle	3,3,I	n/a	Yes	Between 0 and 360 inclusive	Designed for direct symbology display in ArcView	Always equals 360 - azimuth

Drill holes and measured sections – SECHOLE Last_updated: xx/xx/xxxx

Name SECHOLE
Description Measured sections and drill hole data
Type Point coverage
Linked tables SECHOLE.LTH, SECHOLE.STR and SECHOLE.SVY

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Drill hole	SECHOLE	Drill hole locality	feature, ufi, siteno, sectholeno, feat_code, descript, flagname, typesec, dh_company, dh_id, av_azimuth, av_inclin, tot_metres, bedperp, refid, upordown, plotrank

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	SECHOLE	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	siteid	16,16,C	mixed	Yes		A user-supplied number or ID for the site	Must be unique to the originator. There may be more than one sample collected from each site
	siteno	7,7,I	n/a	Yes		A unique Oracle generated number for the site. **Back-link to SITES coverage**	
	sectholeno	5,5,I	n/a	Yes	A unique positive sequential 5 digit integer	**Link to DHOLE.LTH, DHOLE.STR and DHOLE.SVY look-up tables**	
	feat_code	8,8,I	n/a	Yes		An identification code assigned to the feature	
	descript	100,100,C	mixed	Yes	FEATCODE authority table	A description of the feature	
	flagname	24,24,C	mixed	Yes	NGMA.SECTYPES authority table	Indicates the type of measured section being described i.e. surface measured section or type of drillhole	
	typesec	1,1,C	mixed	Yes	T, R, ?	Indicates if the section is a type section, reference section or other	
	dh_company	48,48,C	mixed	No		Name of the company or organisation which drilled the hole	
	dh_id	48,48,C	mixed	No		Name or number of the drill hole	
	av_azimuth	3,3,I	n/a	No	Between 0 and 360 inclusive	Initial azimuth of the drill hole in degrees	Units in degrees
	av_inclin	3,3,I	n/a	No	Between -90 and 90 inclusive	Initial inclination of the drill hole in degrees	Units in degrees
	tot_metres	8,8,N,2	n/a	No		Total down hole depth of the drill hole in metres	Up to two digits are allowed after the decmal place, allowing depths to the nearest centimeter
	bedperp	1,1,C	upper	Yes	Y, N	Indicates if the drill hole or measured section is perpendicular to bedding	
	refid	9,9,C	mixed	Yes		Identifies a reference in AGSOREFS, AGSO's Bibliographic References Database, which refers to the drill hole or measured section	
	upordown	1,1,C	upper	Yes	U, D, ?	Indicates if the drill hole or measured section is up or down sequence or not known	
	plotrank	1,1,I	n/a	Yes	1, 2	A field used to discriminate plotting (1) from non-plotting (2) features	

Name SECHOLE.LTH
Description Drill holes and measured sections lithology
Type Look-up table
Linked theme SECHOLE

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	sectholeno	5,5,I	n/a	Yes	A unique positive sequential 5 digit integer	**Back-link to DHOLE coverage**	
	iz_no	5,5,I	n/a	Yes		Unique sequential integer	
	d1	8,8,N,2	n/a	Yes		A commencing distance or depth of described intervals in metres	
	d2	8,8,N,2	n/a	Yes		A terminating distance or depth of a described interval in metres	
	percent	9,9,N,2	n/a	Yes, for lithology		Percentage occurrence of a particular lithology within an interval.	
	detail_ptr	7,7,I	n/a	Yes		**Pointer to ROCKS coverage via rockno**	
	comments	160,160,C	mixed	Yes		Additional comments regarding the interval	
	stratno	7,7,I	n/a	Yes	GEODX.FLATSTRAT authority table	Stratigraphic index number	Must be unique for all rock units across Australia. Non-compulsory for Cainozoic units
	unitname	64,64,C	mixed	Yes	GEODX.FLATSTRAT authority table	The name of a stratigraphic unit including rank terms that are part of a name	Non-compulsory for Cainozoic units
	supergroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	An assemblage of related groups, or of formations and groups, having significant lithological features in common	For granite bodies a supersuite is on the same hierarchy level as a supergroup
	group	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	The formal lithostratigraphic unit which includes two or more contiguous or associated formations with significant lithological features in common	For granite bodies a suite or complex is on the same hierarchy level as a group
	subgroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A formally differentiated assemblage of formations within a group	
	formation	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A body of rock strata which is unified with respect to adjacent strata by consisting dominantly of a certain lithological type or combination of types or by possessing other unifying lithological features	For granite bodies a pluton is on the same hierarchy level as a formation
	member	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A lithostratigraphic unit of subordinate rank comprising some specially developed part of a formation	
	informal	64,64,C	mixed	No		Informal stratigraphic name which is not in AGSO's STRATLEX Oracle table	
	qualifier	60,60,C	mixed	Yes		A qualifying term, if any, before the lithology name field that follows	It is a concatenation of qualifier, qualifier2 and qualifier3 fields in the ROCKS table
	lithname	32,32,C	mixed	Yes		Lithology name	
	grouping	50,50,C	mixed	Yes		User-defined classification used to classify suites of rocks from particular regions into classes other than those suggested by other fields on the form	The values entered here are chosen by the originator and have No global significance
	map_symb	8,8,C	mixed	Yes	NGMA.LITHUNITS authority table	Text from the Oracle identifying the lithology of the rock unit.	

Name SECHOLE.STR
Description Drill holes and measured sections structures
Type Look-up table
Linked theme SECHOLE

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	sectholeno	5,5,I	n/a	Yes	A unique positive sequential 5 digit integer	**Back-link to DHOLE coverage**	
	iz_no	5,5,I	n/a	Yes		Unique sequential integer	
	d1	8,8,N,2	n/a	Yes		A commencing distance or depth of described intervals in metres	
	d2	8,8,N,2	n/a	Yes		A terminating distance or depth of a described interval in metres	
	percent	9,9,N,2	n/a	Yes		Percentage occurrence of a particular lithology within an interval.	
	detail_ptr	7,7,I	n/a	Yes		**Pointer to ROCKS coverage via rockno**	
	comments	128,128,C	mixed	Yes		Additional comments regarding the interval	
	feat_code	8,8,I	n/a	Yes		An identification code assigned to the feature	
	legend	40,40,C	mixed	Yes		Description of the structure observed	
	azimuth	3,3,I	n/a	Yes	Between 0 and 360 inclusive	Azimuth of the structural observation. For planar observations the azimuth is always the direction of dip	Units in degrees
	inclination	3,3,I	n/a	Yes	Between -90 and 90 inclusive	Vertical inclination of the structure being measured	Units in degrees
	defno	4,4,C	n/a	No		Number of the deformation that produced the structure being measured	
	defsurfno	4,4,C	n/a	No		Deformation that produced the deformed surface being measured	

Name SECHOLE.SVY
Description Drill holes and measured sections survey
Type Look-up table
Linked theme SECHOLE

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	sectholeno	5,5,I	n/a	Yes	A unique positive sequential 5 digit integer	**Back-link to DHOLE coverage**	
	iz_no	5,5,I	n/a	Yes		Unique sequential integer	
	d1	8,8,N,2	n/a	Yes		A commencing distance or depth of described intervals in metres	
	d2	8,8,N,2	n/a	Yes		A terminating distance or depth of a described interval in metres	
	percent	9,9,N,2	n/a	Yes		Percentage occurrence of a particular lithology within an interval.	
	detail_ptr	7,7,I	n/a	Yes		**Pointer to ROCKS coverage via rockno**	
	comments	128,128,C	mixed	Yes		Additional comments regarding the interval	
	feat_code	8,8,I	n/a	Yes		An identification code assigned to the feature	
	legend	40,40,C	mixed	Yes		Description of the measured section	
	azimuth	3,3,I	n/a	Yes	Between 0 and 360 inclusive	Azimuth of the drill hole in degrees	Units in degrees
	inclination	3,3,I	n/a	Yes	Between -90 and 90 inclusive	Initial inclination of the drill hole in degrees	Units in degrees
	defno	4,4,C	n/a	No		The number of the deformation event which produced the structure	
	defsurfno	4,4,C	n/a	No		Number of the surface which is being deformed by the measured structure e.g. *0* for bedding	

Linear geology from drill holes (DEVIANT database) – DHGEOL Last_updated: xx/xx/xxxx

Name DHGEOL
Description Linear geology from the drill holes as extracted from the DEVIANT database
Type Point coverage
Linked table DHGEOL.LUT

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Drill hole geology	DH_GEOL	A drill hole containing geological information	feature, ufi, dh_id, dh_company, year, tot_meters

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	DH_GEOL	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	dh_id	20,20,C	mixed	Yes		A unique identification code assigned to the feature	
	dh_company	48,48,C	mixed	No		Name of the company or organisation which drilled the hole	
	year	4,4,I	n/a	No		Year when the drill hole is completed	
	tot_meters	8,8,N,2	n/a	No		Total down hole depth of the drill hole in metres	

Name DHGEOL.LUT
Description Geological information about the drill hole
Type Look-up table
Linked theme DHGEOL coverage

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	dh_id	20,20,C	mixed	Yes		**Link to DHGEOL.PAT**	
	stratno	7,7,I	n/a	Yes	GEODX.FLATSTRAT authority table	Stratigraphic index number	Must be unique for all rock units across Australia. Non-compulsory for Cainozoic units
	supergroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	An assemblage of related groups, or of formations and groups, having significant lithological features in common	For granite bodies a supersuite is on the same hierarchy level as a supergroup
	group	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	The formal lithostratigraphic unit which includes two or more contiguous or associated formations with significant lithological features in common	For granite bodies a suite or complex is on the same hierarchy level as a group
	subgroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A formally differentiated assemblage of formations within a group	
	formation	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A body of rock strata which is unified with respect to adjacent strata by consisting dominantly of a certain lithological type or combination of types or by possessing other unifying lithological features	For granite bodies a pluton is on the same hierarchy level as a formation
	member	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A lithostratigraphic unit of subordinate rank comprising some specially developed part of a formation	
	superseq	64,64,C	mixed	No		A large scale fundamental stratigraphic unit of sequence stratigraphy that consists of smaller scale sequences	
	sequence	64,64,C	mixed	No		The sequence (or more strictly 'depositional sequence') is the fundamental unit of sequence stratigraphy. It is a relatively conformable succession of genetically related strata bounded by unconformities or their correlative conformities. It is formed by an interaction of tectonics, thermal history, sea level change, and supply	

Measured sections (DEVIANT database) – MSRSECT Last_updated: xx/xx/xxxx

Name MSRSECT
Description Measured sections from DEVIANT database
Type Point coverage
Linked table MSRSECT.LUT

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Measured section	MSR_SECTION	A sequence of geological units, at the surface	feature, ufi, unique_id, originator, locdesc, regname, base_top, tot_length

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	MSR_SECTION	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	unique_id	20,20,C	mixed	Yes		A unique identification code assigned to the feature	
	originator	22,22,C	mixed	Yes	NGMA.ORIGINATORS authority table	The person or organisation that collected the data at the site	
	locdesc	64,64,C	mixed	No		Additional information relating to the sections' location	
	regname	64,64,C	mixed	No		Geological region name in which the section is located	
	base_top	1,1,C	upper	Yes	B, T, ?	Indicates if the section is bottom, top or unknown	
	tot_length	8,8,N,2	n/a	No		Total length of the section in metres	

Name MSRSECT.LUT
Description Geological information about the drill hole
Type Look-up table
Linked theme DHGEOL coverage

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	unique_id	20,20,C	mixed	Yes		**Link to MSRSECT.PAT**	
	stratno	7,7,I	n/a	Yes	GEODX.FLATSTRAT authority table	Stratigraphic index number	Must be unique for all rock units across Australia. Non-compulsory for Cainozoic units
	supergroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	An assemblage of related groups, or of formations and groups, having significant lithological features in common	For granite bodies a supersuite is on the same hierarchy level as a supergroup
	group	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	The formal lithostratigraphic unit which includes two or more contiguous or associated formations with significant lithological features in common	For granite bodies a suite or complex is on the same hierarchy level as a group
	subgroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A formally differentiated assemblage of formations within a group	
	formation	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A body of rock strata which is unified with respect to adjacent strata by consisting dominantly of a certain lithological type or combination of types or by possessing other unifying lithological features	For granite bodies a pluton is on the same hierarchy level as a formation
	member	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A lithostratigraphic unit of subordinate rank comprising some specially developed part of a formation	
	superseq	64,64,C	mixed	No		A large scale fundamental stratigraphic unit of sequence stratigraphy that consists of smaller scale sequences	
	sequence	64,64,C	mixed	No		The sequence (or more strictly 'depositional sequence') is the fundamental unit of sequence stratigraphy. It is a relatively conformable succession of genetically related strata bounded by unconformities or their correlative conformities. It is formed by an interaction of tectonics, thermal history, sea level change, and supply	

Petrographic descriptions – PETROG Last_updated: xx/xx/xxxx

Name PETROG
Description Petrographic descriptions
Type Point coverage
Linked tables PETROG.DAT and PETROG.MIN

Object	Feature Class	Feature	Feature Definition	Attributes
	Thin section	THINSECT	Petrographic description	feature, ufi, siteid, siteno, sampleid, thinsectid, tsno, rockno, rockname, description, comments

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	THINSECT	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	siteid	16,16,C	mixed	Yes		A user-supplied number or ID for the site	Must be unique to the originator. There may be more than one sample collected from each site
	siteno	7,7,I	n/a	Yes		A unique Oracle generated number for the site	
	sampleid	16,16,C	upper	Yes		The ID of the rock sample the thin section comes from. **Back-link to ROCKS coverage**	Must be unique to the originator
	thinsectid	16,16,C	upper	No		A user-supplied number or other ID for the thin section	Should correspond to whatever ID is written on the thin section
	tsno	6,6,I	n/a	Yes	A positive integer less than 1 million	**Link to PETROG.DAT and PETROG.MIN look-up tables**	
	rockno	6,6,I	n/a	Yes	A positive integer less than 1 million	**Link to STRUC coverage**	
	rockname	64,64,C	mixed	No		Petrological name based on microscopic examination of the thin section	
	description	64,64,C	mixed	No		Observation description	
	comments	64,64,C	mixed	No		Additional comments about the thin section	

Name PETROG.DAT
Description Extendable attributes for petrographic descriptions
Type Look-up table
Linked theme PETROG

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	tsno	6,6,I	n/a	Yes	A positive integer less than 1 million	**Back-link to PETROG coverage**	
	typedesc	32,32,C	mixed	Yes	PETROG.TSDATATYPES authority table	Extended attributes describing lithology	
	subdesc	32,32,C	lower	Yes	PETROG.TSDATATYPES authority table	Value describing extended attributes	
	descript	64,64,C	mixed	No		Additional descriptive information relating to the Data Type/Subtype record	

Name PETROG.MIN
Description Mineral occurrence data for petrographic descriptions
Type Look-up table
Linked theme PETROG

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Table	tsno	6,6,I	n/a	Yes	A positive integer less than 1 million	**Back-link to PETROG coverage**	
	mineral	32,32,C	lower	Yes	NGMA.AGSOMINERALS authority table	Name of the mineral or clast	
	percent	5,5,N,1	n/a	No	Between -1 and 100 inclusive	The volume percentage of the thin section composed of the stated mineral, clast, matrix, etc.	Negative numbers are used in lieu of a less-than symbol. Example -1.0 is taken to mean <1.0 (less than one percent)
	occurrence	32,32,C	lower	No	PETROG.TSMINOCCMODES authority table	Occurrence of the stated mineral or other component	
	comments	64,64,C	mixed	No		Comment or description relating to the stated mineral or component	

Fossils – FOSSIL Last_updated: xx/xx/xxxx

Name FOSSIL
Description Fossil localities
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Fossil	FOSSIL	Fossil locality	feature, ufi, feat_code, siteid, long_agd66, lat_agd66, locdesc, descript, stratno, unitname, supergroup, group, subgroup, formation, member, informal, era, period, stage, fauna, flora, comments, reference

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	FOSSIL	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	feat_code	8,8,I	n/a	Yes	FEATCODE authority table	An identification code assigned to the feature as specified in the FEATCODE table	
	siteid	16,16,C	upper	Yes, for all new data		A user-supplied number or ID	
	locdesc	64,64,C	mixed	No		Descriptive field for additional information relating to the site's location	
	descript	100,100,C	mixed	Yes		A description of the feature	
	stratno	7,7,I	n/a	Yes	GEODX.FLATSTRAT authority table	Stratigraphic index number	Must be unique for all rock units across Australia. Non-compulsory for Cainozoic units
	unitname	64,64,C	mixed	Yes	GEODX.FLATSTRAT authority table	The name of a stratigraphic unit including rank terms that are part of a name	Non-compulsory for Cainozoic units
	supergroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	An assemblage of related groups, or of formations and groups, having significant lithological features in common	
	group	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	The formal lithostratigraphic unit which includes two or more contiguous or associated formations with significant lithological features in common	
	subgroup	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A formally differentiated assemblage of formations within a group	
	formation	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A body of rock strata which is unified with respect to adjacent strata by consisting dominantly of a certain lithological type or combination of types or by possessing other unifying lithological features	
	member	64,64,C	mixed	No	GEODX.FLATSTRAT authority table	A lithostratigraphic unit of subordinate rank comprising some specially developed part of a formation	
	informal	64,64,C	mixed	No		Informal stratigraphic name which is not in AGSO's STRATLEX Oracle table	
	era	100,100,C	mixed	No	GEODX.GEOTIME authority table	A geological-time unit during which the rocks of the corresponding erathem were formed	
	period	100,100,C	mixed	No	GEODX.GEOTIME authority table	A geological-time unit during which the rocks of the corresponding system were formed	
	stage	30,30,C	upper	No		A geological-time unit of lesser duration than period, during which the rocks of a formation	

						were formed	
	fauna	254,254,C	mixed	No		A description of fauna assemblage	
	flora	254,254,C	mixed	No		A description of flora assemblage	
	comments	254,254,C	mixed	No		Additional comments related to fossils on the site	
	reference	64,64,C	mixed	No		Reference to publications or other source material	

Field photographs – PHOTO Last_updated: xx/xx/xxxx

Name PHOTO
Description Field photographs and/or sketches
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Photo	PHOTO	Field photo location	feature, ufi, siteno, originator, locdesc, caption, photoname

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	PHOTO	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	siteno	16,16,C	upper	Yes		A user-supplied number or ID for the site from Oracle SITES and ROCKS tables	
	originator	22,22,C	mixed	Yes	NGMA.ORIGINATORS authority table	The person or organisation that collected the data at the site	
	locdesc	64,64,C	mixed	Yes		Descriptive field for additional information relating to the site's location	
	caption	254,254,C	mixed	Yes		Description of the photograph	Note field orientation for landscape scenes
	photoname	254,254,C	mixed	Yes	Directory path	A path to scanned photo image for display	Must be a valid path to use for hotlinks in ArcView

Ship surveys – SHIPSURV Last_updated: xx/xx/xxxx

Name SHIPSURV
Description Ship survey tracks
Type Line coverage

Note Each ship track should be digitised, from-node to to-node, in the direction the ship travelled.

Object	Feature Class	Feature	Feature Definition	Attributes
Arc	Ship survey track	SHIP_TRACK	A line showing the course taken by a ship while capturing marine data	feature, ufi, survey_no, name, vessel, surv_org, client, surv_date, proc_date

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Arc	feature	12,12,C	upper	Yes	SHIP_TRACK	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	survey_no	10,10,C	upper	Yes		Survey number	
	name	32,32,C	upper	No		Survey name	
	vessel	32,32,C	mixed	No	OZMAR.PLATFORMS authority table	Survey ship	
	surv_org	128,128,C	mixed	No	OZMAR.ORGANISATIONS authority table	Organisation responsible for the survey	
	client	128,128,C	mixed	No	OZMAR.ORGANISATIONS authority table	Client for which the survey was done	
	surv_date	8,10,D	n/a	No		Start date of survey	
	proc_date	8,10,D	n/a	No		Date when processing carried out; this has implications for the version of the data	

Marine survey point – MARINEPT Last_updated: xx/xx/xxxx

Name MARINEPT
Description Marine navigation points and seismic shot points
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Shot point	SHOT_PT	A point where a seismic sounding is taken from a ship	feature, ufi, survey_no, seis_line, pt_no, nav_method, depth, cc_depth, tot_grav, fa_anom, tot_mag, igrf_anom, date, time
	Navigation point	NAV_PT	A point where a marine navigation reading is taken from a ship	feature, ufi, survey_no, pt_no, nav_method, depth, cc_depth, tot_grav, fa_anom, tot_mag, igrf_anom, date, time

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	SHOT_PT, NAV_PT	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	survey_no	10,10,C	upper	Yes		Survey number	
	seis_line	20,20,C	upper	Yes		Seismic line number	
	pt_no	8,8,I	n/a	Yes		Shot number or navigation point number	
	nav_method	128,128,C	mixed	No	OZMAR.NAVMETHODS authority table	Navigation method as one of Differential GPS, Dead Reckoning tied to Transit satellite fixes + dGPS, Dead Reckoning tied to Transit satfixes plus stand-alone GPS, Radio navigation, Dead Reckoning tied to Transit satellite fixes, Standalone GPS (subject to SA), Satellite Doppler + AVLF radio nav, Celestial + Dead Reckoning between fixes, GPS with P-Code access	
	depth	7,7,N,2	n/a	No		Depth in metres, always negative	
	cc_depth	7,7,N,2	n/a	No		Depth in metres, always negative, Carter corrected	
	tot_grav	9,9,N,1	n/a	No		Gravity reading	
	fa_anom	9,9,N,1	n/a	No		Free air anomaly	
	tot_mag	8,8,N,1	n/a	No		Magnetic reading	
	igrf_anom	8,8,N,1	n/a	No		Bouger anomaly	
	date	8,10,D	n/a	No		Date of reading	
	time	8,10,D	n/a	No		Time of reading	

Swath boundaries – SWATHBDY Last_updated: xx/xx/xxxx

Name SWATHBDY
Description Ship swath mapping boundaries
Type Polygon coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Polygon	Swath area	SWATH_AREA	An area that has been swath mapped	feature, ufi, survey_no
	Swath void	SWATH_VOID	A void in an area that has been swath mapped	feature, ufi
Arc	Swath boundary	SWATH_BDY	The boundary line of an area that has been swath mapped	feature, ufi
	Frame	FRAME	The edge of the tile or study area	feature, ufi

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Polygon	feature	12,12,C	upper	Yes	SWATH_AREA, SWATH_VOID	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	survey_no	10,10,C	upper	Yes, for swath areas		Survey number	
Arc	feature	12,12,C	upper	Yes	SWATH_BDY, FRAME	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for that feature type in that coverage

Offshore boundaries – OFFSHBDY Last_updated: xx/xx/xxxx

Name OFFSHBDY
Description Offshore boundaries
Type Line coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Arc	Offshore boundary	OFFSH_BDY	The boundary line of a National or State jurisdiction area	feature, ufi, bdy_type, source, date, descript, nation, lcs, comment

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Arc	feature	12,12,C	upper	Yes	OFFSH_BDY	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for that feature type in that coverage
	bdy_type	25,25,C	upper	Yes	3M, 12M, 24M, 200M, 350M, 2500+100M, HEDBERG, ADJACENT, BOX, ZOC, IB, PRE1997, EEZ	Boundary type	M stands for nautical miles. ZOC stands for zone of cooperation, IB stands for international boundary
	source	20,20,C	mixed	Yes		The organisation from which the data is supplied	
	date	8,10,D	n/a	Yes		The date when the data is received by AGSO	
	descript	60,60C	mixed	No		Description of the offshore boundary	
	nation	20,20,C	upper	No	SOLOMON ISLANDS, FRANCE, PAPUA NEW GUINEA, INDONESIA, NORWAY, NEW ZEALAND	Nation claiming jurisdiction on the other side of the boundary	
	lcs	1,1,C	upper	Yes, where the boundary forms the legal continental shelf	Y, N	Limit of Legal Continental Shelf (LCS)	
	comment	254,254,C	mixed	No		Any comment, perhaps to clarify the status of the boundary	

Earthquake epicentres – EQUAKES Last_updated: xx/xx/xxxx

Name EQUAKES
Description Earthquake epicentres
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Earthquake epicentre	QUAKE_EPICNT	Epicenter of an earthquake	feature, ufi, magnitude, depth, date, time, source

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	QUAKE_EPICNT	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	magnitude	5,5,N,2	n/a	No		The maximum of all measured magnitude values (Richter scale) of the earthquake	
	depth	5,5,N,1	n/a	No		Focal depth of the earthquake (in metres) from the mean sea level (MSL)	
	date	8,10,D	n/a	No		Date when the earthquake occurred	
	time	11,11,C	n/a	No		Universal Coordinated Time (UTC) when the earthquake occurred e.g. 13:50:24.10	Time must be given as hh:mm:ss (24-hour format)
	source	150,150,C	mixed	No	QUAKES.SOURCES authority table	Seismographic agency or a reference that provided information about the earthquake	

Landslides – LANDSLID Last_updated: xx/xx/xxxx

Name LANDSLID
Description Landslides
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Landslide occurrence	LANDSLIDE	A location where a landslide occurred	feature, ufi, lsno, location, date, class, synopsis1, synopsis2

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	LANDSLIDE	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	lsno	4,4,I	n/a	Yes		Landslide number	Unique landslide number from the LANDSLID database
	location	175,175,C	mixed	Yes		Description of the location	
	date	8,10,D	n/a	No		Date when the landslide occurred	If day or month is unknown, their values are set to the first day in a month, or the first month of a year respectively. If year is unknown, the date value is null.
	class	70,70,C	mixed	Yes		Landslide classification	
	synopsis1	250,250,C	mixed	Yes		Description of the caused damage	
	synopsis2	250,250,C	mixed	No		Description of the caused damage (second part)	

Australian Fundamental Gravity Network stations – AFGNSTN Last_updated: xx/xx/xxxx

Name AFGNSTN
Description This dataset contains the locations of the Australian Fundamental Gravity Network stations
Type Point coverage

Object	Feature Class	Feature	Feature Definition	Attributes
Point	Australian Fundamental Gravity Network Station	AFGN_STAT	Location of the AFGN station	feature, ufi, latitude, longitude, datum, stationno, statn_name, statn_type

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Point	feature	12,12,C	upper	Yes	AFGN_STAT	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	latitude	10,10,N,6	n/a	Yes		Precise latitude of station in decimal degrees	
	longitude	11,11,N,6	n/a	Yes		Precise longitude of station in decimal degrees	
	datum	5,5,C	upper	Yes		Precise datum of station coordinates	
	stationno	12,12,I	n/a	Yes		A unique Oracle generated number for the gravity station	
	statn_name	30,30,C	mixed	Yes		Name of the station	
	statn_type	20,20,C	mixed	Yes	GRAVITY.STATIONTYPES authority table	Type of the station	

Index of Gravity Geophysical Surveys – GRAVSRV Last_updated: xx/xx/xxxx

Name GRAVSRV
Description The gravity surveys index presents a summary of the essential specifications of gravity surveys held in the National Gravity Database.
Type Region coverage

Object	Feature Class	Feature	Feature Definition	Attributes
region	Gravity survey	GRAV_SURVEY	The extents of the gravity survey	feature, ufi, surveyid, name, surveytype, operator, contractor, processor, startdate, enddate, vesseltype, spacemin, spacemax, accuracy, stations, acc_gu, acc_hght

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Region.surveys	feature	12,12,C	upper	Yes	GRAV_SURVEY	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	surveyid	6,6,I	n/a	Yes		A unique Oracle generated number for each survey	
	name	66,66,C	mixed	Yes		Name of the survey	
	surveytype	8,8,C	lower	Yes	land, sea, air	Indicator of whether survey was conducted on land, sea or air	
	operator	60,60,C	mixed	No		Name of the people who wanted the survey done	
	contractor	60,60,C	mixed	No		Name of the people that physically collected the data	
	processor	60,60,C	mixed	No		Name of company that processed the data (If AGSO the name of the person is included)	
	startdate	8,10,D	n/a	No		Start date of survey	
	enddate	8,10,D	n/a	No		End date of survey	
	vesseltype	30,30,C	mixed	No		Type of vessel used to collect the data	
	spacemin	10,10,N,1	n/a	No		Minimum space between stations in metres	
	spacemax	10,10,N,1	n/a	No		Maximum space between stations in metres	
	accuracy	7,7,N,2	n/a	No		The accuracy of the positioning method	
	stations	6,6,I	n/a	No	A positive integer	The number of the stations in the survey	
	acc_gu	7,7,N,2	n/a	No		Accuracy of the gravity values in micrometers	
	acc_hght	8,8,N,3	n/a	No		Accuracy of the height in metres	

Index of Airborne Geophysical Surveys – AIRBSRV Last_updated: xx/xx/xxxx

Name AIRBSRV
Description The Airborne Geophysical Survey Index presents a summary of the essential specifications of airborne geophysical surveys held in the National Airborne Geophysical Surveys Database.
Type Region coverage as REGION.SURVEYS

Object	Feature Class	Feature	Feature Definition	Attributes
Region	Airborne survey	AIRB_SURVEY	The extents of the airborne geophysical survey	feature, ufi, project, survey, data, digital, type, crafttype, start, end, operator, minspacing, maxspacing, contractor, processor, agl, asl, linekm, released, sampleint, lines, direction, xtalvol, upxtalvol, craftname, tiekm, totalkm, areakm, tiespacing

Object	Field Name	Field Type	Case	Compulsory	Valid Values	Description of Field	Rules
Region	feature	12,12,C	upper	Yes	AIRB_SURVEY	Feature type	
	ufi	6,6,I	n/a	Yes	A positive integer less than 1 million	Unique feature identifier (ufi)	Must be unique for a feature type in a coverage. Populated by calculating it equal to RECNO when the coverage is complete
	project	5,5,I	n/a	Yes		Unique survey identifier	
	survey	80,80,C	mixed	Yes		The name of the survey	
	data	30,30,C	mixed	Yes	Mag, Rad, Elev, Rad-256ch, FD_EM, TD_EM	Geophysical data acquired (both analogue and digital) in the survey: Mag - total magnetic intensity, Rad - 4 channel gamma-ray data, Elev - elevation, Rad-256ch - 256 channels of gamma-ray data, FD_EM - frequency domain electromagnetics, TD_EM - time domain electromagnetics	
	digital	30,30,C	mixed	No	Mag, Rad, Elev, Rad-256ch, FD_EM, TD_EM	Indicates digital geophysical data available for a survey: Mag - total magnetic intensity, Rad - 4 channel gamma-ray data, Elev - elevation, Rad-256ch - 256 channel gamma-ray data, FD_EM - frequency domain electromagnetics, TD_EM - time domain electromagnetics	
	type	15,15,C	mixed	No	regional, detailed, semi-detailed	Type of the survey	
	crafttype	15,15,C	mixed	No		Type of the aircraft used to collect the data	
	start	8,10,D	n/a	No		Beginning date of the survey	
	end	8,10,D	n/a	No		Ending date of the survey	
	operator	30,30,C	mixed	No		The organisation which owns the survey data (and usually who commissioned the survey). This is from whom the data can be purchased	
	minspacing	6,6,I	n/a	Yes		Minimum space between traverses in metres	
	maxspacing	6,6,I	n/a	No		Maximum space between traverses in metres	
	contractor	30,30,C	mixed	No		The organisation which acquired the survey data (i.e. who flew the survey)	
	processor	30,30,C	mixed	No		The organisation which processed the survey data	
	agl	6,6,I	n/a	No		The height of acquisition of the survey data above the ground surface in metres	

	asl	6,6,I	n/a	No		The height of acquisition of the survey data above sea level in metres	
	linekm	8,8,I	n/a	No		Actual distances flown in on-line data acquisition	
	released	8,10,D	date	No		The release date at which the data were available from the survey operator	
	sampleint	6,6,I	n/a	No		Sample interval along line in metres	
	lines	6,6,I	n/a	No		Total number of lines in the survey	
	direction	3,3,I	n/a	No		The direction of the survey lines in degrees from true north	
	xtalvol	8,8,I	n/a	No		The volume of the gamma-ray spectometer downward looking crystals in litres	
	upxtalvol	6,6,I	n/a	No		The volume of the gamma-ray spectometer upward looking crystals in litres	
	craftname	30,30,C	mixed	No		The name or call-sign of the aircraft	
	tiekm	8,8,I	n/a	No		Tie kilometres flown in on-line acquisition	
	totalkm	9,9,I	n/a	No		Total kilometres flown in on-line acquisition	
	areakm	9,9,I	n/a	No		The area of the actual survey in square km	
	tiespacing	8,8,I	n/a	No		The tie (cross-line) separations in metres. Where there are several line spacings for a survey, the minimum and maximum are given	

Australian Government

Geoscience Australia

Module 3

Minerals Deposits, Mineral Potential Assessment, Survey and Field Observations Themes

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