TASMANIA
DEVELOPMENT
AND RESOURCES

Tasmanian Geological Survey
Record 1996/06

Structure of GIS databases (Revision 1)

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INTRODUCTION

The various databases described in this report are available in ArcInfo format (or in an ArcInfo generated exchange format, e.g. DXF, MapInfo), but reside and were developed on three software platforms; Access, ArcInfo and FORTRAN (Table 1).The previous report on the structure of the databases (Tasmanian Geological Survey Record 1995/06) reflected the situation in April 1995, whereas this report describes the structure in July 1996. Some fields in the databases are still to be developed and the BIOSTRAT database contains only a small amount of data. Nevertheless, information about them gives an indication of the direction of future data acquisition.

Table 1

Software platforms for Mineral Resources Tasmania databases

Database	*Software platform*
TENEMENTS	ArcInfo/Ingres
MIRLOCH	FORTRAN
DORIS	Access
ROCKCHEM	Access
TASCHRON	Access
TASSED	ArcInfo
TASSTR	ArcInfo
TASGEOL	ArcInfo
GEOLSOURCE	Access
TASREF	Access
BIOSTRAT	Access

MINING TENEMENTS

Current Exploration Licence Data

Exploration licence boundaries are based upon AMG co-ordinates, geographical features (e.g. coast), or administrative boundaries (e.g. World Heritage Area).

Current exploration licence information (metallic minerals, non-metallic minerals and onshore oil) is available. This dataset is maintained on a day-to-day basis. There is no planned capture program for historic mining exploration licence data.

Item Name	*Info. def*	*Description*
TYPE	3,4,C	Type of licence: EL — Exploration Licence, RL — Retention Licence, ETA — Exploration Tender Area.
NUMBER	4,5,B	Tenement number.
YEAR	4,5,B	Year of tenement application.
OUTPUT	6,7,C	Number/Year combination for output purposes.
DERIVED FROM	8,9,C	Tenement from which current tenement originated.
ID_NUMBER	4,5,B	Number used to link to REGIS an Ingres database. This link is still to be introduced.

Current Mining Leases

Mining lease boundaries are derived from Mining Tenement maps of scales of 1:25 000 and larger.

Current mining lease information is available. This dataset is maintained on a day-to-day basis. There is no planned capture program for historic mining lease data.

Item Name	*Info. def.*	*Description*
LEASE_NO	4,5,B	Mining Lease identification number.
LEASE_AREA	4,5,B	Mining Lease area in hectares.
PRODUCT	4,5,B	Commodity mining lease has been taken out for.
ID_NUMBER	4,5,B	Number used to link to REGIS, an Ingres database. This link is still to be introduced.
PLAN_NO	9,10,C	Lease diagram number.

MIRLOCH — MINERAL DEPOSITS DATABASE

Introduction

MIRLOCH is a computerised database of mineral deposits in Tasmania and is loosely related to the MINLOC database of the Australian Geological Survey Organisation. It is designed as a quick reference to specific deposits, for mineral deposit map production, resource assessments, and GIS applications. The MIRLOCH table is supplied with authority tables for encoded items.

MIRLOCH Data Table — MIRLOCH.PAT

Item Name	*Info. def.*	*Description*
MIRLOCH-ID	4,5,B	Unique number for each mineral occurrence location.
QUAD	4,5,B	Mandatory number field giving the number of the quadrangle in which the mineral deposit occurs, e.g. 40 for Alberton.
REFNO	5,6,C	This is unique number for each mine or mineral occurrence. The first two characters indicate the 1:50 000 scale geological quadrangles, followed by a three-digit serial number. For example 37017 represents deposit 17 in quadrangle 37 (Sheffield). The number for quadrangles 1 to 9 inclusive should be prefixed by 0 (e.g. 09001).
NAME	40,41,C	The name(s) of the mine or mineral occurrence where known. Where the name is unknown, the deposit may be given the Mining Lease number, the name of the watercourse (for alluvial workings), name of the relevant prospector, prospecting association, etc. (if known) or simply be titled "Unnamed". If a series of significant deposits with the same name exists in a limited area, they may be appended A, B, C, etc., or a centroid of the deposits given as a single deposit. Alluvial goldfields and other mineral fields may be denoted in this manner. The abbreviations used in this item are listed in the authority table MIRLOCH.DEP. Duplicate names should be separated by semi-colons. Other delimiters used previously, however, include: the backslash (\), a comma and OR, while others are enclosed in parentheses ( ) or quotation marks. These will be amended in due course.
MAJORCOM	8,9,C	The main exploitable commodities in order of importance. Chemical symbols are used for metallic resources where possible (note UR is used for uranium, and some similar exceptions). Recommended abbreviations are listed in the commodity abbreviation authority table MIRLOCH.ABR. Commas are used to separate commodities, e.g. CU, PB, ZN.
MINORCOM	11,12,C	The minor exploitable commodities in order of importance. The distinction from the main exploitable commodity is somewhat arbitrary, and usage is similar.
AMGE	6,6,C	AMG easting.
AMGN	7,7,C	AMG northing.
ACCURACY	1,2,C	Accuracy of the position of the deposit is indicated by a code, listed in the co-ordinate accuracy authority table MIRLOCH.ACC.
MAPNO	5,6,C	The 1:50 000 scale National Map Sheet Index Numbers, e.g. 83124 for Broadmarsh.
STATUS	1,2,C	Code for the present status of a mine (and an indication of whether reserves are known), or whether the deposit is a prospect, mineral occurrence or a mineralised area. A mineralised area may be, for example, an extensive alluvial goldfield, an area of erratic or sub-economic mineralisation, etc. Relates to the status authority table MIRLOCH.STA.
SIZE	1,2,C	Code for the estimated total *in situ* size of the deposit (in tonnes for hard-rock deposits, or in m^3 for placer and alluvial deposits). Relates to the size authority table MIRLOCH.SIZ.

HOST	2,3,C	Code for the relevant time/stratigraphic units hosting the deposit. Two host rocks may be defined to cater for discordant deposits that traverse these time/stratigraphic boundaries. Relates to the host authority table MIRLOCH.HOS.
AGE	1,2,C	Code for the age of the mineralisation. The age of the primary mineralisation is given if the ore has been later remobilised. The age is usually inferred. Relates to the age of the mineralisation authority table MIRLOCH.AGE.
FORM	2,3,C	Code for the overall form of the deposit and/or nature of the mineralisation. Relates to the form authority table MIRLOCH.TYP.
STRIKE	4,4,C	The strike of the deposit, where applicable, in the range 0-359(°T). If unknown or inapplicable, use -1.
EXPLOR	5,6,C	Code for the type of exploration which has been undertaken on this deposit. Up to five methods may be entered. Prospecting signifies pits, trenches or shafts. Geological mapping refers to detailed surface and/or underground mapping. Geochemical surveys refer to detailed soil sampling as well as systematic chip sampling of mineralisation and host rocks. Geophysical surveys refers to ground-based techniques related to the deposits. Drilling refers to any drill hole intersecting the deposit. Relates to the type of exploration authority table MIRLOCH.EXP.
REF	38,39,C	The best and most recent references available should be listed here, plus relevant comments if space permits. Abbreviations for publications are listed in the publications authority table MIRLOCH.REF. Examples: GSB50 p123; TCR 90-1234; MRV Min. Map 5.

DORIS — DRILL HOLE DATABASE

Introduction

This database provides information about drill holes of all types drilled by this department and commercial companies.

DORIS Data Table — DORIS.PAT

Item Name	*Info. def.*	*Description*
DORIS-ID	4,5,B	A number unique to each drill hole and used to link to other databases.
NAME	32,32,C	Mandatory field designed to accommodate the drill hole number and location.
QUAD	4,5,B	Mandatory number field giving the number of the quadrangle in which the drill hole occurs; e.g. 40 for Alberton.
MAPREF	4,5,B	Mandatory number field giving the number of the 1:50 000 scale map in which the drill hole occurs; e.g. 84152 for Mathinna.
EASTING	4,7,B	Mandatory field of 6 digits — AMG easting for the drill hole location.
NORTHING	4,8,B	Mandatory field of 7 digits — AMG northing for the drill hole location.
ACC	4,5,B	Mandatory one-digit code indicating the accuracy of the drill hole position. Relates to the co-ordinate accuracy authority table DORACC.AUT.
PURPOSE	4,5,B	One-digit code for the purpose of the drill hole. Relates to the purpose authority table PURPOSE.AUT.
PLAN_NO	10,10,C	Number of the plan held by Mineral Resources Tasmania that shows the drill hole.
REP_REF	30,30,C	Mandatory 12-character field giving the references to the reports containing the log of the drill hole or other information.
LOG_LOC	4,5,B	Three-digit number of the file in the Mineral Resources Tasmania closed file room containing the log of the drill hole.
CORE_HELD	4,5,B	One-digit code indicating if the core is held by Mineral Resources Tasmania. Relates to the core held authority table DCORE.AUT.
EL_ML	10,10,C	Character field giving the exploration or mining lease number of the area in which the hole was drilled.
ORG	20,20,C	Field giving the name of the organisation that had the hole drilled.
DRILLER	4,5,B	One-digit code for the organisation that did the drilling. Relates to the driller authority table DRILLER.AUT.
DATE	10,10,D	Date drilling started.
DEPTH	4,5,B	Final depth of the drill hole in metres.
DRILLTYPE1	4,5,B	One-digit numeric code for type of drill used. Relates to the drill type authority table DRILLTYPE.AUT.
DRILLTYPE2	4,5,B	One-digit numeric code for type of drill used. Relates to the drill type authority table DRILLTYPE.AUT.
LOGGED	4,5,B	One-digit code to indicate whether the hole was geophysically logged. Relates to the logged authority table LOG.AUT.
CLOSEDFILE	3,3,C	Status of the file that contains the log of the hole. Yes if closed and no if open.
DATEREVIEW	8,8,D	Date on which the data was checked.
VERIFIED	3,3,C	Verification status of the data. Yes if it has been verified and no if it has not.
AZIMUTH	4,9,B	Direction of the drill hole.
DIP	4,9,B	Angle of hole relative to the horizontal, with negative values for holes directed downwards and positive values for holes directed upwards.

ROCKCHEM — WHOLE-ROCK AND MINERAL CHEMISTRY DATABASE

Introduction

The fields in this database are partly modelled on those of the PETCHEM DATA SET of AGSO, produced by Wyborn and Ryburn (BMR Record 1989/19). The database consists of five data tables with associated authority tables. The database stores major elements, trace elements, rare earth elements and mineral analyses. The SAMPLE data table is also used by the TASCHRON and BIOSTRAT databases; the major links are indicated in Figure 1.

ROCKCHEM.PAT

Item Name	*Info. def.*	*Description*
RCHEM-ID	4,5,B	A number unique to each analysis and used to link the various geochemical tables, i.e. the sample, majors, traces, REE and mineral data tables. It also links to the tables of the TASCHRON database.

SAMPLE Data Table — RCHEM.SAM

Item Name	*Info. def*	*Description*
ORIG	3,3,C	Letter code for the geologist or organisation who collected or submitted the sample for analysis. It relates to the originators authority table ORIG.AUT.
RCHEM-ID	4,5,B	A number unique to each analysis and used to link the various geochemical tables, i.e. the sample, majors, traces, REE and mineral data tables. It also links to the tables of the TASCHRON and TASREF databases.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample.
REGION	2,2,C	Letter code which relates to the authority table for tectono-stratigraphic regions — REGION.AUT.
SPGRP	2,2,C	Letter code which relates to the authority table of supergroups or major stratigraphic subdivisions — SPGRP.AUT.
GRP	2,2,C	Letter code which relates to the authority table of groups or equivalents — GRP.AUT.
SBGRP	2,2,C	Letter code which relates to the authority table of subgroups or equivalents — SBGRP.AUT.
FRM	2,2,C	Letter code which relates to the authority table of formations or equivalents — FRM.AUT.
MBR	2,2,C	Letter code which relates to the authority table of members or equivalents — MBR.AUT.
CLASS	1,1,C	Letter code which relates to the authority table of major genetic classification subdivisions — CLASS.AUT.
TYPE	1,1,C	Letter code which relates to the authority table of minor genetic classification subdivisions — TYPE.AUT.
COMP	1,1,C	Letter code which relates to the authority table of compositional subdivisions — COMP.AUT.
LITH	2,2,C	Letter code which relates to the authority table of lithology types — LITH.AUT.
LITHOLOGY	128,128,C	Field for a full lithological description.
ERA	2,2,C	Letter code which relates to the authority table of geological eras — ERA.AUT.
PERIOD	2,2,C	Letter code which relates to the authority table of geological periods — PERIOD.AUT.
EPOCH	2,2,C	Letter code which relates to the authority table of geological epochs — EPOCH.AUT.
DIV	2,2,C	Letter code which relates to the authority table which is a subdivision of epoch, mainly for units within the Tertiary — DIV.AUT.

MINAGE	4,12,F,3	Minimum age for the unit in million years BP. Where an accurate age is not available, the accepted IUGS minimum age for the time rock unit is used.
MAXAGE	4,12,F,3	Maximum age for the unit in million years BP. Where an accurate age is not available, the accepted IUGS maximum age for the rock time unit is used.
AGEMETHOD	20,20,C	Absolute age, determination method.
QUAD	2,2,B	Mandatory number field giving the number of the quadrangle in which the sample was collected, e.g. 40 for Alberton.
GEOGAREA	128,128,C	Field for the name of the geographic area (e.g. valley, plain, mountain range) from which the sample came.
LOCALITY	128,128,C	Field for a description of the sample site to aid in its relocation in the field, e.g. "5.5 km NW of Brown's Bore, on east bank of dry creek".
AMGE	4,8,F,0	Mandatory field for AMG easting.
AMGN	4,8,F,0	Mandatory field for AMG northing.
ACC	2,4,B	Number field giving the error in metres for the position of the sample.
DORIS-ID	4,6,B	Unique number for the drill hole the sample came from. Allows a link to the DORIS database.
REGNO	16,16,C	Character code that allows a link to the TASROK database.
OTHERDATA	128,128,C	Field for any data not covered by the above fields that the originator feels are relevant.
CLOSEDFILE	8,8,D	Character field containing yes or no to indicate whether the data is from a closed file.

MAJOR Data Table — RCHEM.MAJ

Item Name	*Info. def.*	*Description*
ORIG	3,3,C	Letter code for the geologist or organisation who collected or submitted the sample for analysis. It relates to the authority table ORIG.AUT.
RCHEM-ID	4,5,B	A number unique to each sample and used to link to the sample data table RCHEM.SAM.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample.
ANALNO	16,16,C	Number used by the laboratory that analysed the sample.
LAB	4,5,B	Numeric code that relates the analysis to the laboratory which did the analysis from a list in the authority table LAB.AUT.
SiO2	4,5,F,2	The measured concentration (wt%). For values less than the minimum detection limit the entry is the minus value of the detection limit, e.g. a value of <0.1 would be encoded as -0.1.
TiO2	4,5,F,2	As above.
Al2O3	4,5,F,2	As above.
Fe2O3 TOT	4,5,F,2	All iron calculated as Fe_2O_3 wt%.
FeO TOT	4,5,F,2	All iron calculated as FeO wt%.
Fe2O3	4,5,F,2	The measured concentration (wt%). For values less than the minimum detection limit the entry is the minus value of the detection limit, e.g. a value of <0.1 would be encoded as -0.1.
FeO	4,5,F,2	As above.
MnO	4,5,F,2	As above.
MgO	4,5,F,2	As above.
CaO	4,5,F,2	As above.
Na2O	4,5,F,2	As above.
K2O	4,5,F,2	As above.
P2O5	4,5,F,2	As above.
H2O Plus	4,5,F,2	As above.
H2O Min	4,5,F,2	As above.
CO2	4,5,F,2	As above.

SO3 TOT	4,5,F,2	All sulphur calculated as SO_3 wt%.
Sulphate as SO3	4,5,F,2	Measured sulphate calculated as SO_3 wt%.
Sulphide as SO3	4,5,F,2	Measured sulphide calculated as SO_3 wt%.
S	4,5,F,2	The measured concentration (wt%). For values less than the minimum detection limit the entry is the minus value of the detection limit, e.g. a value of <0.1 would be encoded as -0.1.
LOI	4,5,F,2	Loss on ignition in wt%.
TOTAL	4,6,F,2	Total of the major elements in wt%.

TRACE Data Table — RCHEM.TRC

Item Name	*Info. def.*	*Description*
ORIG	3,3,C	Letter code for the geologist or organisation who collected or submitted the sample for analysis. It relates to the authority table ORIG.AUT.
RCHEM-ID	4,5,B	A number unique to each sample and used to link to the sample data table RCHEM.SAM.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample.
ANALNO	16,16,C	Number used by the laboratory that analysed the sample.
LAB	4,5,B	Numeric code that relates the analysis to the laboratory which did the analysis from a list in the authority table LAB.AUT.
Ag	4,6,F,1	The measured concentration (ppm). For values less than the minimum detection limit the entry is the minus value of the detection limit, e.g. a value of <0.1 would be encoded as -0.1.
As	4,6,F,1	As above.
Au	4,6,F,1	As above.
Ba	4,6,F,1	As above.
Bi	4,6,F,1	As above.
Cd	4,6,F,1	As above.
Ce	4,6,F,1	As above.
Cl	4,6,F,1	As above.
Co	4,6,F,1	As above.
Cr	4,6,F,1	As above.
Cu	4,6,F,1	As above.
F	4,6,F,1	As above.
Ga	4,6,F,1	As above.
Hg	4,6,F,1	As above.
Ir	4,6,F,1	As above.
La	4,6,F,1	As above.
Li	4,6,F,1	As above.
Mo	4,6,F,1	As above.
Nb	4,6,F,1	As above.
Nd	4,6,F,1	As above.
Ni	4,6,F,1	As above.
Os	4,6,F,1	As above.
Pb	4,6,F,1	As above.
Pd	4,6,F,1	As above.
Pt	4,6,F,1	As above.
Rb	4,6,F,1	As above.
Re	4,6,F,1	As above.
Rh	4,6,F,1	As above.

Ru	4,6,F,1	As above.
Sb	4,6,F,1	As above.
Sc	4,6,F,1	As above.
Se	4,6,F,1	As above.
Sn	4,6,F,1	As above.
Sr	4,6,F,1	As above.
Te	4,6,F,1	As above.
Th	4,6,F,1	As above.
U	4,6,F,1	As above.
V	4,6,F,1	As above.
W	4,6,F,1	As above.
Y	4,6,F,1	As above.
Zn	4,6,F,1	As above.
Zr	4,6,F,1	As above.

REE Data Table — RCHEM.REE

Item Name	*Info. def.*	*Description*
ORIG	3,3,C	Letter code for the geologist or organisation who collected or submitted the sample for analysis. Relates to the authority table ORIG.AUT.
RCHEM-ID	4,5,B	A number unique to each sample and used to link to the sample data table RCHEM.SAM.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample.
ANALNO	16,16,C	Number used by the laboratory that analysed the sample.
LAB	4,5,B	Numeric code that relates the analysis to the laboratory which did the analysis. From a list in the authority table LAB.AUT.
La	4,6,F,1	The measured concentration (ppm). For values less than the minimum detection limit the entry is the minus value of the detection limit, e.g. a value of <0.1 would be encoded as -0.1.
Ce	4,6,F,1	As above.
Pr	4,6,F,1	As above.
Nd	4,6,F,1	As above.
Sm	4,6,F,1	As above.
Eu	4,6,F,1	As above.
Gd	4,6,F,1	As above.
Tb	4,6,F,1	As above.
Dy	4,6,F,1	As above.
Ho	4,6,F,1	As above.
Er	4,6,F,1	As above.
Tm	4,6,F,1	As above.
Yb	4,6,F,1	As above.
Lu	4,6,F,1	As above.

MINERAL Data Table — RCHEM.MIN

Item Name	*Info. def.*	*Description*
ORIG	3,3,C	Letter code for the geologist or organisation who collected or submitted the sample for analysis. Relates to the authority table ORIG.AUT.
RCHEM-ID	4,5,B	A number unique to each analysis and used to link to the sample data table RCHEM.SAM.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample from which the mineral came.
MINERALNUM	16,16,C	Number used by the geologist for the mineral analysis.
MINERAL	16,16,C	Name of the mineral.
LAB	4,5,B	Numeric code that relates the analysis to the laboratory which did the analysis. From a list in the authority table LAB.AUT.
COMMENTS	64,64,C	Optional comments on the relationship of the analysis to others in the sample or other information.
SiO2	4,5,F,2	The measured concentration (wt%). For values less than the minimum detection limit the entry is the minus value of the detection limit, e.g. a value of <0.1 would be encoded as -0.1.
TiO2	4,5,F,2	As above.
Al2O3	4,5,F,2	As above.
Cr2O3	4,5,F,2	As above.
MgO	4,5,F,2	As above.
CaO	4,5,F,2	As above.
MnO	4,5,F,2	As above.
FeO	4,5,F,2	As above.
SrO	4,5,F,2	As above.
BaO	4,5,F,2	As above.
Na2O	4,5,F,2	As above.
K2O	4,5,F,2	As above.
F	4,5,F,2	As above.
Cl	4,5,F,2	As above.
NiO	4,5,F,2	As above.
P2O5	4,5,F,2	As above.
SO3	4,5,F,2	As above.

REF.CON Data Table

Item Name	*Info. def.*	*Description*
RCHEM-ID	4,5,B	Unique number providing the link to the RCHEM-ID field in the SAMPLE data table RCHEM.SAM.
REFNO	4,5,B	Number providing the link to the REFNO field in the table REF.LU.

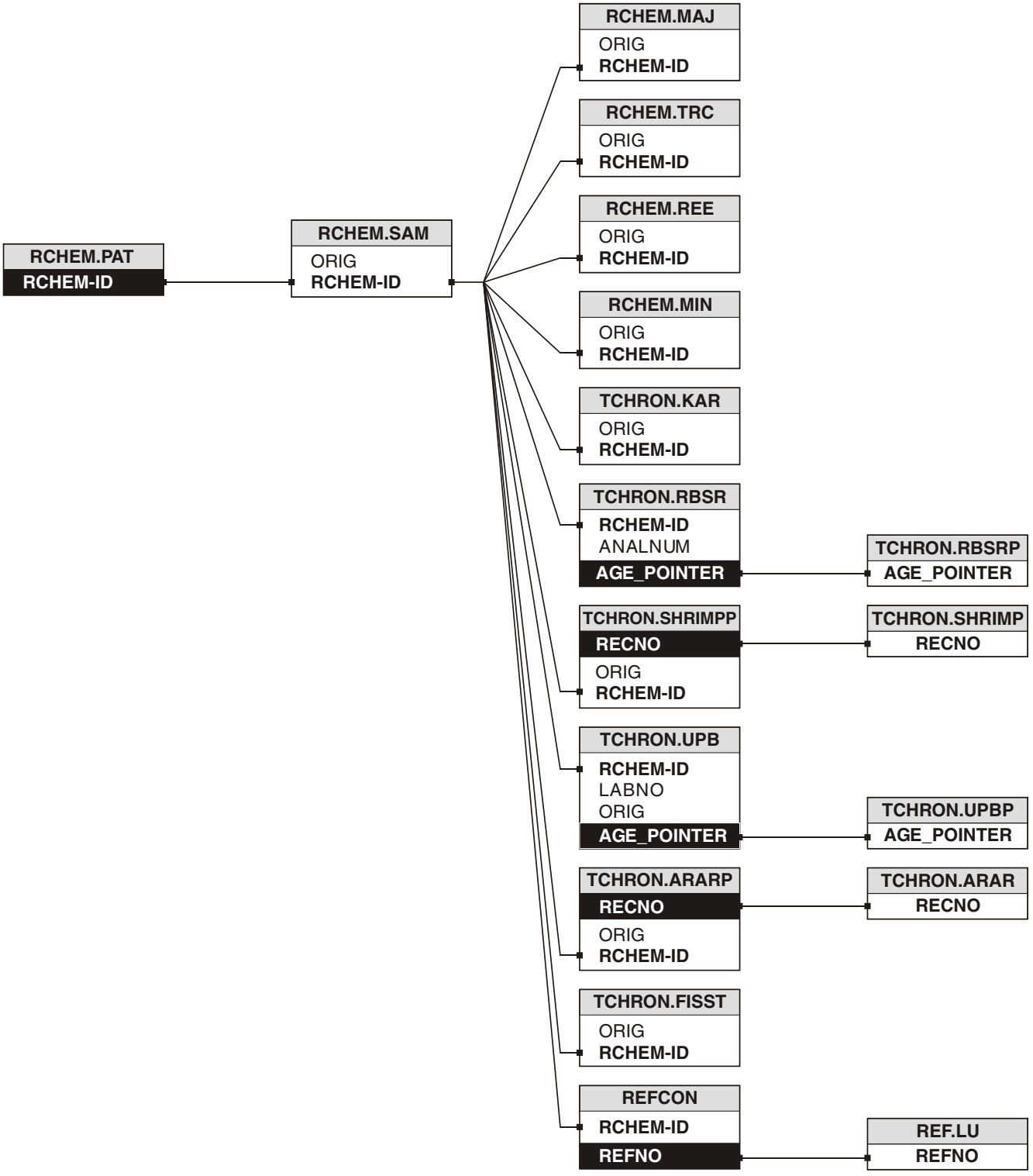

Figure 1

Major links in the ROCKCHEM and TASCHRON databases. Items necessary to illustrate the linkages are shown, with most of the other items omitted to avoid clutter.

TASCHRON GEOCHRONOLOGY DATABASE

Introduction

The fields in this database are partly modelled on those in the OZCHRON database developed by AGSO. Various data tables are linked to the sample data table (RCHEM.SAM), which is also used by the ROCKCHEM database (see fig. 1).

K-AR Data Table — TCHRON.KAR

Item Name	*Info. def.*	*Description*
ORIGIN	3,3,C	Letter code for the geologist who collected the sample. Relates to the authority table ORIG.AUT.
RCHEM-ID	4,5,B	A number unique to each age determination and used to link to the sample data table RCHEM.SAM.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample.
MINERAL	16,16,C	Name of the mineral used for the dating.
K_WTPCT	4,5,F,2	The average of all analytical results for potassium expressed in weight percent.
R40AR_MPG	4,5,F,2	Radiogenic argon in units of E-10 mole per gram.
R40AR_PCT	4,5,F,2	The atomic percentage of total ^{40}Ar which is of radiogenic origin.
AGE_MA	4,8,F,2	Mandatory. Age expressed in Ma.
2STD_DEV	4,5,F,2	Twice standard deviation of age, expressed in Ma, at the 95% confidence level.
COMMENTS	200,200,C	Optional 200-character field for additional information.

RB-SR Data Table — TCHRON.RBSR

Item Name	*Info. def.*	*Description*
ORIG	3,3,C	Letter code for the geologist who collected the sample. Relates to the authority table ORIG.AUT.
RCHEM-ID	4,9,B	A number unique to each age determination and used to link to the sample data table RCHEM.SAM.
ANALNUM	50,50,C	Mandatory number to distinguish each data record.
AGE_POINTER	4,5,B	Number used to link data records to the AGE_POINTER field in the RB-SR POOL data table TCHRON.RBSRP.
MINERAL	16,16,C	Character field to indicate the material analysed — either “whole rock”, or the name of the separated mineral.
RB_PPM	4,5,F,2	Rubidium in ppm.
SR_PPM	4,5,F,2	Strontium in ppm.
RB87SR86	4,5,F,2	Calculated isotope ratio $^{87}Rb/^{86}Sr$.
SR87SR86	4,5,F,2	Observed isotope ratio $^{87}Sr/^{86}Sr$.
COMMENTS	200,200,C	Character field for additional information.

RB-SR_POOL Data Table — TCHRON.RBSRP

Item Name	*Info. def.*	*Description*
AGE_POINTER	4,5,B	Number used to link with the AGE_POINTER field in the RB-SR data table TCHRON.RBSR.
MSWD	4,5,F,2	Mean square of weighted deviates.
AGE_MA	4,8,F,2	The Rb-Sr isochron age expressed in Ma.
STD_DEVA	4,5,F,2	Age error envelope at the 95% confidence level.
INIT_RATIO	4,5,F,2	The isochron's intercept on the $^{87}Sr/^{86}Sr$ axis.
STD_DEVI	4,5,F,2	Initial Ratio error envelope at the 95% confidence level.
COMMENTS	200,200,C	Character field for additional information.

SHRIMP_POOL Data Table — TCHRON.SHRIMPP

Item Name	*Info. def.*	*Description*
RECNO	4,5,B	Number that links to the RECNO field in the SHRIMP_ANAL data table TCHRON.SHRIMP.
ORIG	3,3,C	Letter code for the geologist who collected the sample. Relates to the authority table ORIG.AUT.
RCHEM-ID	4,5,B	A number unique to each age determination and used to link to the RCHEM-ID field in the SAMPLE data table RCHEM.SAM.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample.
AGE206_238207PB	4,5,F,2	Pooled age expressed in Ma based on the $^{206}Pb/^{238}U$ ratio ^{207}Pb-corrected.
2STD_DEVA	4,5,F,2	Twice standard deviation of age based on $^{206}Pb/^{238}U$ ratio , expressed in Ma, at the 95% confidence level.
AGE207_206207PB	4,5,F,2	Pooled age expressed in Ma based on $^{207}Pb/^{206}Pb$ ratio ^{207}Pb-corrected.
2STD_DEVB	4,5,F,2	Twice standard deviation of age based on $^{207}Pb/^{206}Pb$ ratio , expressed in Ma, at the 95% confidence level.
COMMENTS	200,200,C	Character field for additional information.

SHRIMP_ANAL Data Table — TCHRON.SHRIMP.

Item Name	*Info. def.*	*Description*
RECNO	4,9,B	A number that links to the RECNO field in the SHRIMP_POOL data table TCHRON.SHRIMPP.
LABNO	16,16,C	Character field for any laboratory identification used, as distinct from field sample numbering.
SPOTANAL	16,16,C	Identification for the spot analysis.
U_PPM	4,5,F,2	Uranium in ppm.
TH_PPM	4,5,F,2	Thorium in ppm.
TH_OVER_U	4,5,F,2	Th/U ratio.
PB206PB204	4,5,F,2	Measured $^{206}Pb/^{204}Pb$ ratio.
F_PCT	4,5,F,2	Percentage of common ^{206}Pb in measured ^{206}Pb.
PB206U238RAD208PB	4,5,F,2	Atomic ratio of radiogenic ^{206}Pb to parent ^{238}U — ordinate of concordia diagram, ^{208}Pb-corrected.
STD_DEV2	4,5,F,2	The 67% error limits in the $^{206}Pb^*/^{238}U^*$ ratio.
PB206U238RAD207PB	4,5,F,2	Atomic ratio of radiogenic ^{206}Pb to parent ^{238}U — ordinate of concordia diagram, ^{207}Pb-corrected.
STD_DEV3	4,5,F,2	The 67% error limits in the $^{206}Pb^*/^{238}U^*$ ratio.
PB207U235RAD208PB	4,5,F,2	Atomic ratio of radiogenic ^{207}Pb to parent ^{235}U — abscissa of concordia diagram, ^{208}Pb-corrected.

STD_DEV4	4,5,F,2	The 67% error limits in the $^{207}Pb^*/^{235}U^*$ ratio
PB207PB206208PB	4,5,F,2	Atomic ratio of radiogenic isotopes ^{207}Pb and ^{206}Pb, ^{208}Pb-corrected.
STD_DEV1	4,5,F,2	The 67% error limits in the $^{207}Pb^*/^{206}Pb^*$ ratio.
AGE206_238207PB	4,5,F,2	Age in Ma derived from the ratio $^{206}Pb^*/^{238}U$ which was ^{207}Pb-corrected.
STD_DEV7	4,5,F,2	The 95% error limits in the $^{206}Pb/^{238}U$ age in Ma.
AGE207_206207PB	4,5,F,2	Age in Ma derived from the ratio $^{207}Pb^*/^{206}Pb^*$ which was ^{207}Pb-corrected.
STD_DEV8	4,5,F,2	The 95% error limits in the $^{207}Pb/^{206}Pb$ age in Ma.
COMMENTS	200,200,C	Character field for additional information.

U-PB_ANAL Data Table — TCHRON.UPB.

Item Name	*Info. def.*	*Description*
RCHEM-ID	4,9,B	A number that links to the RCHEM-ID field in the SAMPLE data table RCHEM.SAM.
LABNO	16,16,C	Character field for any laboratory identification used, as distinct from field sample numbering.
ORIG	3,3,C	Letter code for the geologist who collected the sample. Relates to the authority table ORIG.AUT.
AGE_POINTER	4,5,B	Number used to link with the AGE_POINTER field in the U-PB_POOL data table TCHRON.UPBP
U_PPM	4,5,F,2	Uranium in ppm.
PB_PPM	4,5,F,2	Lead in ppm.
PB206PB204	4,5,F,2	Measured $^{206}Pb/^{204}Pb$ ratio.
PB204	4,5,F,2	Mass abundance of ^{204}Pb in ppm.
PB206RAD	4,5,F,2	Mass abundance of radiogenic ^{206}Pb in ppm.
PB207RAD	4,5,F,2	Mass abundance of radiogenic ^{207}Pb in ppm.
PB208RAD	4,5,F,2	Mass abundance of radiogenic ^{208}Pb in ppm.
F_PCT	4,5,F,2	Percentage of common ^{206}Pb in measured ^{206}Pb.
PB208PB206	4,5,F,2	Atomic ratio of radiogenic isotopes $^{208}Pb^*$ and $^{206}Pb^*$ after correction for common lead. Unless otherwise specified in the comment field the common Pb ratio is from the Cummings-Richards Mode 3 growth curve.
STD2_DEVA	4,5,F,2	Twice standard deviation 95% error limits in the $^{208}Pb/^{206}Pb^*$.
PB207U235	4,5,F,2	Atomic ratio of radiogenic $^{207}Pb^*$ to parent ^{235}U — abscissa of concordia diagram.
STD2_DEVB	4,5,F,2	Twice standard deviation 95% error limits in $^{207}Pb^*/^{235}U$.
PB207PB206	4,5,F,2	Atomic ratio of radiogenic $^{207}Pb^*$ and $^{206}Pb^*$ after correction for common lead.
STD2_DEVC	4,5,F,2	Twice standard deviation 95% error limits in the $^{207}Pb^*/^{206}Pb^*$.
AGE206_238	4,5,F,2	Age in Ma derived from the ratio $^{206}Pb^*/^{238}U$.
AGE207_235	4,5,F,2	Age in Ma derived from the ratio $^{207}Pb^*/^{235}U$.
AGE207_206	4,5,F,2	Age in Ma derived from the ratio $^{207}Pb^*/^{206}U$.
STD_DEVD	4,5,F,2	The 95% error limits in the $^{207}Pb/^{206}Pb$ age in Ma.
COMMENTS	200,200,C	Character field for additional information.

U-PB_POOL Data Table — TCHRON.UPBP

Item Name	*Info. def.*	*Description*
AGE_POINTER	4,5,B	Number that links to the AGE_POINTER field in the U-PB_ANAL data table TCHRON.UPB.
ORIG	3,3,C	Letter code for the geologist who collected the sample. Relates to the authority table ORIG.AUT.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample.
AGE206_238207PB	4,5,F,2	Pooled age expressed in Ma based on the $^{206}Pb/^{238}U$ ratio, ^{207}Pb-corrected.
STD2_DEVA	4,5,F,2	Twice standard deviation of age based on $^{206}Pb/^{208}U$ ratio, expressed in Ma, at the 95% confidence level.
AGE207_206207PB	4,5,F,2	Pooled age expressed in Ma based on $^{207}Pb/^{206}Pb$ ratio, ^{207}Pb-corrected.
STD2_DEVB	4,5,F,2	Twice standard deviation of age based on $^{207}Pb/^{206}Pb$ ratio, expressed in Ma, at the 95% confidence level.
COMMENTS	200,200,C	Character field for additional information.

AR-AR_POOL Data Table — TCHRON.ARARP

Item Name	*Info. def.*	*Description*
RECNO	4,5,B	Number that links to the RECNO field in the ARAR_STEP data table TCHRON.ARAR.
ORIG	3,3,C	Letter code for the geologist who collected the sample. Relates to the authority table ORIG.AUT.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample.
MINERAL	16,16,C	Mandatory name of the analysed mineral separate. Can be “whole rock”.
AGE_PLAT	4,5,F,2	Plateau age expressed in Ma.
2STD_DEVA	4,5,F,2	Twice standard deviation of age expressed in Ma, at the 95% confidence level.
COMMENTS	200,200,C	Character field for additional information.

ARAR_STEP Data Table — TCHRON.ARAR

Item Name	*Info. def.*	*Description*
RECNO	4,5,B	Number that links to the RECNO field in the AR-AR_POOL data table TCHRON.ARARP.
LABNO	16,16,C	Character field for any laboratory identification used, as distinct from field sample numbering.
TEMP	50,50,C	Temperature or identification for the step analysis.
AR36	4,5,F,2	^{36}Ar E-19 moles.
STD_DEV1	4,5,F,2	The 67% error limits in the ^{36}Ar.
AR37	4,5,F,2	^{37}Ar E-16 moles.
STD_DEV2	4,5,F,2	The 67% error limits in the ^{37}Ar.
AR39TOTAL	4,5,F,2	^{39}Ar E-17 moles total.
STD_DEV3	4,5,F,2	The 67% error limits in the ^{39}Ar.
AR40	4,5,F,2	^{40}Ar E-16 moles.
STD_DEV4	4,5,F,2	The 67% error limits in the ^{40}Ar.
AR40PCT	4,5,F,2	^{40}Ar percentage of total ^{40}Ar.
AR39CUMPCT	4,5,F,2	Cumulative percentage of ^{39}AR released.
AR4_39_K	4,5,F,2	The Ar/Ar ratio which corresponds to the parent daughter ratio $^{40}Ar/^{40}Ar$.
AGE	4,5,F,2	Apparent age in Ma.
STD_DEV5	4,5,F,2	The 67% error limits in the apparent age.
COMMENTS	200,200,C	Character field for additional information.

FISST Data Table — TCHRON.FISST

Item Name	*Info.Def.*	*Description*
ORIG	3,3,C	Letter code for the geologist who collected the sample. Relates to the authority table ORIG.AUT.
RCHEM-ID	4,5,B	A number that links to the RCHEM-ID field in the SAMPLE data table RCHEM.SAM.
FIELDNO	16,16,C	Mandatory field number used by the collector of the sample.
MINERAL	16,16,C	Mandatory name of the mineral used.
N_DOSE	4,5,F,2	Neutron dose (10E15n cm^{-2}).
SPON_T_N	4,5,F,2	Number of spontaneous tracks.
SPON_T_D	4,5,F,2	Density of spontaneous tracks (10E7 cm^{-2}).
IND_T_N	4,5,F,2	Number of induced tracks.
IND_T_D	4,5,F,2	Density of induced tracks (10E7 cm^{-2}).
U	4,5,F,2	Uranium in ppm.
AGE_MA	4,5,F,2	Mandatory age expressed in Ma.
STD2_DEV	4,5,F,2	Time standard deviation of age expressed in Ma at the 95% confidence level.
COMMENTS	200,200,C	Character field for any additional information.

TASSTR STRUCTURAL GEOLOGY DATABASE

Introduction

Structural geological data are stored in an ArcInfo coverage called MAPNAME.ST. The structural data are stored in a single table in ArcInfo (MAPNAME.ST.PAT). There is one location stored in ArcInfo for each measurement. Thus if measurements of bedding and cleavage have been made at the same location, there will be two label points in the coverage with the same co-ordinates. The fields in the .PAT file are detailed below.

MAPNAME.ST.PAT Tables

A MAPNAME.ST.PAT table is created in ArcInfo after the structural data have been digitised or entered from the keyboard. There are two tables, one for the 1:25 000 and the other for the 1:250 000 base scale digital data.

PAT table for 1:25 000 coverage showing only the extra items.

Item Name	*Info. def.*	*Description*
TYPE	3,3,C	Letter code for the type of structural measurement which relates to the 1:25 000 scale authority table STRUC25.AUT.
SYMBOL	4,5,B	The symbol number from the ArcInfo markerset. The correspondence between TYPE codes and marker symbol numbers is shown in the authority table STRUC25.AUT.
ANGLE	4,5,B	The rotation angle of the structural symbol specified counterclockwise from the positive X axis (see DD below).
DIP	4,5,B	The dip or plunge of the feature. Planar features with unspecified dip, and horizontal linear features are encoded as -1.
DD	4,5,B	The direction (azimuth) of dip or plunge of the feature. This is used to calculate ANGLE.
GEOLOGIST	4,4,C	Letter code for the geologist who made the measurement, if known. Relates to the authority table ORIG.AUT.
RELIAB	4,5,B	A code for the reliability of the measurement, so that if multiple readings of the same type are made at a single location a priority may be assigned to the readings. The lowest value has highest priority.
M_SCALE	4,12,F,2	The scale at which the mapping was carried out; e.g. 50 for 1:50 000.
O_SCALE	4,12,F,2	Number to indicate which structural symbols should be output at different scales. For example, 25 indicates that the symbol should be output at all scales equal to or more detailed than 1:25 000.
LOC_ACC	4,5,B	The estimated location accuracy of the measurement in metres.
FIELD_NO	8,8,C	The field locality number used by the geologist.
FIELD_BOOK	50,50,C	Field book identification.
SAMPLE_NO	8,8,C	The sample number of a sample from this location.
TASROK_NO	8,8,C	The TASROK number of a sample from this location.
COMMENTS	20,20,C	Short comments about the measurement.
XOFF	4,12,F,2	The X offset of the structural symbol.
YOFF	4,12,F,2	The Y offset of the structural symbol.
RCODE	4,5,B	Numeric code used as a link to the lookup tables GEOLOGY.LU and LITH.LU. Used to record the rock or mineral type of veins or dykes.

PAT table for 1:250 000 scale coverage showing only the extra items.

Item Name	*Info. def.*	*Description*
TYPE	3,3,I	Number code for the type of structural measurement which relates to the 1:250 000 scale authority table STRUC250.AUT
DIP	3,3,I	The dip of the feature. Planar features with unspecified dip, or which are vertical, are encoded as 0.
AZIMUTH	4,5,B	The rotation angle of the structural symbol specified counterclockwise from the positive X axis.
M_SCALE	4,5,B	The scale at which the mapping was carried out; e.g. 50 for 1:50 000.
O_SCALE	4,5,B	The maximum intended output scale; e.g. 50 for 1:50 000.

Introduction

The database is stored in a series of ArcInfo tables which are described below. Accompanying the data tables are authority tables that define the coded entries. The database tables and the relationships between tables are illustrated in Figure 2. The database employs a one-to-many relational format, enabling flexibility in data storage.

TASSED.PAT Table

This is the mandatory point attribute table created by ArcInfo when point locations are digitised. A unique numerical code is assigned to each sample in the TASSED-ID field which is used as a key field to relate each sample with information in other TASSED data tables.

Item Name	*Info def.*	*Description*
TASSED-ID	4,5,B	Unique identification numeric code which is used to link the sample location to the TASSED.SAM, TASSED.ANL and TASSED.SRV data tables.

TASSED.SAM Data Table

The TASSED.SAM data table holds all the descriptive information about each sample. It relates to TASSED.PAT via TASSED-ID on a one-to-one relate.

Item Name	*Info def.*	*Description*
TASSED-ID	4,5,B	Unique sample identification numeric code which is used to link the sample to the TASSED.ANL data table and the TASSED.PAT table.
SURVEY	4,5,B	A numeric code for the survey number which is used to link each sample to information about the survey in the TASSED.SRV data table.
SAMPLE	10,10,C	The original sample number designated by sample collector.
DATE	8,8,D	Date the sample was taken in DD/MM/YY format with 01 used for day and month if they are unknown.
STYPE	2,2,C	Two-letter code for the sample type. It relates to the authority table STYPE.AUT.
ACC	4,5,B	Numeric code for location accuracy. It relates to the authority table LOCACC.AUT.
SNAP25K	2,2,B	Numeric code indicating how sample positions were located on the 1:25 000 scale drainage base maps. Relates to the authority table SNAP25K.AUT.
COMMENTS	150,150,C	Comments.
COMPBY	3,3,C	Letter code for the geologist who compiled the data. Relates to the authority table ORIG.AUT.

TASSED.ANL Data Table

The TASSED.ANL data table stores the analytical results for each sample. A single sample in TASSED.PAT may have multiple entries in this table. The analytical and treatment methods are recorded for each analysis.

Item Name	*Info. def.*	*Description*
TASSED-ID	4,5,B	Unique sample identification code which links this table to TASSED.PAT.
ELEMENT	2,2,C	The element analysed. All entries are in upper case.
TREAT	10,10,C	Character code that relates the sample to the authority table TREAT.AUT, which lists types of treatment applied to samples prior to analysis.
ANAL	2,2,C	Letter code that links the analytical data to the analytical technique used. From a list in the authority table ANAL.AUT.
LAB	4,5,B	Numeric code that relates the analysis to the laboratory which did the analysis. From a list in the authority table LAB.AUT.
VALUE	4,12,F,4	The measured concentration (ppm). For values less than the minimum detection limit the entry is the minus value of the detection limit; e.g. a value of <0.1 would be encoded as -0.1.
MDL	4,12,F,4	The minimum detection limit. A value of -1 is used where the detection limit is unknown.

TASSED.SRV Data Table

The TASSED.SRV data table stores information about each geochemical survey. The SURVEY item in the TASSED.SAM data table has a one-to-many relate with SURVEY in the TASSED.SRV data table. This table allows the user to trace any sample back to its data source in the Mineral Resources Tasmania library. The fields in the TASSED.SRV data table are:

Item Name	*Info. def.*	*Description*
SURVEY	4,5,B	A numeric code for the survey number.
TCR	8,8,C	The Tasmanian Company Report number.
DOMINFO	8,8,C	The DOMINFO record number.

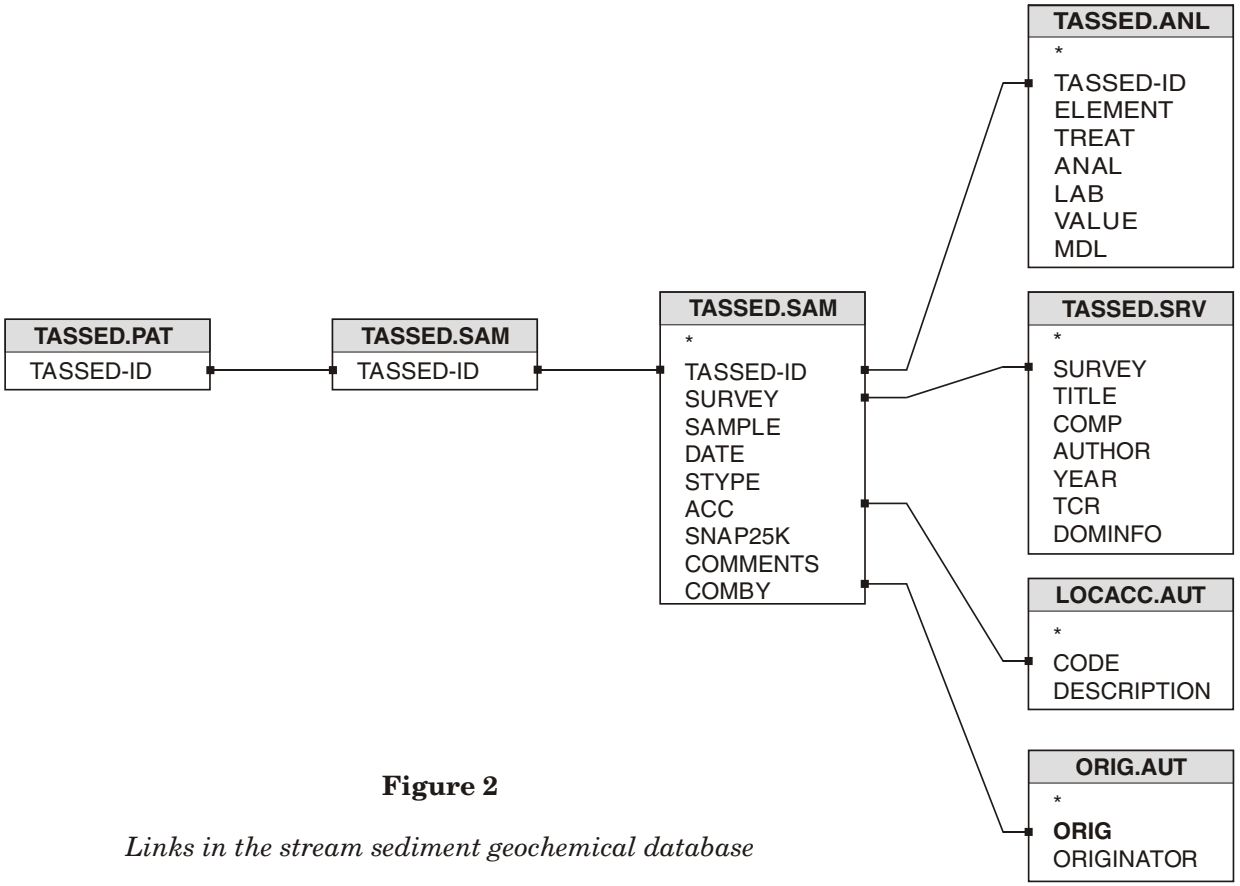

Figure 2

Links in the stream sediment geochemical database

TASGEOL — ROCK UNIT DATABASE

Introduction

The attribute scheme for Tasmanian digital geological maps is detailed below. The database tables and the relationships between tables are illustrated in Figure 3. The structure of each table and the codes for each field are defined below.

MAPNAME.G.PAT Table

The MAPNAME.G.PAT table is created automatically during the process of building the geological map in ArcInfo. There is one entry in this table for each polygon on the map. An item RCODE is added to the table for the 1:25 000 scale geology coverage and an additional item GEOLOGY is added for the 1:250 000 scale coverage. The RCODE field carries the code given to each polygon and is used to link a polygon to the textual information for each rock type stored in the related tables. The fields additional to the standard fields in the MAPNAME.PAT table are described below.

Item Name	*Info. def.*	*Description*
RCODE	4,5,B	Numeric code used as a link to the lookup tables GEOLOGY.LU and LITH.LU.
GEOLOGY	5,5,C	Letter symbols used on the map and key. This item is only used for the 1:250 000 scale coverage.

GEOLOGY.LU Table

The GEOLOGY.LU table is a look-up table which carries attributes for each geological polygon. There is a many-to-one relationship between the MAPNAME.G.PAT table and this table. The fields in the GEOLOGY.LU table are described below.

Item Name	*Info. def.*	*Description*
RCODE	4,5,B	Numeric code used as a link to the lookup table LITH.LU and MAPNAME.G.PAT.
SYMBOL	8,8,C	Letter symbol for the rock unit which appeared on the published map.
REGION	2,2,C	Letter code which relates to the authority table for tectono-stratigraphic regions REGION.AUT.
SPGRP	2,2,C	Letter code which relates to the authority table of supergroups or major stratigraphic subdivisions SPGRP.AUT.
GRP	2,2,C	Letter code which relates to the authority table of groups or equivalents GRP.AUT.
SBGRP	2,2,C	Letter code which relates to the authority tablemat of subgroups or equivalents SBGRP.
FRM	2,2,C	Letter code which relates to the authority table of formations or equivalents FRM.AUT.
MBR	2,2,C	Letter code which relates to the authority table of members or equivalents MBR.AUT.
ERA	2,2,C	Letter code which relates to the authority table of geological eras ERA.AUT.
PERIOD	2,2,C	Letter code which relates to the authority table of geological periods PERIOD.AUT.
EPOCH	2,2,C	Letter code which relates to the authority table of geological epochs EPOCH.AUT.
DIV	2,2,C	Letter code which relates to the authority table which is a subdivision of epoch, mainly for units within the Tertiary DIV.AUT.
MINAGE	4,12,F,3	Minimum age for the unit in million years BP. Where an accurate age is not available, the accepted IUGS minimum age for the time rock unit is used.
MAXAGE	4,12,F,3	Maximum age for the unit in million years BP. Where an accurate age is not available, the accepted IUGS maximum age for the rock time unit is used.
DESC	200,200,C	Free text description of the unit.

GRPCOR	4,5,B	Number code which relates to the authority table GRPCOR.AUT which lists group correlations. This feature has not yet been implemented.
FRMCOR	4,5,B	Number code which relates to the authority table FRMCOR.AUT which lists formation correlations. This feature has not yet been implemented.
MBRCOR	4,5,B	Number code which relates to the authority table MBRCOR.AUT which lists member correlations. This feature has not yet been implemented.

LITH.LU Lookup Table

The LITH.LU lookup table carries additional attributes for each geological polygon, including attributes which describe the rock classification, mineralogy and lithology. There is a many-to-many relationship between the MAPNAME.G.PAT table and this table, and hence a single geological polygon can contain multiple lithologies. The fields in the LITH.LU lookup table are:

Item Name	*Info. def.*	*Description*
RCODE	4,5,B	Numeric code used as a link to the lookup table GEOLOGY.LU and MAPNAME.G.PAT.
CLASS	1,1,C	Letter code which relates to the authority table of major genetic classification subdivisions — CLASS.AUT.
TYPE	1,1,C	Letter code which relates to the authority table of minor genetic classification subdivisions — TYPE.AUT.
COMP	1,1,C	Letter code which relates to the authority table of compositional subdivisions — COMP.AUT.
GENESIS	1,1,C	Letter code which relates to the authority table of depositional environments or formation mechanisms — GENESIS.AUT.
LITH	2,2,C	Letter code which relates to the authority table of lithology types — LITH.AUT.
PROP	4,5,B	Proportion for the lithology expressed as a percentage.
TEXT	19,19,C	Letter codes which relate to the authority table of texture qualifiers — TEXT.AUT. Up to four qualifiers are allowed for each lithology separated by spaces. The codes have been adapted from the TASROK database.
MIN	15,15,C	Letter code which relates to the authority table of mineralogical qualifiers — MIN.AUT. Up to four qualifiers are allowed for each lithology separated by spaces. The codes have been adapted from the TASROK database.

MAPNAME.G.AAT Table

The MAPNAME.G.AAT table is created automatically during the process of building the geological map in ArcInfo. There are two tables, one for the 1:25 000 and the other for the 1:250 000 base scale digital data.

AAT table for 1:25 000 scale coverage showing only the extra item

Item Name	*Info. def.*	*Description*
LINECODE	4,5,B	Numeric code providing a link to the authority table LINE25.AUT.

AAT table for 1:250 000 scale coverage showing only the extra item

Item Name	*Info. def.*	*Description*
LINECODE	4,5,B	Numeric code providing a link to the authority table — LINE250.AUT.

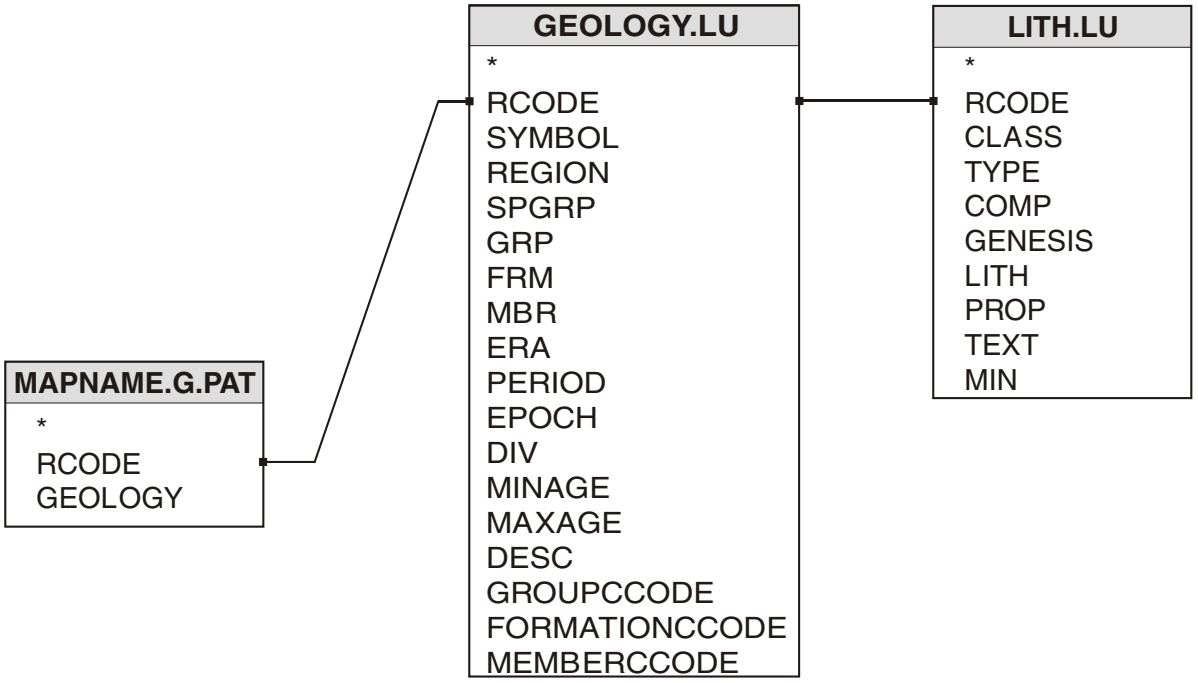

Figure 3

Structure of the TASGEOL rock unit database. The GEOLOGY item in the MAPNAME.G.PAT table is only present for the 1:250 000 scale geology coverage.

GEOLSOURCE — GEOLOGY SOURCE DATABASE

Introduction

In order to record the sources of the information for the geological map, reliability information, and to record the geologists responsible for preparing the information for GIS input, an additional coverage for the 1:250 000 base scale digital data has been created. It is intended that there will also be a coverage for the 1:25 000 scale digital data at a later stage, and the necessary data structures for this are also listed here. The coverages are linked to the REF.LU, REL.AUT and ORIGIN.AUT tables using the SOURCE250, SOURCE25, REFLINK and COMPLINK lookup tables as intermediate tables (see Figure 4 for the 1:250 000 base scale database structure).

SOURCE250.PAT Table

Item Name	*Info. def.*	*Description*
SOURCE250-ID	4,5,B	Machine generated number.
REF	4,5,B	Unique number that links the map polygon to the lookup tables SOURCE250.LU, COMLINK LU and REFLINK.LU.

SOURCE25.PAT Table

Item Name	*Info. def.*	*Description*
SOURCE25-ID	4,5,B	Machine generated number.
REF	4,5,B	Unique number that links the map polygon to the lookup tables SOURCE25.LU, COMLINK LU and REFLINK.LU.

SOURCE250.LU Lookup Table

Item Name	*Info. def.*	*Description*
CODE	4,5,B	Unique number providing the link to SOURCE250.PAT and REFLINK.LU lookup table.
RECODE	4,5,B	Number providing link to the authority table REL.AUT.
COMCODE	4,5,B	Number providing link to the lookup table COMPLINK.LU.

SOURCE25.LU Lookup Table

Item Name	*Info. def.*	*Description*
CODE	4,5,B	Unique number providing the link to SOURCE25.PAT and REFLINK.LU lookup table.
RECODE	4,5,B	Number providing link to the authority table REL.AUT.
COMCODE	4,5,B	Number providing link to the lookup table COMPLINK.LU.

REFLINK.LU Lookup Table

Item Name	*Info. def.*	*Description*
CODE	4,5,B	Unique number providing the link to SOURCE250.LU or SOURCE25.LU.
REFNO	4,5,B	Number providing link to authority table REF.LU.

COMPLINK.LU Lookup Table

Item Name	*Info. def.*	*Description*
CODE	4,5,B	Unique number providing the link to SOURCE250.LU or SOURCE25.LU.
COMCODE	3,3,C	Letter code providing link to authority table ORIGIN.AUT.

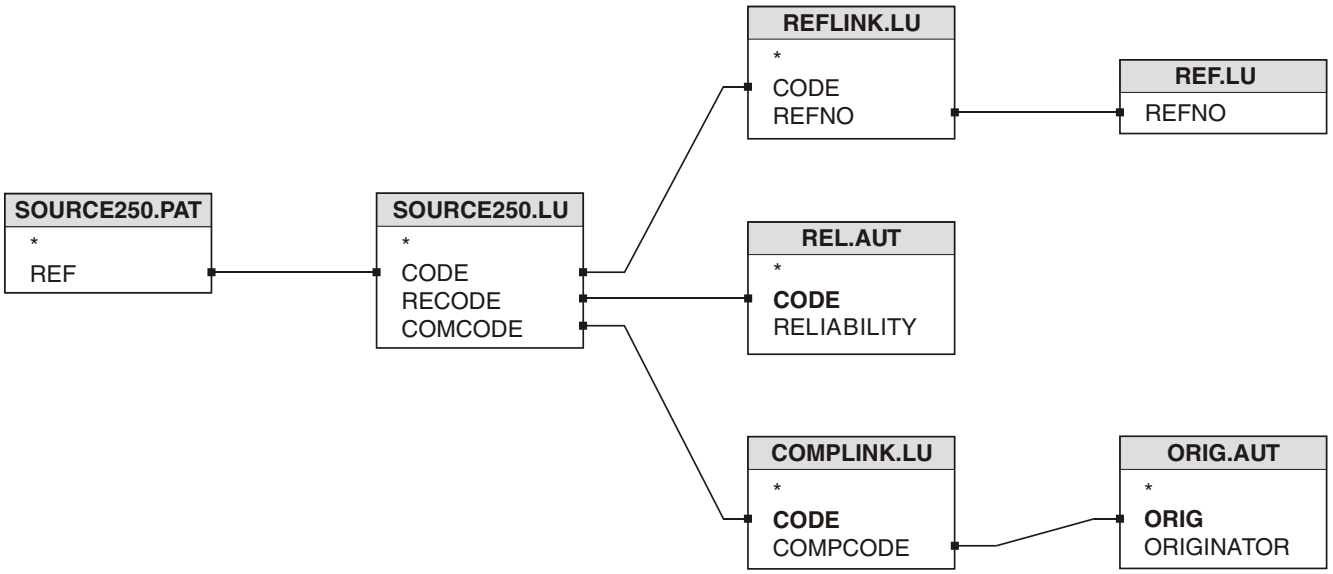

Figure 4

Links for the 1:250 000 scale geology source database.

TASREF — REFERENCES TO TASMANIAN DATA DATABASE

Introduction

This database holds the references to the source of the information held in the other databases. See Figure 5 for the database structure.

REF.LU Table

Item Name	*Info. def.*	*Description*
REFNO	4,5,B	Unique number for each reference providing a link with REFNO field in the AUTHL.LU table.
YEAR	4,5,B	Year of publication.
UID	20,20,C	Identification code for the person who entered the reference in the database.
TITLE	200,200,C	Title of the reference.
JOURNAL	200,200,C	Journal that contains the reference.
VOL	36,36,C	The volume of the journal that contains the reference.
PAGES	36,36,C	Page number of the reference in the journal that contains the reference.
STATUS	4,5,B	Number code that links to the CODE field in the REPSTAT.AUT authority table.
TCRN	4,5,B	Number of the Tasmanian Company Report in which the data occurs.

AUTHL.LU Lookup Table

Item Name	*Info. def.*	*Description*
AUTHN	4,5,B	Number that links to the AUTHN field in the AUTH.AUT authority table.
ORDER	4,5,B	A number which gives the order of the author in the list of authors for the reference.
REFNO	4,5,B	Number that links to the REFNO field in the REF.LU table.

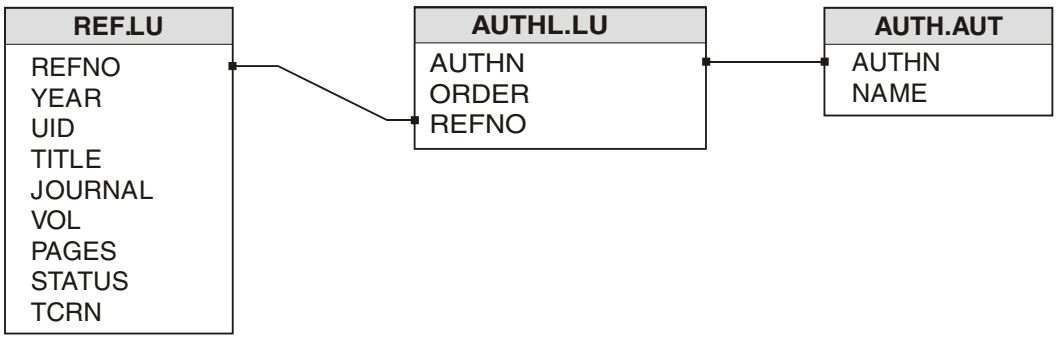

Figure 5

Database structure for the TASREF references database

BIOSTRAT — STRATIGRAPHICALLY SIGNIFICANT FOSSIL OCCURRENCES DATABASE

Introduction

This database holds information about stratigraphically significant fossil occurrences.

BIOSTRAT Data Table — BIOSTRAT

Item Name	*Info. def.*	*Description*
RCHEM_ID	4,5,B	A number unique to each fossil locality and used to link to the SAMPLE data table RCHEM.SAM.
LOCNUM	4,5,B	Locality number.
BIOTA	200,200,C	Taxa present.
AGE	200,200,C	Statement of probable age.
PRES	200,200,C	Description of the type of preservation.

LOCALITY.LU Lookup Table

Item Name	*Info. def*	*Description*
CODE	4,5,B	A number that provides a link to the LOCNUM field in the BIOSTRAT data table BIOSTRAT.DAT.
LOCNAME	100,100,C	Name and description of the locality where the fossils were found.

Authority tables for MIRLOCH data

The information definition for the item is given in brackets after the item.

CO-ORDINATE ACCURACY Table — MIRLOCH.ACC

	Code (4,5,B)	*Error (64,64,C)*
1	<50 m	
2	<100 m	
3	<500 m	
4	<1 km	
5	>1 km	

STATUS Table — MIRLOCH.STA

	Code (4,5,B)	*Status (64,64,C)*
0	Operating mine	
1	Non-operating mine — reserves known	
2	Non-operating mine — reserves unknown	
3	Abandoned mine — reserves known	
4	Abandoned mine — reserves unknown	
5	Abandoned — mined out	
6	Prospect — explored	
7	Prospect — unexplored	
8	Mineralised area	
9	Mineral occurrence	

SIZE OF DEPOSIT Table — MIRLOCH.SIZ

	Code (4,5,B)	*Size (64,64,C)*
0	Not determined	
1	Very small: <100 tonnes (or cubic metres)	
2	Small: 100 t – 10 000 t	
3	Medium: 10 000 t – 1 000 000 t	
4	Large: 1 000 000 t – 10 000 000 t	
5	Very large: >10 000 000 t	

HOST ROCK Table — MIRLOCH.HOS

	Code (4,5,B)	*Host (64,64,C)*
0	Precambrian sequences	
1	Cambrian sedimentary sequences	
2	Cambrian igneous sequences	
3	Mount Read Volcanics and correlates	
4	Owen Conglomerate/Moina Sandstone and correlates	
5	Gordon Limestone/Eldon Group and correlates	
6	Mathinna Beds	
7	Devonian granitoid	
8	Parmeener Supergroup	
9	Jurassic–Cainozoic sequences	

AGE OF MINERALISATION Table — MIRLOCH.AGE

	Code (4,5,B)	*Minage (64,64,C)*
0	Not determined	
1	Precambrian	
2	Eocambrian–Early Cambrian	
3	Middle–Late Cambrian	
4	Ordovician–Early Devonian	
5	Late Devonian (granite associated)	
6	Permo-Triassic	
7	Jurassic–Cretaceous	
8	Tertiary	
9	Quaternary	

FORM OF DEPOSIT Table — MIRLOCH.TYP

	Code (4,5,B)	*Form (64,64,C)*
0	Volcanic massive sulphide	
1	Stratiform	
2	Vein (single, sheet, saddle)	
3	Stockwork	
4	Disseminated	
5	Replacement	
6	Pipe	
7	Placer	
8	Residual	
9	Other (noted in references)	

EXPLORATION OF DEPOSIT Table — MIRLOCH.EXP

	Code (4,5,B)	*Exploration (64,64,C)*
0	Nil or no known exploration	
1	Prospecting	
2	Geological mapping	
3	Geochemical surveys	
4	Geophysical surveys	
5	Drilling	

DEPOSIT ABBREVIATIONS Table — MIRLOCH.DEP

Abbreviation (8,8,C)	*Full Term (32,32,C)*	*Preferred Use (16,16,C)*
?	Unnamed	Unnamed
ALLUV	Alluvial	
BH	Borehole	
C/F, CF	Coal field	CF
CK	Creek	
E	East	
EXTD	Extended	
EXTN	Extension	
G/F, GF	Gold field	GF
ML	Mining Lease	
N	North	
NO NAME	Unnamed	Unnamed
O/B	Orebody	
PA OR P.A.	Prospecting Association	PA
PR	Prospect	
PSYN	Prospecting Syndicate	
PT	Point	
Q	Quarry	
R	River	
RVT, RT	Rivulet	RVT
RWD	Reward	
S	South	
SYN	Syndicate	
T/F, TF	Tin field	TF
UNKNOWN	Unnamed	Unnamed
W	West	
WKGS	Workings	

COMMODITY ABBREVIATION Table — MIRLOCH.ABR

Abbreviation (8,8,C)	*Mineral (32,32,C)*	*Preferred Use (16,16,C)*
Ag	Silver	
As	Arsenic	Arsenopyrite
Asb	Asbestos	Chrysotile, etc.
Au	Gold	Electrum
Ba	Barium	Barite
Be	Beryllium	Beryl
Bi	Bismuth	
Bitumen	Bitumen	Asphalt, hydrocarbons
Bs	Building stone	(See ornamental stone, granite, sandstone, slate, etc.)
Bx	Bauxite	Aluminium
Cd	Cadmium	
Cn	Corundum	See also gems
Co	Cobalt	
Coal	Coal	Black coal Bituminous coal, torbanite
Coal-Bn	Brown coal	See also lignite
Cr	Chromium	Chromite
Croc	Crocoite	See gems
Cu	Copper	Chalcopyrite, etc.
Cy	Clay	Beidellite, illite, kaolinite, montmorillonite, etc.
Dmd	Diamond	See gems
Dol	Dolomite	
Dt	Diatomite	

Fe	Iron	See Hem, Mag, Py, Po
Fl	Fluorite	
Gems	Gems	Inc. crocoite, stichtite, sapphire, zircon, topaz, turqoise
Granite	Granite	See Bs
Graph	Graphite	
Hem	Haematite	See Fe
Hg	Mercury	Cinnabar
Hm	Heay minerals	Use Ilm, Ru, Zr, Mon, etc.
Ilm	Ilmenite	See Ti
Ir	Iridium	See Pgm
Li	Lithium	
Lignite	Lignite	See Coal-Bn
Lim	Limonite	See Fe
Lim	Goethite	See Fe
List	Limestone	See Lst, Lsnd
Lsnd	Lime sands	
Lst	Limestone	See List
Lx	Leucoxene	See Ti
Mag	Magnetite	See Fe
Mar	Marble	See limestone
Mi	Mica	Muscovite
Mn	Manganese	
Mo	Molybdenum	Molybdenite
Mon	Monazite	See REE, Th
Ms	Magnesite	Magnesium
Mi	Nickel	Heazlewoodite, etc.
Oc	Ochre	Pigment
Os	Osmium	See PGM
Osh	Oil shale	Tasmanites
OsIr	Osmiridium	See Ir, Os, PGM
Pb	Lead	Galena
Pd	Palladium	See PGM
Peat	Peat	See Coal-Bn
PGM	Platinoids	Undifferentiated, See Pd, Pt, Ir, Os, Ru, Rh
Ph	Phosphorus	Phosphate
Po	Pyrrhotite	See Fe
Pt	Platinum	See PGM
Py	Pyrite	See Fe
Re	Rhenium	See PGM
REE	Rare Earths	
Rh	Rhodium	See PGM
Ru	Ruthenium	See PGM
Rut	Rutile	See HM
S	Sulphur	
Sb	Antimony	Stibnite
Si	Silicon	Silica, quartz, chalcedony
Slate	Slate	See BS
Sn	Tin	Stannite, cassiterite
SSt	Sandstone	See BS
Tc	Talc	
Th	Thorium	See monazite
Ti	Titanium	See HM, Lx, Ilm, Ru
Ur	Uranium	Uraninite
V	Vanadium	
W	Tungsten	Scheelite, wolframite, wolfram
Zeol	Zeolite	Natrolite, chabazite
Zn	Zinc	Sphalerite
Zr	Zircon	Zirconium, see also gems, see HM

PUBLICATIONS Table — MIRLOCH.REF

Abbrev. (20,20,C)	*Explanation (128,128,C)*	*Example of usage (28,28,C)*
Admin	See & use ML Plans	Admin
AIMM M...	Australasian Institute of Mining & Metallurgy, monograph series	AIMM-M5
Collins (Hons)	Unpublished Honours Thesis, P. L. F. Collins, Univ. Tas.	Collins (Hons)
Econ Geol	Economic Geology (journal)	Ford, Econ Geol (1981)
ER...	Explanatory Report: Tasmanian Geological Atlas 1 mile and 1:50 000 series	ER 50 (also ER7914S)
EZ	EZ (Pasminco) Unpublished Mineral Deposit File	EZ
Geol. Map. ...	See & use sheet	Geol. Map. 32
GSB...	Geological Survey Bulletin	GSB 32
GSBull...	See & use GSB	GSBull19
GSER...	See & use ER...	GSER 25
GSMR...	Geological Survey Mineral Resources	GSMR 9
GSR...	Geological Survey Report	GSR
Min Res Map B	Map B by Noldart (1967) from GSB 50	Min Res Map B
Min. Chart ...	Old Mineral Resource map series (~1951)	Min. Chart 12
Min. Map. ...	See & use Min. Chart	Min. Map 5
Mine Lease	See & use ML Plans	Mine Lease
Mineral Map...	See & use Min. Chart	Mineral Map 4
ML maps	See & use ML Plans	ML maps
ML Plans	Mining Lease plans	ML Plans
MRV Map ...	Mt Read Volcanics Project Geological Maps	MRV Map 2
OS ...	Old Series Report	OS 112
Pers. Comm.	Personal communication	T. Ling, Pers. Comm.
Plan...	Plan held by Cartographic Drafting	Plan 1208A
PPRST	Papers & Proceedings of the Royal Society of Tasmania	Bacon (1990) PPRST 123
Rio Aust. Expl. P/L	Unpublished plans (1957) in library	Rio Aust. Expl. P/L (1957)
Sharples (1990)	Monograph: Building & ornamental stone resources of Tasmania	Sharples (1990)
Sharples (1990) MSc	Unpublished MSc Thesis, C. Sharples, University of Tasmania	Sharples (1990) MSc
Sheet...	Tasmanian Geological Atlas 1 mile and 1: 50 000 series	Sheet 41
TCR...	Unpublished exploration company report	TCR 85-1234
TDM lease plans	TDM lease plans	TDM lease plans
TDM Map...	See & use sheet	TDM Map 50
TR...	Technical Report	TR 7
UR...	Unpublished Report	UR 90/23 or Blake, UR 1940

Authority tables for the DORIS database

DORACC Table — DORACC.AUT

The DORACC table stores the estimated accuracy of the drill hole location.

Code (4,5,B)	*Error (25,25,C)*
1	0.5 m
2	2.5 m
3	25 m
4	250 m
5	2.5 km

PURPOSE Table — PURPOSE.AUT

The PURPOSE table stores the purpose for which the hole was drilled.

Code (4,5,B)	*Description (25,25,C)*
0	Engineering geology
1	Metallic minerals
2	Non-metallic minerals
3	Fuels
4	Stratigraphic

DCORE Table — DCORE.AUT

The DCORE table indicates whether the drill core is held by Mineral Resources Tasmania.

Code (4,5,B)	*Description (25,25,C)*
0	Not held
1	Held

DRILLER Table — DRILLER.AUT

The DRILLER table indicates the organisation or category of organisation that did the drilling.

Code (4,5,B)	*Description (25,25,C)*
0	Department of Mines
1	Hydro-Electric Commission
2	Commonwealth Government
3	Private contractor

Drilltype Table — DRILLTYPE.AUT

The DRILLTYPE table indicates the type of drill used.

Code (4,5,B)	*Description (25,25,C)*
0	Diamond
1	Cable tool
2	Rotary
3	Percussion
4	Auger

LOG Table — LOG.AUT

The LOG table indicates whether the hole was geophysically logged.

Code (4,5,B)	*Description (25,25,C)*
0	Not logged
1	Logged

Authority tables for the STRUCTURE database

STRUC25 Table — STRUCT25.AUT

The TYPE field in the MAPNAME.ST.PAT table for 1:25 000 base scale digital data stores a character code which identifies the type of structural measurement and allows it to be related to the STRUCT25 authority table that gives the description of the structural feature. The first character of the code is in upper case and indicates the class of structural measurement, e.g. B — Bedding, L — Lineation. The second character is lower case. This type of code enables efficient query operations such as selecting all cleavage measurements by selecting samples which have a 'C' in the TYPE field. The codes and their descriptions in the STRUCT25 authority table are listed below.

Code	*First markerset symbol number*	*Description*
Baa	621	Strike and dip of bedding, right way up
Bab	626	Strike and dip of bedding, overturned
Bac	624	Strike of vertical bedding, facing unknown
Bad	601	Strike of vertical bedding, facing known
Bae	625	Horizontal bedding, facing unknown
Baf	602	Strike and dip of bedding, facing unknown
Bag	404	Strike and dip of compositional layering
Bah	405	Strike of vertical compositional layering
Sai	653	Strike and dip of igneous banding or platy alignment
Saj	654	Strike of vertical igneous banding or platy alignment
Lah	513	Trend and plunge of columnar jointing
Lai	514	Vertical columnar jointing
Cae	407	Strike and dip of cleavage of unspecified type and relative age
Caf	408	Strike of vertical cleavage of unspecified type and relative age
Cai	23	Strike and dip of crenulation cleavage
Caj	24	Strike of vertical crenulation cleavage
Caa	926	Strike and dip of cleavage or foliation, relative local age S1
Cab	930	Strike of vertical cleavage or foliation, relative local age S1
Cac	927	Strike and dip of cleavage or foliation, relative local age S2
Cad	931	Strike of vertical cleavage or foliation, relative local age S2
Cag	928	Strike and dip of cleavage or foliation, relative local age S3
Cah	929	Strike of vertical cleavage or foliation, relative local age S3
Saa	115	Strike and dip of foliation due to alignment of K-feldspar phenocrysts in granitic rock
Sab	116	Strike of vertical foliation due to alignment of K-feldspar phenocrysts in granitic rock
Sac	117	Trend of preferred orientation of K-feldspar phenocrysts in granitic rock
Sad	111	Strike and dip of foliation due to alignment of hornblende and/or biotite in granitic rock
Sae	112	Strike of vertical foliation due to alignment of hornblende and/or biotite in granitic rock
Saf	114	Trend of preferred orientation of hornblende and/or biotite in granitic rock
Sag	650	Strike and dip of metamorphic foliation

Sah	651	Strike of vertical metamorphic foliation
Sak	25	Strike and dip of metamorphic foliation parallel to bedding
Sal	26	Strike of vertical metamorphic foliation parallel to bedding
Sam	27	Strike and dip of metamorphic foliation parallel to compositional layering
San	28	Strike of vertical metamorphic foliation parallel to compositional layering
Sao	29	Strike and dip of metamorphic foliation, relative local age S2
Sap	30	Strike of vertical metamorphic foliation, relative local age S2
Lac	509	Generalised palaeocurrent direction, showing sense of movement
Lad	409	Generalised palaeocurrent direction, polarity unspecified
Lae	410	Trend and plunge of lineation of unspecified type
Laf	411	Horizontal lineation, unspecified type
Laa	412	Trend and plunge of bedding/primary cleavage intersection lineation (L1)
Lab	413	Horizontal bedding/primary cleavage intersection lineation (L1)
Lag	414	Trend and plunge of lineation L2 formed by intersection of cleavages or foliations of relative local ages S1 and S2
Laj	415	Trend and plunge of crenulation lineation
Lak	416	Horizontal crenulation lineation
Lao	31	Trend and plunge of mineral elongation lineation
Lal	417	Trend and plunge of slickensides
Pac	502	Dip direction and dip of minor fold axial surface (for use in combined symbols with minor fold hinge lines)
Haa	501	Trend and plunge of minor fold hinge line, unspecified relative age
Had	32	Trend of horizontal minor fold hinge line, unspecified relative age
Hab	418	Trend and plunge of hinge line of minor antiform, unspecified relative age
Hac	419	Trend and plunge of hinge line of minor synform, unspecified relative age
Haf	119	Trend and plunge of minor fold hinge line, unspecified relative age, vergence dextral
Hag	120	Trend and plunge of minor fold hinge line, unspecified relative age, no vergence
Hah	121	Trend and plunge of minor fold hinge line, unspecified relative age, vergence sinistral
Hal	504	Trend and plunge of minor fold hinge line, relative local age F1
Han	123	Trend and plunge of minor fold hinge line, relative local age F1, vergence dextral
Hao	122	Trend and plunge of minor fold hinge line, relative local age F1, no vergence
Hap	118	Trend and plunge of minor fold hinge line, relative local age F1, vergence sinistral
Haq	420	Trend and plunge of minor fold hinge line, relative local age F2
Hae	33	Trend of horizontal minor fold hinge line, relative local age F2
Hai	34	Trend and plunge of minor conjugate fold hinge line, relative local age F2
Haj	35	Trend and plunge of minor fold hinge line, relative local age F2
Hak	36	Trend and plunge of minor fold hinge line, relative local age F2, no vergence
Ham	37	Trend and plunge of minor fold hinge line, relative local age F2, vergence sinistral

Har	018	Trend and plunge of chevron-fold hinge line, unspecified relative age
Paf	019	Strike of axial surface of chevron fold with vertical hinge line
Pah	38	Strike of vertical kink band, movement sense unspecified
Pae	012	Strike and dip of kink band with sense of displacement viewed down plunge: dextral
Pab	017	Strike of vertical kink band: dextral
Pad	011	Strike and dip of kink band with sense of displacement viewed down plunge: sinistral
Paa	016	Strike of vertical kink band: sinistral
Hau	421	Trend and plunge of kink-fold hinge line, sense of displacement unknown
Hav	511	Trend and plunge of kink-fold hinge line, with sense of displacement viewed down-plunge: dextral
Haw	512	Trend and plunge of kink-fold hinge line, with sense of displacement viewed down-plunge: sinistral
Jaa	721	Strike and dip of dominant joint set
Jab	723	Strike of dominant joint set, vertical
Vac	403	Trend of vein with rock type or mineral indicated
Vaa	401	Strike and dip of dyke or vein with rock type or mineral indicated
Vab	402	Strike of dyke or vein, vertical, with rock type or mineral indicated
Faa	39	Strike of outcrop-scale fault, type unspecified
Fab	40	Strike of outcrop-scale fault, downthrown side indicated
Fac	41	Strike and dip of outcrop-scale fault, type unspecified
Fad	42	Strike of vertical outcrop-scale fault, type unspecified
Fae	43	Strike and dip of outcrop-scale thrust fault
Lam	422	Glacial striae, sense of movement unknown
Lan	423	Glacial striae, showing sense of movement

STRUCT250 Table — STRUCT250.AUT

The TYPE field in the MAPNAME.ST.PAT table for 1:250 000 base scale digital data stores a number code which identifies the type of structural measurement and allows it to be related to the STRUCT250 authority table that gives the description of the structural feature.

Code (4,5,B)	*Description (80,80,C)*
2	Strike and dip of bedding, right way up
8	Strike and dip of bedding, overturned
4	Strike and dip of bedding, facing unknown
3	Strike of vertical bedding, facing unknown
16	Horizontal bedding
10	Strike and dip of igneous mineral foliation or primary flow banding
11	Strike of vertical igneous mineral foliation or primary flow banding
12	Trend of trace of igneous mineral foliation on horizontal surface
1	Strike and dip of cleavage
9	Strike of vertical cleavage
5	Strike and dip of crenulation cleavage
6	Strike of vertical crenulation cleavage
13	Strike and dip of schistosity or metamorphic foliation
14	Strike of vertical schistosity or metamorphic foliation
7	Direction and plunge of minor fold hinge line, unspecified age
15	Direction and plunge of hinge line of minor fold of cleavage or schistosity

Authority tables for the STREAM SEDIMENT GEOCHEMICAL database

STYPE Table — STYPE.AUT

Code (2,2,C)	*Description (64,64,C)*
SS	Stream sediment
WS	Water sample
SO	Soil sample
RC	Rock chip sample

LOCACC Table — LOCACC.AUT

The LOCACC table stores the estimated accuracy of the sample location. All samples have been transferred onto current 1:25 000 scale topographic maps prior to digitising.

Code (4,5,B)	*Description (64,64,C)*
1	20 m
2	50 m
3	100 m
4	200 m
5	500 m

TREAT Table — TREAT.AUT

The TREAT table lists the types of treatment applied to the samples prior to analysis.

Code (12,12,C)	*Description (32,32,C)*
U	Unknown
-10	-10#
-10+20	-10+20#
-20	-20#
-20+80	-20+80#
-40	-40#
-80	-80#
-80+120	-80+120#
-20+40	-20+40#
-40+80	-40+80#
+80	+80#
-120	-120#
PC	Panned concentrate
BL	Bulk leach extractable gold
BL1	-0.25" followed by BLEG
BL2	-6 mm, followed by BLEG
BL3	-2 mm, followed by BLEG
BL4	-4 #, followed by BLEG
FM	Ferromanganese gravels

ANAL Table — ANAL.AUT

The ANAL table lists the analytical methods used to measure the elemental concentration.

Code (4,4,C)	*Description (64,64,C)*
U	Unknown
XR	X-Ray fluorescence (XRF)
AA	Atomic Absorption Spectroscopy (AAS)
ICP	Inductively Coupled Plasma Mass Spectroscopy (ICPMS)
CM	Colorimetry
NA	Neutron Activation
FA	Fire Assay
ES	Emission Spectroscopy
CXRF	Cold HCl/XRF
HXRF	Hot HCl/XRF
OT	Other

SNAP25K Table — SNAP25K.AUT

Code (4,4,C)	*Description (12,12,c)*
1	Not snapped to drainage
2	Snapped to 1:25 000 digital drainage
3	Digitised on 1:25 000 base map.

Authority table for TASREF database

STATUS OF REPORT Table — REPSTAT.AUT

Code(4,5,B)	*Description (12,12,C)*
1	Open
2	Closed
3	Restricted.

Authority tables common to several databases

LAB Table — LAB.AUT

The LAB table lists the laboratories used to perform the analysis.

Code (4,5,B)	*Description (64,64,C)*
-1	Unknown
1	Analabs
2	Classic Laboratories / Comlabs / Classic Comlabs
3	Geophoto Resources
4	Minex Analytical Services
5	Amdel Analytical Services
6	Assay Research Australia
7	Seltrust Mining
8	ACS Laboratories
9	CSR Laboratories
10	Tasmanian Mines Department
11	Geology Department, University of Western Australia
12	Geology Department, University of Tasmania
13	Australian National University
14	Bureau of Mineral Resources (AGSO)
15	Becquerel Laboratories
16	Sample Exploration Services
17	Australian Lab. Services
18	Robinson Geotec Services
19	Mt Lyell Mining & Railway Co. Ltd
20	Zinc Corp. Broken Hill
21	BHP
22	Central Mineralogical Services
23	Central Science Laboratory, University of Tasmania
24	ACI Glass Packaging Division (Engineering Services)

ORIGIN Table — ORIG.AUT

Orig (3,3,C)	*Originator (256,200,C)*
AB	Aberfoyle Exploration
ABC	Adams, C. J.; Black, L. P.; Corbett, K. D. & Green, G. R.
ABE	Edwards A. B.
AC	Camacho, C.
AGS	Stevens, A. G.
AJC	Crawford, A. J.
ARC	Raheim, A. & Compston, W.
AS	Spry, A.
AVB	Brown A. V.
AWM	McNeill, A. W.
BD	Dower, B.
BDG	Goscombe B. D.
BHM	Black Horse Mining
BIL	Billiton Australia (Shell)
BJG	Griffin, B. J.
BS	Dr Barry Scott
BWC	Chappell B. W.
CAB	Bacon, C. A.
CAP	Capp, C. E.
CB	Brooks, C.
CEG	Gee, C. E.

CKA	Crook, K. A. W.
COM	Comalco
CPW	Perkins, C. & Walshe, J. L.
CRA	CRA Exploration P/L
CRC	Calver, C. R.
CSR	CSR Ltd
DBS	Seymour, D. B.
DEB	Barrett, D. E.
DEM	MacKenzie, D. E.
DGB	Barwick, D. G.
DHG	Green, D. H.
DIG	Groves, D. I.
DJ	Jack, D. J.
DJJ	Jennings, D. J.
DKB	Kimbrough, D. & Brown, A. V.
DMM	Mills, D. M.
DRJ	Jenkins, D. R.
DW	Wesolowski, D. E.
EJR	Reid E. J.
EZ	E.Z. Co of Australasia Ltd
FLS	Sutherland, F. L.
GJD	Davidson, G. J.
GLL	Gleadow, A. J. W. & Lovering, J. F.
GRG	Green, G. R.
HB	Bartlett, H. H.
HJC	Calcraft, H. J.
HOM	Hooker Mining P/L
IM	McDougall, I.
JCB	Briden, J. C.
JDC	Cocker, J. D.
JFE	Evernden, J. F. & Richards, J. R.
JGP	Purvis, J. G.
JLE	Everard, J. L.
JM2	McClenaghan, J.
JP	Pemberton, J.
JWF	Farquhar, J. W.
JWH	Hudspeth, J. W.
KDC	Corbett, K. D.
KPR	Robinson, K. P.
LPB	Black, L. P.
LTV	Veska, L. T.
MC	McNeill, A. W. & Corbett, K. D.
MJC	Clarke, M. J
MJR	Roach, M. J.
MJV	Vickary, M. J.
MKM	Macphail, M. K. & Hill, R. S.
ML	Mt Lyell Mining & Railway Co, Stevens-Hoare, N. P.
MPM	McClenaghan, M. P.
NCH	Higgins, N. C.
NCW	White, N. C.
NJJ	Noldart, J. & Jack, R.
NJT	Turner, N. J.
PAK	Kitto, P. A.
PAN	Pancontinental Mining Ltd
PAS	Pasminco Exploration
PBN	Nye, P. B. (Mineral Holdings Australia P/L)
PC	Blackney, P. C. J.

PJW	Warmeant, P. J.
PLA	Placer Exploration Ltd.
PLC	Collins, P. L. F
PRW	Williams, P. R.
PWB	Baillie, P. W.
PWS	Schmidt, P. W.
RCC	Coleman, R. C.
RDM	McNeill, R. D.
RGR	Richardson, R. G.
RHF	Findlay, R. H.
ROR	Reid, R. O.
RPG	Gibson, R. P.
RSB	Bottrill, R. S.
RSK	Skrzeczynski, R. H.
RV	Varne, R.
SFC	Cox, S. F.
SHK	Sawka, W. N.; Heizler, M. T.; Kistler, R. W. & Chapp
SMF	Forsyth, S. M.
SRH	Hunns, S. R.
TAK	Kwak, T. A. P.
TBP	Taylor, B. P.
TED	Tedford, R. H.; Banks, M. R. & others
VTH	Threader, V. (Mineral Holdings Australia P/L)
WBA	Anderson, W. B.
WCC	Cromer, W. C.
WFC	Clayton, W. F.
WMR	Rivers, W. M.

REFERENCES Table — REF.AUT

This table is too large to be listed here and can be obtained in digital form.
REFNO (4,5,B); AUTHORS (200,200,C); YEAR (4,5,B); TITLE (200,200,C); PUBLICATION (200,200,C).

REGION Table — REGION.AUT

Code (10,10,C)	*Region (64,64,C)*
AL	Arthur Lineament
AT	Adamsfield Trough
BA	Badger Head Region
BB	Bass Basin
BE	Beaconsfield Area
BH	Bathurst Harbour Area
CE	Cape Sorell–Elliott Bay
CV	Connerville Inlier
DG	Derwent Graben
DR	Dial Range Trough
DT	Dundas–Oonah Trough
ET	Eastern Tasmania
FM	Fossey Mountains Trough
FO	Forth Region
JW	Jubilee–Weld–New River
KI	King Island
MR	Mt Read Volcanic Belt
OB	Otway Basin
OG	Oyster Bay Graben
PC	Post Carboniferous cover sequences
RC	Rocky Cape Block
SB	Smithton Basin

SC	South Coast Region
TB	Tasmanian Basin
TG	Tamar Graben
TY	Tyennan Region
WT	Western Tasmania

SPGRP Table — SPGRP.AUT

Code (3,3,C)	*Supergroup (200,200,C)*
AM	Arthur Metamorphic Complex
CA	Cambrian allochthonous sequences (e.g. Cleveland–Waratah)
CD	Cambrian mafic intrusive rocks
CF	Cambrian felsic volcanic rocks
CG	Cambrian granitoids and intrusive porphyrys
CM	Cambrian mixed derivation sequences
CS	Cambrian sedimentary sequences
CU	Cambrian ultramafic-mafic complexes
CV	Cambrian felsic volcano-sedimentary sequences
DG	Devonian–Carboniferous granitoids and related rocks
EB	Eocambrian basalt-greywacke sequences
JD	Jurassic igneous rocks
KI	Cretaceous igneous rocks
NP	Neoproterozoic passive margin sequences
NS	Neoproterozoic siliceous turbidite sequences
OI	Intrusive bodies within Cambro-Ordovician siliciclastic sequences
PG	Precambrian granitoids
PL	Lower Parmeener Supergroup
PM	Proterozoic metamorphosed siliceous shelf sequences
PR	Proterozoic relatively unmetamorphosed siliceous shelf sequences
PU	Upper Parmeener Supergroup
QS	Quaternary sediments
TS	Tertiary sequences
WR	Wurawina Supergroup

GRP Table — GRP.AUT

The SGCODE item holds the code of the supergroup to which the group belongs.

Code (5,5,C)	*Group (50,50,C)*	*SGCODE (5,5,C)*
AC	Anderson Creek Ultramafic Complex	CU
AD	Adamsfield Ultramafic Complex	CU
AH	Ahrberg Group	
BA	Badger Head Group	NS
BE	Beulah Granite	CG
BI	Bicheno Granite	DG
BO	Bogan Gap Group	PL
BR	Boyes River Ultramafic Complex	CU
BT	Blue Tier Batholith	DG
BU	Beaconsfield Ultramafic Complex	CU
CB	Coles Bay Granite	DG
CC	Clytie Cove Group	CS
CD	Cascades Group	PU
CG	Clark Group	PR
CM	City of Melbourne Bay Group	NP
CP	Cape Portland Complex	KI
CS	Cape Sorell Ultramafic Complex	CU
CT	Cateena Group	CV
CV	Central Volcanic Complex	CF
CX	Cox Bight Granite	DG

CY	Cygnet Alkaline Complex	KI
DC	Dalcoath Granite	DG
DL	Lower Dundas Group	CM
DM	Dove Metamorphic Complex	PM
DN	Denison Group	WR
DP	Deep Glen Bay Granite	DG
DS	Devonian cavern fillings (Eugenana Beds)	
DU	Upper Dundas Group	WR
DV	Dove Granite	DG
DW	Darwin Granite	CG
DX	Dundas Ultramafic Complex	CU
EB	Elliott Bay Granite	CG
ED	Eddystone Batholith	DG
EG	Eldon Group	WR
ES	Eastern Quartz Phyric Sequence	CF
FA	Farrell Slates	CV
FH	Fincham Metamorphic Complex	PM
FI	Fisher Metamorphic Complex	PM
FL	Faulkner Group	PL
FM	Forth Metamorphic Complex	PM
FR	Franklin Metamorphic Complex	PM
FU	Forth Ultramafic Complex	CU
GF	Grandfathers Granite	DG
GG	Gordon Group	WR
GT	Granite Tor Granite	DG
GV	Golden Valley Group	PL
HC	Huskisson River Ultramafic Complex	CU
HE	Henty Fault Wedge Sequence	CV
HK	Heemskirk Granite	DG
HL	Lower Huskisson Group	CV
HM	Howell Metamorphic Complex	PM
HR	Heazlewood River Ultramafic Complex	CU
HT	Housetop Granite	DG
HU	Upper Huskinson Group	WR
IG	Interview Granite	DG
JY	Joyce Metamorphic Complex	PM
KG	West Coast Granite (King Island)	PG
LB	Launceston Beds	TS
LF	Liffey Group	PL
LG	Lisle Granitoid	DG
MA	Mt Anne Group	PR
MB	Meredith Batholith	DG
MC	Massey Creek Group	PL
MD	Middle Arm Group	PL
MG	Mathinna Group	
MH	Mt Charter Group	CF
MI	Maria Island Granite	DG
MM	Mary Metamorphic Complex	PM
MS	Mount Stewart Ultramafic Complex	CU
MU	Murchison Granite	CG
MW	Mainwaring Group	CA
OG	Owen Group	WR
PG	Pieman Granite	DG
PH	Pine Hill Granite	DG
PN	Pandani Group	PR
PO	Poatina Group	PL
RA	Ragged Basin Complex	CA
RB	Rocky Boat Harbour Ultramafic Complex	CU
RC	Rocky Cape Group	PR
RD	Radford Creek Group	CV
RG	Rosebery Group	CM
RY	Royal George Granite	DG
SB	Scottsdale Batholith	DG

SC	Success Creek Group	NP
SG	Strathgordon Metamorphic Complex	PM
SH	Serpentine Hill Ultramafic Complex	CU
SM	Scotchfire Metamorphic Complex	PM
SP	Spero Bay Ultramafic Complex	CU
ST	Sticht Range Beds	CS
SW	South West Cape Granite	DG
TB	Tertiary Basalts	TS
TC	Table Cape Group	TS
TH	Trial Harbour Ultramafic Complex	CU
TO	Togari Group	
TR	Tiger Range Group	WR
TY	Tyndall Group	CF
UM	Ulverstone Metamorphic Complex	PM
WA	West Arm Group	PL
WI	Wilson River Ultramafic Complex	CU
WL	Weld River Group	NP
YR	Yolande River Sequence	CV

SBGRP Table — SBGRP.AUT

Code (3,3,C)	*Subgroup (30,30,C)*
KA	Kanunnah Subgroup
DE	Detention Subgroup
MC	Mount Cripps Subgroup
QH	Que–Hellyer Volcanics
SO	Southwell Subgroup

FRM Table — FRM.AUT

Code (4,4,C)	*Formation (64,64,C)*	*Code (4,4,C)*	*Formation (64,64,C)*
AB	Abels Bay Formation	AC	Austral Creek Siltstone
AF	Aberfoyle Formation	AG	Animal Creek Greywacke
AI	Andersons Island Pluton	AM	Amber Slate
AN	Ansons Bay Pluton	AS	Ardell Sandstone
BA	Back Peak Beds	BB	Barn Bluff Conglomerate
BC	Barrington Chert	BD	Black River Dolomite
BE	Benjamin Limestone	BF	Beulah Formation
BG	Ben Lomond Granite	BH	Bold Head Granodiorite
BI	Babel Island Pluton	BJ	Brewery Junction Formation
BL	Bull Creek Formation	BO	Boullanger Formation
BP	Boobyalla Pluton	BR	Brady Formation
BS	Bell Shale	BT	Bott Conglomerate
BU	Bundella Formation	BV	Bernafai Volcanics
BW	Blackwood Formation	BY	Black Harry Beds
CA	Castle Carey Formation	CB	Cape Barren Pluton
CC	Catos Creek Granodiorite	CD	Curtis-Davis Volcanics
CE	Cabbage Tree Formation	CF	Cape Frankland Pluton
CG	Clog Tom Sandstone	CI	Chappell Island pluton
CJ	Cape Sir John Pluton	CK	Crimson Creek Formation
CL	Climie Formation	CM	Croles Hill Mixtite
CN	Counsel Creek Formation	CO	Comet Formation
CQ	Crotty Quartzite	CR	Corner Pluton
CS	Cowrie Siltstone	CT	Comstock Tuff
CU	Cluan Formation	CW	Currawong Quartzite
DB	Deep Bay Formation	DC	Dora Conglomerate
DD	Devonian Dolerite	DL	Darlington Limestone

DM	Dalmayne Conglomerate
DP	Diddleum Pluton
FC	Forest Conglomerate and Quartzite
FF	Fernflow Formation
FH	Fonthill Sandstone
FQ	Florence Quartzite
FT	Fern Tree Formation
GB	Grubb Beds
GD	Grassy Granodiorite
GI	Goat Island Conglomerate
GP	Gardens Pluton
GR	Georges River Pluton
HA	Haleys New Country Pluton
HF	Hickman Formation
HO	Hogans Hill Pluton
HS	Hodge Slate
IH	Island Head Formation
IR	Irby Siltstone
JB	Lune River Basalt
JK	Jackey Formation
JQ	Jacob Quartzite
KB	Key Bay Pluton
KE	Mount Kerford Pluton
KK	Keppel Creek Formation
KM	Keith Metamorphics
KQ	Keel Quartzite
LA	Lottah Pluton
LC	Lynch Creek Basalt
LH	Lake Holmes Coal Measures
LP	Long Point Pluton
LU	Lughralta Pluton
LW	Lower Owen Conglomerate
MB	Mount Bischoff Porphyry
MD	Modder River Pluton
MF	Marra Formation
MH	Mount Horror Pluton
MJ	Murchison Volcanics
ML	McLeod Formation
MN	Malbina Formation
MP	Mount Pearson Pluton
MR	Mount Paris Pluton
MT	Mistletoe Sandstone
MV	Marrawah Volcanics
MX	Mixed Sequence (Que-Hellyer Volcanics)
MZ	Martins Rise Pluton
NE	Newton Creek Sandstone
NQ	Neasey Quartzite
OC	Owen Conglomerate
PA	Palana Pluton
PC	Prospect Creek Mudstone
PG	Piccaninny Pluton
PL	Pulbeena Limestone
PP	Porcupine Creek Pluton
PT	Punchion Point Pluton
PY	Pyengana Pluton
QR	Que River Shale
RC	Roland Conglomerate
DN	Duncan Conglomerate
EU	Eugenana Beds
FD	Fernfields Formation
FG	Flowery Gully Limestone
FL	Flowerdale Formation
FS	Flowerdale Sandstone
FV	Florentine Valley Mudstone
GC	Gould Conglomerate
GG	Gog Range Formation
GM	Gnoman Mudstone
GQ	Gell Quartzite
GT	Great Dome Sandstone
HD	Hogans Road Diorite
HH	Harts Hill Formation
HR	Hogarth Road Pluton
IF	Inglis Formation
IN	Inglis Siltstone
IS	Interview Siltstone
JF	Jukes Formation
JP	Joan Point Sandstone
JU	Judith Formation
KC	Kansas Creek Beds
KF	Knocklofty Formation
KL	Karmberg Limestone
KP	Killiekrankie Pluton
KT	Kelcey Tier Beds
LB	Long Bay Shale
LD	Lady Barren Pluton
LO	Lorinna Formation
LR	Lawson River Siltstone
LV	Lobster Creek Volcanics
MA	Mary Ann Bay Sandstone
MC	Mount Cameron Sheets
ME	Mersey Coal Measures
MG	Mount Rugby Formation
MI	Miners Ridge Basalt
MK	Minnow Keratophyre
MM	Mount McKenzie Formation
MO	Middle Owen Conglomerate
MQ	Miners Ridge Sandstone
MS	Moina Sandstone
MU	Musselroe Pluton
MW	Mount William Pluton
MY	Misery Conglomerate
NC	Noddy Creek Volcanics
NF	Nassau Formation
NR	Narrows Formation
OF	Ossa Formation
PB	Pioneer Beds
PF	Palmer Formation
PI	Pats River Pluton
PO	Poimena Pluton
PR	Preolenna Coal Measures
PV	Point Vivian Formation
QF	Quamby Formation
RB	Renison Bell Formation
RE	Reeds Conglomerate

RF	Risdon Formation	RI	Rum Island Pluton
RL	Red Lead Conglomerate	RO	Ross Formation
RR	Russel Road Pluton	RS	Richea Siltstone
RU	Rupert Beds	RZ	Razorback Conglomerate
SA	Sassy Creek Argillites	SB	Smithton Basalt
SC	Squirrel Creek Formation	SD	Smithton Dolomite
SE	Sea Elephant Adamellite	SF	Sprent Formation
SG	Strickland Gorge Formation	SH	Survey Hill Pluton
SI	Singing Creek Formation	SK	Stockers Formation
SM	St Marys Porphyrite	SP	Spreyton Beds
SR	Strzelecki Pluton	SS	Springs Sandstone
ST	Scamander Tier Granodiorite	SU	Studland Bay Basalts
SV	Spink Creek Volcanics	SW	South West Cape Granite
TC	Toombstone Creek Pluton	TF	Tiers Formation
TH	Three Hummock Island Adamellite	TO	Toarra Formation
TP	Tulendeena Pluton	TR	Truro Formation
TS	Tim Shea Sandstone	UB	Upper Blessington Pluton
UO	Upper Owen Sandstone	WE	Wesley Vale Sand
WF	Wynyard Formation	WH	Wart Hill Pyroclastics
WI	Woody Island Formation	WL	Winkleigh Sandstone
WN	Wynyard Tillite	WR	Wierah Formation
WS	Whyte Schist	WT	White Spur Formation
WV	Waterfall Valley Siltstone	WY	Wybalena Pluton
ZE	Zeehan Formation		

MBR Table — MBR.AUT

Code (5,5,C)	*Member (30,30,C)*	*Code (5,5,C)*	*Member (30,30,C)*
BG	Burnt Gully Limestone	FH	Fonthill Sandstone
JR	Julius River Member	NC	Newton Creek Sandstone Member
PB	Pioneer Beds	PR	Poets Road Member

ERA Table — ERA.AUT

Code (4,4,C)	*Era (32,32,C)*	*Code (4,4,C)*	*Era (32,32,C)*
CZ	Cainozoic	MZ	Mesozoic
PZ	Palaeozoic	PR	Proterozoic
AR	Archaean		

PERIOD Table — PERIOD.AUT

Code (4,4,C)	*Period (25,25,C)*	*Start (4,5,F,1)*	*Finish (4,5,F,1)*
QU	Quaternary	1.8	0
TE	Tertiary	65	1.8
CR	Cretaceous	141	65
JU	Jurassic	205	141
TR	Triassic	251	205
PT	Permo-Triassic	298	205
PE	Permian	298	251
PC	Permo-Carboniferous	354	251
CB	Carboniferous	354	298
DE	Devonian	410	354
SD	Siluro-Devonian	434	354
SI	Silurian	434	410
OR	Ordovician	490	434

OD	Ordovician-Devonian	490	354
CO	Cambro-Ordovician	545	434
CM	Cambrian	545	490
CE	Cambrian-Eocambrian	800	490
EC	Eocambrian	800	545
NP	Neoproterozoic	1000	545
MP	Mesoproterozoic	1600	1000
PP	Palaeoproterozoic	2500	1600

EPOCH Table — EPOCH.AUT

Code (4,4,C)	*Epoch (32,32,C)*	*Code (4,4,C)*	*Epoch (32,32,C)*
HO	Holocene	PT	Pleistocene
PL	Pliocene	MC	Miocene
OL	Oligocene	EO	Eocene
PA	Palaeocene	UP	Upper
LO	Lower	LA	Late
MI	Middle	EA	Early

DIV Table — DIV.AUT

Code (4,4,C)	*Division (32,32,C)*	*Code (4,4,C)*	*Division (32,32,C)*
LA	Late	MI	Middle
EA	Early		

CLASS Table — CLASS.AUT

Code (4,4,C)	*Class (32,32,C)*	*Code (4,4,C)*	*Division (32,32,C)*
I	Igneous	M	Metamorphic
S	Sedimentary	U	Unconsolidated

TYPE Table — TYPE.AUT

Code (2,3,C)	*Type (25,25,C)*	*Code (2,3,C)*	*Type (25,25,C)*
B	Biological	M	Chemical
C	Contact metamorphic	E	Epiclastic
H	Hyperbyssal	P	Plutonic
R	Regional metamorphic	V	Volcanic
L	Volcaniclastic		

COMP Table — COMP.AUT

Code (4,4,C)	*Composition (32,32,C)*	*Code (4,4,C)*	*Composition (32,32,C)*
A	Acid	B	Basic
C	Carbonate	D	Quartzo-feldspathic
F	Feldspathic	I	Intermediate
L	Lithic	P	Pelitic
Q	Quartzose	T	Quartz-lithic
U	Ultrabasic	V	Various compositions

GENESIS Table — GENESIS.AUT

Code (3,4,C)	*Genesis (50,51,C)*	*Code (3,4,C)*	*Genesis (50,51,C)*
I	Air fall	A	Alluvial
H	Ash flow	V	Cavern fill
C	Cumulate	P	Deep marine
D	Deltaic	X	Differentiate
F	Fluviatile	U	Fluvioglacial
E	Fresh water	G	Glacial
O	Glaciomarine	Y	Human
L	Lacustrine	M	Marine
W	Mass flow	N	Non marine
R	Reefal	S	Shallow marine
J	Talus	T	Turbidite
Z	Aeolian		

LITH Table — LITH.AUT

Code (3,4,C)	*Lithology (50,50,C)*	*Code (3,4,C)*	*Lithology (50,50,C)*
AD	Adamellite	AG	Agglomerate
AL	Alluvium	AM	Amphibolite
AN	Andesite	AP	Aplite
AT	Appinite	BA	Basalt
BN	Basaltic andesite	BO	Boulders
BR	Breccia	CH	Chert
CL	Clay	CN	Conglomerate
CO	Coal	CR	Chromatite
CV	Colluvium	CY	Claystone
DA	Dacite	DD	Dioritoid
DI	Diorite	DL	Dolerite
DM	Diamictite	DN	Dunite
DO	Dolomite	DQ	Quartz diorite
FE	Ferricrete	GA	Gabbroid
GB	Gabbro	GD	Granodiorite
GN	Gneiss	GQ	Quartz gabbro
GR	Granite	GT	Granitoid
GV	Gravel	GW	Greywacke
HZ	Harzbergite	IR	Ironstone
KG	Alkali-feldspar granite	KS	Alkali-Feldspar syenite
LA	Laterite	LG	Lag deposit
LI	Lignite	LM	Lamprophyre
LS	Limestone	LV	Lava
LW	Lithic Wacke	MA	Marble
MD	Monzodiorite	MG	Monzogabbro
MI	Mine tailings	MN	Moraine
MO	Monzonite	MQ	Quartz monzonite
MS	Mudstone	MU	Mud
OR	Organic matter	PD	Peridotite
PG	Pegmatite	PH	Phyllite
PL	Pelite	PO	Porphyry
S	Psammite	PT	Peat
PX	Pyroxenite	QG	Quartz monzogabbro
QM	Quartz monzodiorite	QW	Quartzwacke
QZ	Quartzite	RD	Rhyodacite
RY	Rhyolite	PY	Phyllite
SA	Sand	SC	Schist

SD	Syenitoid	SE	Shells
SH	Shale	SI	Silt
SK	Skarn	SL	Slate
SP	Serpentinite	SQ	Quartz syenite
SR	Scree	SS	Sandstone
ST	Siltstone	SW	Swamp deposit
SY	Syenite	TA	Talus
TI	Tillite	TN	Tonalite
TS	Tasmanite	TU	Tuff
UM	Ultramafic	WA	Wacke

TEXT Table — TEXT.AUT

Code (10,10,C)	*Texture (50,50,C)*	*Code (10,10,C)*	*Texture (50,50,C)*
ABRC	autobrecciated	ACIC	acicular
ALGA	algal	ALKA	alkaline
ALTD	altered	AMYG	amygdaloidal
ANDE	andesitic	ANGL	angular
AREN	arenaceous	ARGI	argillaceous
ARKO	arkosic	AUGE	augen
BAKE	baked	BAND	banded
BASA	basaltic	BEDD	bedded
BIOC	bioclastic	BIOT	bioturbated
BLAC	black	BLEA	bleached
BLUE	blue	BONN	bonninitic
BREC	brecciated	BROW	brown
BRYO	bryozoan	BUFF	buff
CALC	calcareous	CARB	carbonaceous
CGND	coarse-grained	CHCD	chalcedonic
CHER	cherty	CLAY	clayey
CMET	contact metamorphosed	COLL	colliform
COLM	columnar	CONG	conglomeratic
CREM	cream	CREN	crenulated
CRIN	crinoidal	CRYP	cryptocrystalline
DEND	dendritic	DEVI	devitrified
DOLE	doleritic	EQGR	equigranular
FBND	flow-bande	FELD	feldspathic
FELS	felsic	FENE	fenestral
FERR	ferruginous	FGND	fine-grained
FIBR	fibrous	FOLD	folded
FOLI	foliated	FORA	foraminiferal
FOSS	fossiliferous	FRIA	friable
GLAS	glassy	GLOM	glomeroporphyritic
GPHY	granophyric	GRAD	graded
GRAI	granitic	GRAN	granule
GREE	green	GREI	greissenised
GREY	grey	GRIT	gritty
GRNL	granular	HFLS	hornfelsed
HIGD	high grade	HYCL	hyaloclastic
IGNI	ignimbritic	INDU	indurated
INFM	intraformational	LAMI	laminated
LAPI	lapilli	LEUC	leucocratic
LITH	lithic	LOGD	low grade
LTHD	lithified	MAFI	mafic
MARO	maroon	MASS	massive
MELA	melanocratic	MFLO	mass flow
MGND	medium grained	MIAR	miarolitic
MICA	micaceous	MOTT	mottled
MSRT	moderately sorted	NODU	nodular

OOLI	oolitic	OPAQ	opaque
ORAN	orange	PEBB	pebbly
PEGM	pegmatitic	PELI	pelitic
PERL	perlitic	PHOS	phosphatic
PHYR	phyric	PICR	picritic
PILL	pillow	PINK	pink
PISO	pisolitic	PORP	porphyritic
POTA	potassic	PSAM	psammitic
PSPE	psammopelitic	PSRT	poorly sorted
PUMI	pummiceous	PURP	purple
QTZO	quartzose	QTZT	quartzitic
RECR	recrystallised	REDD	red
RHYO	rhyolitic	ROUN	rounded
SAND	sandy	SAUS	saussuritised
SCHI	schistose	SCOR	scoriaceous
SHAL	shaly	SHEA	sheared
SIFD	silicified	SILI	siliceous
SILT	silty	SLAT	slaty
SLTH	sublithic	SPHE	spherulitic
SPOT	spotted	STAN	staniferous
STRO	stromatolitic	SULP	sulphidic
THIC	thickly bedded	THIN	thinly bedded
THOL	tholeiitic	TRAC	trachyitic
TUFF	tuffaceous	VARV	varved
VCGD	very coarse-grained	VESI	vesicular
VFGD	very fine-grained	VITR	vitric
VUGG	vuggy	WEAT	weathered
WELD	welded	WHIT	white
WSRT	well sorted	XBED	crossbedded
XENO	containing xenoliths	YELL	yellow

MIN Table — MIN.AUT

Code (4,5,C)	*Mineral (25,25,C)*	*Code (4,5,C)*	*Mineral (25,25,C)*
ACT	actinolite	AGT	agerine-augite
AB.	albite	ALM	almandine
AM.	amphibole	ANL	analcite
ANT	anatase	AND	andalusite
ADR	andradite	ANH	anhydrite
ANK	ankerite	AN.	anorthite
ATH	anthophyllite	ATG	antigorite
AP.	apatite	APO	apophyllite
ARG	aragonite	ARF	arfvedsonite
APY	arsenopyrite	AUG	augite
AX.	axinite	BRT	barite
BRL	beryl	BT.	biotite
BHM	boehmite	BN.	bornite
BRK	brookite	BRC	brucite
BST	bustamite	CAL	calcite
CCN	cancrinite	CRN	carnegieite
CST	cassiterite	CLS	celestite
CBZ	chabazite	CC.	chalcocite
CCP	chalcopyrite	CHL	chlorite
CLD	chloritoid	CHN	chondrodite
CRS	christobalite	CHR	chromite
CCL	chrysocolla	CTL	chrysotile
CAM	clinoamphibole	CEN	clinoenstatite
CFS	clinoferrosilite	CHU	clinohumite
CPX	clinopyroxene	CZO	clinozoisite
CRD	cordierite	CRN	corundum

CV.	covellite
CUP	cuprite
DG.	diginite
DOL	dolomite
ECK	eckermanite
ELB	elbatite
EP.	epidote
FA.	fayalite
FSD	feldspathoid
FAC	ferroactinolite
FS.	ferrosilite
FO	forsterite
GRT	garnet
GH.	gehlenite
GLT	glauconite
GT.	goethite
GRS	grossularite
GP.	gypsum
HS	hastingsite
HZ.	heazlewoodite
HEM	hematite
HUL	heulandite
HU.	humite
ILL	illite
JD.	jadeite
KFS	K feldspar
KLS	kalsilite
KTP	kataphorite
KY.	kyanite
LWS	lawsonite
LCT	leucite
LM.	limonite
LO.	loellingite
MKT	magnesiokatophorite
MGS	magnesite
MC.	marcasite
MEL	melilite
MC.	microcline
MNZ	monazite
MNT	montmorillonite
MS.	muscovite
NE.	nepheline
NSN	nosean
OMP	omphacite
OAM	orthoamphibole
OPX	orthopyroxene
PRG	pargasite
PN.	pentlandite
PRV	perovskite
PGT	pigeonite
PRH	prehnite
PMP	pumpellyite
PYL	pyrolusite
PRL	pyrophyllite
PO.	pyrrhotite
RDS	rhodochrosite
RBK	riebeckite
SA.	sanidine
SCP	scapolite
SRL	schorl
SRP	serpentine
CUM	cummingtonite
DSP	diaspore
DI.	diopside
DRV	dravite
ED.	edenite
EN.	enstatite
FST	fassite
FSP	feldspar
FTS	ferro tschermakite
FED	ferroedenite
FL.	fluorite
GN.	galena
GED	gedrite
GBS	gibbsite
GLN	glaucophane
GR.	graphite
GRU	grunerite
HL.	halite
HYN	hauyne
DD.	hedenbergite
HC.	hercynite
HBL	hornblende
HYP	hypersthene
ILM	ilmenite
JH.	johannsenite
KRS	kaersutite
KLN	kaolinite
KRN	kornerupine
LMT	laumontite
LPD	lepidolite
LX.	leucoxene
LZ.	lizardite
MGH	maghemite
MRB	magnesioriebeckite
MAG	magnetite
MRG	margarite
MI.	mica
MO.	molybdenite
MTC	monticellite
MUL	mullite
NTR	natrolite
NRB	norberite
OL.	olivine
OPA	opal
OR.	orthoclase
PG.	paragonite
PCT	pectolite
PER	periclase
PHL	phlogopite
PL.	plagioclase
PEN	protoenstatite
PY.	pyrite
PRP	pyrope
PX.	pyroxene
QTZ	quartz
RDN	rhodonite
RT.	rutile
SPR	sapphirine
SCH	scheelite
SER	sericite
SD.	siderite

SIL	sillimanite	SDL	sodalite
SPS	spessartine	SP.	sphalerite
SPN	sphene	SPL	spinel
SPD	spodumene	ST.	staurolite
STB	stibnite	STP	stilpnomelane
STR	strontianite	TLC	talc
TMP	thompsonite	TTN	titanite
TOZ	topaz	TUR	tourmaline
TR.	tremolite	TRD	tridymite
TRO	troilite	TS.	tschermakite
USO	ulvospinel	VRM	vermiculite
VES	vesuvianite	VIO	violarite
WTH	witherite	WF.	wolframite
WO.	wollastonite	WUS	wustite
ZE.	zeolite	ZRN	zircon
ZO.	zoisite		

GRPCOR Table — GRPCOR.AUT

Code (4,5,B)	*Correlation name (60,60,C)*	*Other groups (200,200,C)*	*Root map symbol (8,8,C)*
1	Weld River Group	Success Creek Group	Pw
2	Ragged Basin Complex		Ca
3	Gordon Group		Ol
4	Denison Group	Owen Group, Cambro-Ordovician siliclastic sequences	CO
5	Eldon Group	Tiger Range Group	SD
6	Mathinna Group		OD
7	Tyndall Group		Cdvt

FRMCOR Table — FRMCOR.AUT

The database feature using this table has not yet been implemented.

MBRCOR Table — MBRCOR.AUT

The database feature using this table has not yet been implemented.

LINE25.AUT Table — LIN25.AUT

Linecode (4,5,B)	*Type (60,60,C)*	*Class (30,30,C)*
1	Geological boundary, unspecified	Position accurate or approx.
2	Geological boundary, unspecified	Inferred
3	Transitional geological boundary	Position approx.
4	Geological boundary of small outcrop	Position approx.
5	Line marking boundary of body of water	
7	Geological boundary of small float occurrence	
8	Geological boundary, unspecified	Inferred from aeromagnetic interp.
11	Moraine ridge crests	
21	Unconformable boundary	Position accurate or approx.
22	Unconformable boundary	Inferred
31	Disconformable boundary	Position accurate or approx.
32	Disconformable boundary	Inferred
41	Intrusive boundary	Position accurate or approx.
42	Intrusive boundary	Inferred
44	Scarp	
47	Photo lineament	

48	Aeromagnetic lineament	
51	Fault, unspecified	Position accurate or approx.
52	Fault, unspecified	Inferred
53	Fault, unspecified	Concealed
54	Fault, unspecified	Inferred from aeromagnetic interp.
55	Fault, unspecified	Concealed, inferred from aeromagnetic interpretation
60	Downthrow line symbol	
61	Normal fault (downthrown side indicated)	Position accurate or approx.
62	Normal fault (downthrown side indicated)	Inferred
63	Normal fault (downthrown side indicated)	Concealed
70	Teeth line symbol	
71	Thrust fault (teeth on upper plate)	Position accurate or approx.
72	Thrust fault (teeth on upper plate)	Inferred
73	Thrust fault (teeth on upper plate)	Concealed
80	Symbol ?	
81	Strike-slip fault (relative movement indicated)	Position accurate or approx.
82	Strike-slip fault (relative movement indicated)	Inferred
83	Strike-slip fault (relative movement indicated)	Concealed
91	Metamorphic boundary	Position approx.
100	Colour boundary	
101	Alteration boundary	Position approx.
209	Plunge arrow	
210	Plunge arrow	
211	Antiform, major fold	
212	Synform, major fold	
213	Overturned antiform, major fold	
214	Overturned synform, major fold	
221	Antiform, major early fold	
222	Synform, major early fold	
223	Overturned antiform, major early fold	
224	Overturned synform, major early fold	
231	Antiform, major later fold	
232	Synform, major later fold	
233	Overturned antiform, major later fold	
234	Overturned synform, major later fold	

LINE250.AUT Table — LIN250.AUT

Code (4,5,B)	*Description (60,60,C)*
4	Fault
111	Fault with relative downthrown side indicated
112	Thrust or reverse fault, teeth on upper plate
15	Wrench fault with relative displacement indicated
13	Concealed fault
1	Geological boundary
10	Lithological trend line
100	Colour boundary (grey line colour)
11	Precambrian dolerite dykes, NW Tasmania (red line colour)
12	Devonian(?) dolerite dykes, NE Tasmania (purple line colour)
210	Axial surface trace of major fold
211	Axial surface trace of major antiform
212	Axial surface trace of major synform
213	Axial surface trace of overturned major antiform
214	Axial surface trace of overturned major synform

REL Table — REL.AUT

Code (4,5,B)	*Reliability (256,200,C)*
1	Published systematic Geological Survey mapping (1:25 000 scale)
2	Published systematic Geological Survey mapping (1:50 000 scale)
3	Unpublished compilation Geological Survey mapping (1:10 000–1:50 000 scale)
4	Published systematic Geological Survey mapping (1:63,360 scale) after 1965
5	Published systematic Geological Survey mapping (1:63,360 scale) before 1965
6	Unpublished mapping (1:50 000 or more detailed scale) from various non-government sources
7	Unpublished reconnaissance scale mapping, and/or interpretation based on air photo and/or geophysical data, from various sources
8	Geological Survey mapping 1:25 000 scale
9	Geological Survey mapping 1:10 000 scale
10	Geological Survey mapping 1:5000 scale
11	Geological Survey mapping largely based on interpretation of aeromagnetic data
12	Geological Survey mapping largely based on extrapolation and inference without ground control

AUTH Table — AUTH.AUT

This table is too large to be listed here and can be obtained in digital form. The table consists of a number code and author name; AUTHOR (4,5,B), AUTHOR NAME (60,60,C).

[1 August 1996]

APPENDIX 1

Lookup and Authority table file names

Unix File Names

MIRLOCH

MIRLOCH.PAT

Item	*Authority Table*
MIRLOCH-ID	
QUAD	
REFNO	
NAME	MIRLOCH.DEP
MAJORCOM	MIRLOCH.ABR
MINORCOM	
AMGE	
AMGN	
ACCURACY	MIRLOCH.ACC
MAPNO	
STATUS	MIRLOCH.STA
SIZE	MIRLOCH.SIZ
HOST	MIRLOCH.HOS
AGE	MIRLOCH.AGE
FORM	MIRLOCH.TYP
STRIKE	
EXPLOR	MIRLOCH.EXP
REF	MIRLOCH.REF

DORIS

DORIS.PAT

Item	*Authority Table*
DORIS-ID	
NAME	
QUAD	
MAPREF	
EASTING	
NORTHING	
ACC	DORACC.AUT
PURPOSE	PURPOSE.AUT
PLAN_NO	
REP_REF	
LOG_LOC	
CORE_HELD	DCORE.AUT
EL_ML	
ORG	
DRILLER	DRILLER.AUT
DATE	
DEPTH	
DRILLTYPE1	DRILLTYPE.AUT
DRILLTYPE2	DRILLTYPE.AUT
LOGGED	LOG.AUT

	CLOSEDFILE
	DATEREVIEW
	VERIFIED
	AZIMUTH
	DIP

ROCKCHEM / TASCHRON / BIOSTRAT / TASREF

ROCKCHEM.PAT

Item	*Data Table*	*Lookup Table / Data Table*	*Lookup Table*	*Authority Table*
RCHEM-ID	RCHEM.SAM	REF.LU	AUTHL.LU	ORIG.AUT
	RCHEM.MAJ			REGION.AUT
	RCHEM.TRC			SPGRP.AUT
	RCHEM.REE			GRP.AUT
	RCHEM.MIN			SBGRP.AUT
	TCHRON.KAR			FRM.AUT
	TCHRON.RBSR			MBR.AUT
	TCHRON.RBSRP			CLASS.AUT
	TCHRON.SHRIMPP	TCHRON.SHRIMP		
	TCHRON.UPB	TCHRON.UPBP		
	TCHRON.ARARP	TCHRON.ARAR		
	TCHRON.FISST			
	BIOSTRAT.DAT		TYPE.AUT	
				COMP.AUT
				LITH.AUT
				ERA.AUT
				PERIOD.AUT
				EPOCH.AUT
				DIV.AUT
				REF.AUT
				LAB.AUT
				REPSTAT.AUT
	REF.CON	REF.LU	AUTHL.LU	AUTH.AUT

TASSED

TASSED.PAT

Item	*Data Table*	*Authority Table (Used by all data tables)*
TASSED-ID	TASSED.SAM	STYPE.AUT
	TASSED.ANL	LOCACC.AUT
	TASSED.SRV	SNAP25K.AUT
		ORIG.AUT
		TREAT.AUT
		LAB.AUT
		ANAL.AUT

MAPNAME.G.PAT

Item	*Lookup Table*	*Authority Table*
RCODE	GEOLOGY.LU	REGION.AUT
		SPGRP.AUT
		GRP.AUT
		SBGRP.AUT
		FRM.AUT
		MBR.AUT
		ERA.AUT
		PERIOD.AUT
		EPOCH.AUT
		DIV.AUT
	LITH.LU	CLASS.AUT
		TYPE.AUT
		COMP.AUT
		GENESIS.AUT
		LITH.AUT
		TEXT.AUT
		MIN.AUT
GEOLOGY		

MAPNAME.G.AAT

Item	*Authority Table*
LINECODE	LINE250.AUT

SOURCE250.PAT

Item	*Lookup Table*	*Lookup Table*	*Lookup Table*	*Authority Table*
SOURCE250-ID				
REF	SOURCE250.LU	REFLINK.LU	REF.LU	
	SOURCE250.LU	COMPLINK.LU		ORIGIN.AUT
	SOURCE250.LU			REL.AUT

MAPNAME.ST.PAT

Item	*Authority Table*
TYPE	STRUC250.AUT
DIP	
AZIMUTH	
M_SCALE	
O_SCALE	

MAPNAME.G.PAT

Item	*Lookup Table*	*Authority Table*
RCODE	GEOLOGY.LU	REGION.AUT
		SPGRP.AUT
		GRP.AUT
		SBGRP.AUT
		FRM.AUT
		MBR.AUT
		ERA.AUT
		PERIOD.AUT
		EPOCH.AUT
		DIV.AUT
	LITH.LU	CLASS.AUT
		TYPE.AUT
		COMP.AUT
		GENESIS.AUT
		LITH.AUT
		PROP.AUT
		TEXT.AUT
		MIN.AUT

MAPNAME.G.AAT

Item	*Authority Table*
LINECODE	LINE25.AUT

SOURCE25.PAT

Item	*Lookup Tables*	*Lookup Table*	*Authority Table*
SOURCE25-ID			
REF	SOURCE25.LU		RELAUT.AUT
		REFLINK.LU	REF.LU
		COMPLINK.LU	ORIGIN.AUT

MAPNAME.ST.PAT

Item	*Authority Table*
TYPE	STRUC25.AUT
SYMBOL	
ANGLE	
DIP	
DD	
GEOLOGIST	
RELIAB	
M_SCALE	
O_SCALE	
LOC_ACC	
FIELD_NO	
FIELD_BOOK	
SAMPLE_NO	
TASROCK_NO	
COMMENTS	
XOFF	
YOFF	

DOS FILE NAMES

MIRLOCH

MIRLOCH.PAT

Item	*Authority Table*
MIRLOCH-ID	
QUAD	
REFNO	
NAME	MIRL_DEP
MAJORCOM	MIRL_ABR
MINORCOM	
AMGE	
AMGN	
ACCURACY	MIRL_ACC
MAPNO	
STATUS	MIRL_STA
SIZE	MIRL_SIZ
HOST	MIRL_HOS
AGE	MIRL_AGE
FORM	MIRL_TYP
STRIKE	
EXPLOR	MIRL_EXP
REF	MIRL_REF

DORIS

DORIS.PAT

Item	*Authority Table*
DORIS-ID	
NAME	
QUAD	
MAPREF	
EASTING	
NORTHING	
ACC	DORAC_AU
PURPOSE	PURP_AU
PLAN_NO	
REP_REF	
LOG_LOC	
CORE_HELD	DCORE _AU
EL_ML	
ORG	
DRILLER	DRILL_AU
DATE	
DEPTH	
DRILLTYPE1	DTYPE_AU
DRILLTYPE2	DTYPE_AU
LOGGED	LOG_AU
CLOSEDFILE	
DATEREVIEW	
VERIFIED	
AZIMUTH	
DIP	

ROCKCHEM / TASCHRON / BIOSTRAT / TASREF

ROCKCHEM.PAT

Item	*Data Table*	*Lookup Tables*	*Lookup Table*	*Authority Table (Used by all data tables)*
RCHEM-ID	RCHM_SAM			ORIG_AU
	RCHM_MAJ			REG_AU
	RCHM_TRC			SPGRP_AU
	RCHM_REE			GRP_AU
	RCHM_MIN			SBGRP_AU
	TC_KAR			FRM_AU
	TC_RBSR			MBR_AU
	TC_RBSRP			CLASS_AU
	TSHRIMPP	TSHRIMP		
	TC_UPB	TC_UPBP		
	TC_URARP	TC_ARAR		
	TC_FISST			
	BIOSTRAT			TYPE_AU
				COMP_AU
				LITH_AU
				ERA_AU
				PER_AU
				EPOCH_AU
				DIV_AU
				REF_AU
				LAB_AU
				REPST_AU
	REFCON	REF_LU	AUTHLU	AUTH_AU

TASSED

TASSED.PAT

Item	*Data Table*	*Authority Table (used by all data tables)*
TASSED-ID	TSED_SAM	STYPE_AU
	TSED_ANL	LOCAC_AU
	TSED_SRV	SNP25_AU
		ORIG_AU
		TREAT_AU
		LAB_AU
		ANAL_AU

MAPNAME.G.PAT

Item	*Lookup Table*	*Authority Table*
RCODE	GEOL_LU	REG_AU
		SPGRP_AU
		GRP_AU
		SBGRP_AU
		FRM_AU
		MBR_AU
		ERA_AU
		PER_AU
		EPOCH_AU
		DIV_AU
	LITH_LU	CLASS_AU
		TYPE_AU
		COMP_AU
		GENES_AU
		LITH_AU
		TEXT_AU
		MIN_AU
GEOLOGY		

MAPNAME.G.AAT

Item	*Authority Table*
LINECODE	LN250_AU

SOURCE250.PAT

Item	*Lookup Table*	*Lookup Table*	*Lookup Table*	*Authority Table*
SOURCE250-ID				
REF	SC250_LU			RELAU_AU
	SC250_LU	RLINK_LU	REF_LU	
	SC250_LU	CLINK_LU		ORIG_AU

MAPNAME.ST.PAT

Item	*Authority Table*
TYPE	ST250_AU
DIP	
AZIMUTH	
M_SCALE	
O_SCALE	

MAPNAME.G.PAT

Item	*Lookup Table*	*Authority Table*
RCODE	GEOL_LU	REG_AU
		SPGRP_AU
		GRP_AU
		SBGRP_AU
		FRM_AU
		MBR_AU
		ERA_AU
		PER_AU
		EPOCH_AU
		DIV_AU
	LITH_LU	CLASS_AU
		TYPE_AU
		COMP_AU
		GENES_AU
		LITH_AU
		PROP_AU
		TEXT_AU
		MIN_AU

MAPNAME.G.AAT

Item	*Authority Table*
LINECODE	LIN25_AU

SOURCE25.PAT

Item	*Lookup Table*	*Lookup Table*	*Lookup Table*	*Authority Table*
SOURCE25-ID				
REF	SRC25_LU			REL_AU
	SRC25_LU	RLINK_LU	REF_LU	
	SRC25_LU	CLINK_LU		ORIG_AU

MAPNAME.ST.PAT

Item	*Authority Table*
TYPE	STR25_AU
SYMBOL	
ANGLE	
DIP	
DD	
GEOLOGIST	
RELIAB	
M_SCALE	
O_SCALE	
LOC_ACC	
FIELD_NO	
FIELD_BOOK	
SAMPLE_NO	
TASROCK_NO	
COMMENTS	
XOFF	
YOFF	