Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

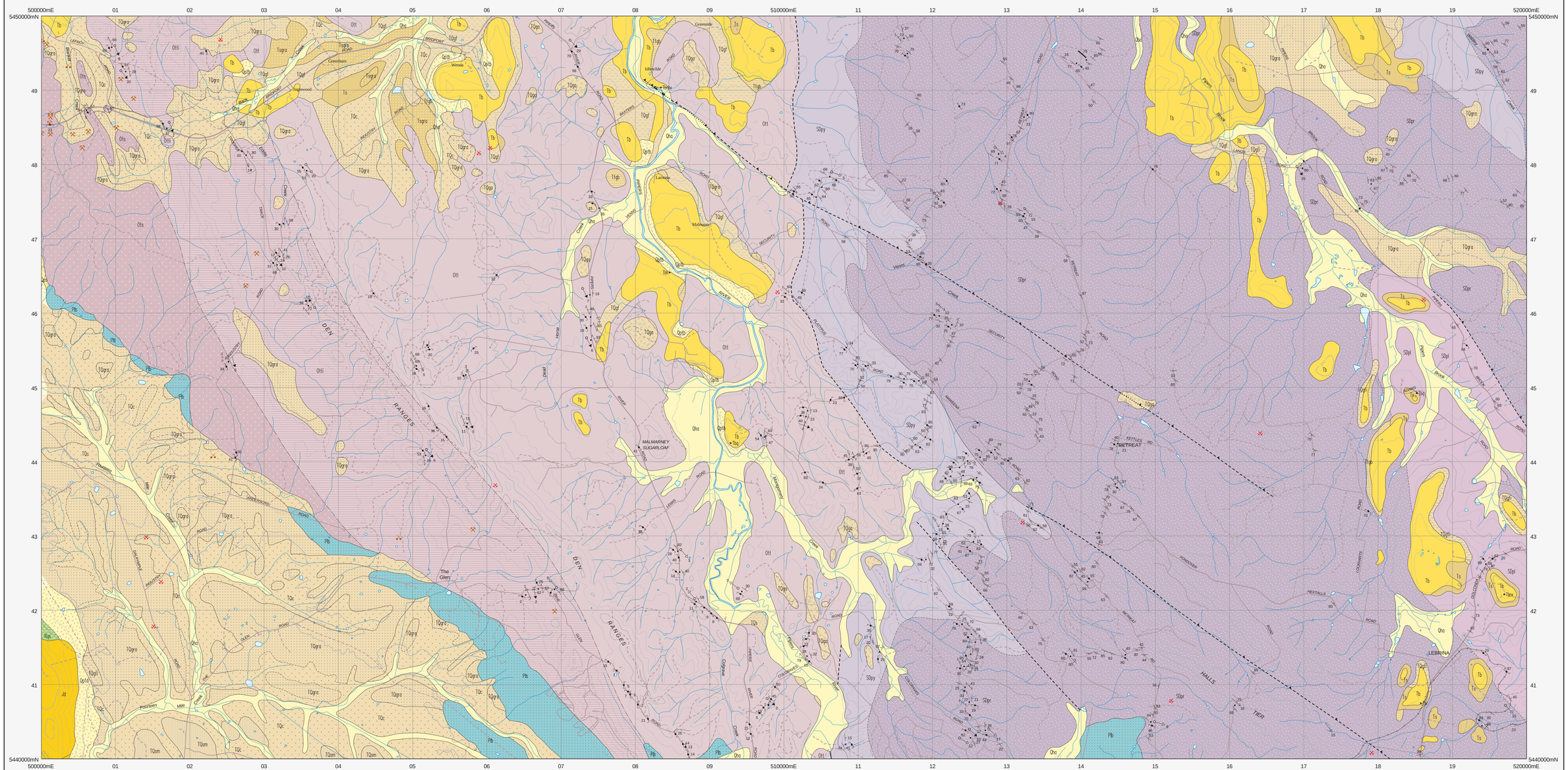
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
RETREAT, SHEET 5044

RETREAT

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmania
Explore the possibilities



QUATERNARY

Qha	HOLOCENE	Stream alluvium, swamp and marsh deposits (Qha).
Qhw	HOLOCENE	Windblown sand and locally derived sand (Qhw).
Qps	PLEISTOCENE	Silt with rounded clasts of granite, schist, quartzite, conglomerate, derived from Permian strata (Qps).
Qptb	PLEISTOCENE	Basalt talus (Qptb).
Qptd	PLEISTOCENE	Dolerite talus (Qptd).
TQc	CENOZOIC	Silt and clay with occasional pebbles (TQc).
TQgf	CENOZOIC	Ferruginous, pisolitic gravel with ironstone blocks (TQgf).
TQgfi	CENOZOIC	Ironstone horizons (TQgfi).
TQgr	CENOZOIC	Rounded gravel, mainly vein quartz (TQgr).
TQga	CENOZOIC	Angular gravel, mainly vein quartz (TQga).
TQgra	CENOZOIC	Rounded and angular gravel, mainly vein quartz (TQgra).
TQsm	CENOZOIC	Medium-grained sand (TQsm).
TQs	CENOZOIC	Sandstone and conglomerate (TQs).
Tb / Ts	PALEOGENE – NEOGENE	Conglomerate, gravel, sand, silt, mud and clay (Ts); rounded and angular gravel, mainly vein quartz (Tsgra); grey-billy and silcrete (Tfgb). Basaltic rock (Tb).

Unconformity.

MESOZOIC

Rqs	TRIASSIC	Cross-bedded quartz sandstone, feldspathic sandstone and shale (Rqs).

PALEOZOIC

Pib	PERMIAN	Poorly sorted pebbly mudstone, sandstone and minor conglomerate, marine fossils present in places (Pib).

Unconformity.

PALEOZOIC

SDpl	SILURIAN – LUDLOW	Dominantly thin-bedded siltstone, with interbedded fine-grained quartz-rich sandstone increasing towards top. Contains Silurian (Ludlow) graptolites (Lone Star Siltstone) (SDpl).
SDpr	SILURIAN – LUDLOW	Interbedded turbiditic medium- to very fine-grained quartz-rich sandstone and subordinate siltstone-mudstone (Retreat Formation) (SDpr).
SDpy	SILURIAN – LUDLOW	Dominantly thin-bedded mudstone, with subordinate cross-laminated siltstone (Yarrow Creek Mudstone) (SDpy).
		Inferred fault.
Ott	ORDOVICIAN	Dominantly dark grey phyllitic slate, with minor thin beds of quartz-rich siltstone. Contains Ordovician graptolites (Turquoise Bluff Slate) (Ott).
Ottl	ORDOVICIAN	Interbedded phyllitic slate and foliated very fine-grained quartz-rich sandstone (Industry Road Member) (Ottl).
Ots	ORDOVICIAN	Thick bedded, turbiditic, graded fine- to very fine-grained quartz-rich sandstone with stripy penetrative cleavage, and minor interbedded slaty pelite (Stony Head Sandstone) (Ots).

PANAMA CODA
TIPPOGORBEE CIRCUS — MATHINNA SUPERGROUP

IGNEOUS ROCKS

Tb	CENOZOIC – PALEOGENE – NEOGENE	Basalt (Tb); quartz tholeiite (Tbq), transitional olivine basalt (Tbr) hawaiite (Tbh), nepheline hawaiite with lherzolite xenoliths (Tbnhx) and olivine nephelinite with lherzolite xenoliths (Tbnx) indicated.
Jd	MESOZOIC – JURASSIC	Dolerite (Jd).

Geological boundary – position approximate.
Geological boundary – inferred.
Transitional geological boundary – position approximate.
Geological boundary – concealed.
Unconformable boundary – position approximate.
Intrusive boundary – position approximate.
Lineament visible on aerial photographs.
Fault – inferred.
Normal fault (downthrown side indicated) – position approximate.
Thrust fault (teeth on upper plate) – inferred.
Thrust fault (teeth on upper plate) – concealed.
(white line) Limit of mapping of sub-unit within undifferentiated unit.

Strike and dip of bedding: right way up; overturned; facing unknown; vertical, facing unknown.
Strike and dip of cleavage: type and relative age unspecified; penetrative cleavage; vertical penetrative cleavage; crenulation cleavage.
Trend and plunge of minor fold hinge line, unspecified relative age, with dip and dip direction of axial surface; vergence sinistral.
Trend and plunge of minor fold hinge line, relative local age F1; reclined fold.
Trend and plunge of minor fold hinge line, relative local age F2; antiform with dip and dip direction of axial surface; with vergence dextral and dip and dip direction of axial surface.
Trend and plunge of bedding/primary cleavage intersection lineation (L1); horizontal.
Trend and plunge of lineation (L2) formed by intersection of cleavages or foliations of relative local ages S1 and S2; crenulation lineation.
Strike and dip of outcrop-scale fault of unspecified relative age, type unspecified.
Notable small float or log occurrence; with rock type indicated.
Notable small outcrop with rock unit indicated.
Field station for adjacent readings on the map.
Mineral deposit location – hardrock
Mineral deposit location – alluvial/tailings
Construction material/industrial mineral/gemstone location

Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.

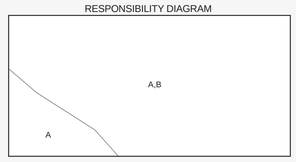
Compiled by M.P. McClenaghan, B.Sc.(Hons), Ph.D., 1995 from the following sources (see responsibility diagram):

A MARSHALL, B.; BARTON, C.M.; JENNINGS, D.J.; NAQVI, I.H. 1965. Geological atlas 1:63 360 series, sheet 31 (8315N). Pipers River. Department of Mines, Tasmania.

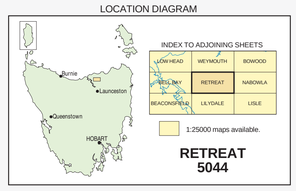
Updated by:

B D.B. Seymour 2008–09: Stratigraphic revision and re-mapping of Mathinna Supergroup supported by interpretation of airborne geophysical, DEM and LiDAR data, as part of the TasExplore Project, Mineral Resources Tasmania.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



RETREAT 5044

REFERENCE THIS MAP AS:

SEYMOUR, D.B. and McCLENAGHAN, M.P. 2009. Digital Geological Atlas 1:25 000 Scale Series. Sheet 5044. Retreat. Mineral Resources Tasmania.

Base data from the LIST, Copyright State of Tasmania.

Map produced by the Geoscience Information Branch of Mineral Resources Tasmania using G.I.S. software.

GDA94 – MGA Zone 55. Contour Interval: 20 metres.

GDA

Plotfile for this map generated from digital data as at: 20-JUL-2011

WARNING: INKS ARE LIGHT SENSITIVE