Tasmania
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Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

GEOLOGY OF TASMANIA

SCALE 1:500000

0 10 20 30 40 50 km

Grid: GDA94 – MGA Zone 55.

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Reference this map as:
Brown et al. (comp.). 2005
Geology of Tasmania. Edition 2005.1
Geological Atlas 1:500000 digital series.
Mineral Resources Tasmania.

The geological data for this map were derived
from Tasmanian Geological Survey Geological Atlas
1:250,000 digital series maps.

For Source and Reliability information refer to
1:250,000 digital series maps.

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LEGEND

CENOZOIC

QUATERNARY — HOLOCENE
- Qh — Sand, gravel, and mud of alluvial, lacustrine and littoral origin (Qh).

PLEISTOCENE
- Qp — Glacial and interglacial deposits (Qp). Talus (Qpt).
- Qpg — Predominantly glacial deposits (Qpg).
- Qps — Coastal sand and gravel (Qps).
- Qpl — Limestone (Qpl).

Erosional surface

TERTIARY
- Ts — Non-marine sequences of sand, gravel, silt, clay and regolith (Ts); basalt (tholeiitic to alkalic) and related pyroclastic rocks (Tb); marine limestone (Tm); conglomerate (Tc).
- Tb
- Tm
- Tc

Erosional surface

MESOZOIC

JURASSIC
- Jb — Basalt (Jb).

Erosional surface

TRIASSIC — UPPER PARMEENER SUPERGROUP
- Rh — Fluviolacustrine sequences of sandstone, siltstone and mudstone (R). Coal measures (Rvc).
- Rv — Basalt (Rb).
- Rq — Dominantly lithic sandstone with felsic volcaniclastics (Rv).
- Rq — Dominantly quartz sandstone (Rq).

PERMIAN — LOWER PARMEENER SUPERGROUP
- Pc — Freshwater sandstone with coal measures (Pc).
- Pu — Upper glaciomarine sequences of pebbly mudstone, pebbly sandstone and limestone (Pu).
- Pl — Freshwater and paralic sandstone and mudstone with some coal measures (Pl). Lower glaciomarine sequences of mudstone, pebbly mudstone, pebbly sandstone, minor limestone and tasmanite oil shale (Pl).
- Pt — Basal tillite (Pt).

LATE CARBONIFEROUS

Erosional surface.

LATE MIDDLE DEVONIAN
- Terrestrial cavern-filling deposits (Dc: Eugenana beds).

Angular unconformity

PALEOZOIC

EARLY DEVONIAN–SILURIAN — ELDON GROUP AND CORRELATES
- SDb — Siltstone, shale and fine-grained sandstone and minor limestone (SDb).
- SDl — Shallow marine quartz sandstone (SDl).
- SDs — Siltstone, shale and minor quartz sandstone (SDs).
- SDc — Shallow marine quartz sandstone (SDc).

ORDOVICIAN — OWEN GROUP AND CORRELATES
- Ol — Shallow marine limestone. Siltstone in some areas (Gordon Group) (Ol).
- Os — Shallow marine sandstone and mudstone (Os).

LATE CAMBRIAN — WURAWINA SUPERGROUP
- COc — Dominantly siliceous conglomerate and sandstone (COc).
- COms — Marine sandstone, siltstone and conglomerate (COms).
- COsc — Siliceous conglomerate and sandstone (COsc).

Angular unconformity in some areas, apparent conformity in others.

MIDDLE CAMBRIAN — MOUNT READ VOLCANICS AND CORRELATES
- Cdt — Dominantly felsic volcaniclastics (Cdt) with some felsic lavas indicated (Cdtl). (Tyndall Group and correlates).
- Cdo — Dominantly andesitic volcanics and intrusives (Cdo).
- Cdv — Sedimentary sequences, with minor volcanics in places (Cdv).
- Cdb — Basaltic to andesitic volcanics, shoshonitic in part (Cdb).
- Cdsv — Felsic volcanosedimentary sequences with minor lava (Cdsv).
- Cdv — Felsic to intermediate calc-alkaline volcanics (Cdv).
- Cdsq — Siliceous sandstone and conglomerate (Cdsq).

Angular unconformity in some areas, apparent conformity in others.

? EARLY CAMBRIAN — ALLOCHTHONOUS SEQUENCES
- Cc — Peridotite, serpentinite and associated rocks (Cc); tonalite and associated rocks (Ct); low-Ti tholeiitic and boninitic lavas (Cb).
- Ct
- Cb
- Ccw — Turbiditic mafic volcaniclastics, red mudstone and chert (Ccw). Some basalt (Ccwb) and chert (Ccwc) indicated.

PROTEROZOIC

LATE NEO-PROTEROZOIC — TOQARI GROUP AND CORRELATES
- Psr — Quartz siltstone and shale (Psr).
- Psd — Shallow marine dolostone and limestone (Psd).
- Pwc — Dolostone, diamictite and mudstone (Pwc).
- Pwt — Turbiditic, mafic-volcaniclastic sandstone and mudstone (Pwt), with some tholeiitic basalt indicated (Pwb).
- Pwt — Shallow-marine dolostone (Pwt).
- Pss — Shallow marine dolostone, chert, shale and diamictite (Pss).
- Pds — Sandstone and conglomerate (Pds).

Low-angle unconformity.

OCEAN FORMATION
- Pu — Quartzwacke turbidite, dolomitic in some areas (Pu); basalt (Pub).

NEO-PROTEROZOIC — ROCKY CAPE GROUP AND CORRELATES
- Prc — Siltstone, mudstone, slate and phyllite (Prc).
- Pr — Carbonate (Pr).
- Prs — Orthoquartzite (Prs).

MESO-PROTEROZOIC
- Ph — Quartz-rich lithicwacke, conglomerate and black slate (Ph).

NORTHEAST TASMANIA

Angular unconformity
- Qpf — Felsic pyroclastic rocks (Qp).

Angular unconformity
- OOq — Early Ordovician to early Devonian micaceous quartzwacke turbiditic sequences (OOq), mudstone sequences (OOp).
- OOp — MATHINNA SUPERGROUP

ARTHUR METAMORPHIC COMPLEX
- Pzc — Chloritic schist, with minor dolostone and magnesite (Pzc). Amphibolite (Pzo).
- Pzo
- Pzp — Dominantly phyllite (Pzp).
- Pzt — Dominantly quartz mica schist and quartzite (Pzt).

TYENNAN AND SIMILAR REGIONS
- Pts — Dominantly quartzite sequences (Pts).
- Pts — Platy or schistose micaceous quartzite (Pts).
- Pts — Garnet-bearing quartzite (Ptsg).
- Ptp — Dominantly greenschist-facies pelitic rocks, mainly phyllite (Ptp).
- Ptpc — Pelitic schist (Ptpc).
- Ptpg — Garnet-bearing pelitic schist (Ptpg).
- Ptd — Dolostone (Ptd).
- Ptb — Schistose conglomerate (Ptb).

IGNEOUS ROCKS

TERTIARY
- Tb — Basalt (tholeiitic to alkalic) and related volcaniclastic rocks (Tb).

CRETACEOUS
- Ko — Appinitic lava and associated lamprophyre dykes (Ko).
- Ks — Syenite, quartz monzonite and related alkaline rocks (Ks.)

JURASSIC
- Jb — Basalt, comagmatic with Jurassic dolerite (Jb).
- Jd — Dolerite (tholeiitic) with granophyre in places (Jd).

TRIASSIC
- Rb — Alkali olivine basalt (Rb).
- Do — Dolerite dykes (Do).

LOWER CARBONIFEROUS – DEVONIAN
- Dgs — Undifferentiated granitic rocks (Dg); undifferentiated alkali-feldspar granite/granite/adamellite, I-type (Dgs); S-type (Dgas); dominantly alkali-feldspar granite, I-type (Dgst); S-type (Dgats); dominantly adamellite/granite, I-type (Dgas); S-type (Dgas).
- Dgst
- Dgas
- Dgast
- Dgn — Dominantly granodiorite/adamellite, (I-type) (Dgn).
- Dgr — Dominantly granodiorite, (I-type) (Dgr).
- Dp — Felsic pyroclastic rocks (Dp).

DEVONIAN
- Dl — Lamprophyre (at Varna Bay) (Dl).

MIDDLE – LATE(?) CAMBRIAN
- Cdd — Tholeiitic dolerite (Cdd).
- Cdtl — Felsic lavas of Tyndall Group (Cdtl).
- Cdb — Basaltic to andesitic volcanics, shoshonitic in part (Cdb).
- Cds — Dominantly andesitic volcanic rocks (Cdo).
- Cdv — Felsic – intermediate, calc-alkaline volcanic rocks (Cdv).
- Cdfp — Quartz-feldspar porphyry (Cdfp).
- Cgr — Granite (Cgr).
- Cg — Gabbroic rocks (Cg).

EARLY(?) CAMBRIAN
- Cb — Low-Ti tholeiitic and boninitic lavas (Cb).
- Ct — Tonalite and associated rocks (Ct).
- Cc — Peridotite, serpentinite and associated rocks (Cc).
- Ccw — Tholeiitic basalt (Ccwb).

MT READ VOLCANICS AND CORRELATES

PROTEROZOIC
- Pzb — Tholeiitic basalt (Pzb).
- Pzm — Tholeiitic dolerite dykes (Pzm).
- Pzb — Alkali basalt and dolerite (Pzb).
- Pzo — Amphibolite (Pzo).
- Pzg — Granitic rocks (Pzg).

- Geological boundary.
- Fault.
- Wrench fault with relative displacement indicated.
- Concealed fault.

THIS MAP IS EDITION 2005.1
BASED ON A STATEWIDE DATASET

WARNING: INKS ARE LIGHT SENSITIVE

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