Tasmanian Government

Department of State Growth
MINERAL RESOURCES TASMANIA

GEOLOGY OF TASMANIA

SCALE 1:500 000

0 10 20 30 40 50 km

Grid: GDA94 – MGA Zone 55.

GDA

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Reference this map as:
Brown et al. (comp.). 2021
Geology of Tasmania. Edition 2021.1
Geological Atlas 1:500 000 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 — PLEISTOCENE HOLOCENE

- Qh — Sand, gravel, and mud of alluvial, lacustrine and littoral origin (Qh).
- Qpt — Glacial and interglacial deposits (Qp). Talus (Qpt).
- Qpg — Predominantly glacial deposits (Qpg).
- Qps — Coastal sand and gravel (Qps).
- Qpl — Limestone (Qpl).

Erosional surface

PALEOGENE–NEOGENE

- 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

Erosional surface

MESOZOIC — JURASSIC

- Jb — Basalt (Jb).

Erosional surface

TRIASSIC — UPPER PARMEENER SUPERGROUP

- Rv — Fluviolacustrine sequences of sandstone, siltstone and mudstone (R). Coal measures (Rvc).
- Rb — Basalt (Rb).
- Rv — Dominantly lithic sandstone with felsic volcaniclastics (Rv).
- Rq — Dominantly quartz sandstone (Rq).
- Rc — Freshwater sandstone with coal measures (Rc).

PERMIAN — LOWER PARMEENER SUPERGROUP

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

Erosional surface.

CARBONIFEROUS–PERMIAN

- Dc — Terrestrial cavern-filling deposits (Dc: Eugenana beds).

Angular unconformity

PALEOZOIC — DEVONIAN — ORDOVICIAN — SILURIAN

- SDb — Siltstone, shale and fine-grained sandstone and minor limestone (SDb).
- SDr — Shallow marine quartz sandstone (SDr).
- SDq — Siltstone, shale and minor quartz sandstone (SDq).
- SDc — Shallow marine quartz sandstone (SDc).
- Ol — Shallow marine limestone. Siltstone in some areas (Gordon Group) (Ol).
- Os — Shallow marine sandstone and mudstone (Os).
- COc — Dominantly siliceous conglomerate and sandstone (COc).
- COms — Marine sandstone, siltstone and conglomerate (COms).
- COci — Siliceous conglomerate and sandstone (COci).

Angular unconformity in some areas, apparent conformity in others.

CAMBRIAN — FURONGIAN — CAMBRIAN SERIES 3

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

Angular unconformity in some areas, apparent conformity in others.

TERRENEVIAN – CAMBRIAN SERIES 2

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

NEOPROTEROZOIC — EDIACARAN — CRYOGENIAN

- Psr — Quartz siltstone and shale (Psr).
- Psd — Shallow marine dolostone and limestone (Psd).
- Pwc — Dolostone, diamictite and mudstone (Pwc).
- Psv — Turbiditic, mafic-volcaniclastic sandstone and mudstone (Psv), with some tholeiitic basalt indicated (Psb).
- Pwt — Shallow marine dolostone (Pwt).
- Pss — Shallow marine dolostone, chert, shale and diamictite (Pss).
- Pds — Sandstone and conglomerate (Pds).

Low-angle unconformity.

TOcounts GROUP AND CORRELATES

- Pw — Quartzwacke turbidite, dolomitic in some areas (Pw); basalt (Pwb).

MESOPROTEROZOIC

- Prc — Siltstone, mudstone, slate and phyllite (Prc).
- Pri — Siltstone and dolostone (Pri).
- Prs — Orthoquartzite (Prs).
- Ph — Quartz-rich lithicwacke, conglomerate and black slate (Ph).

CENOZOIC — PALEOGENE–NEOGENE

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

MESOZOIC — CRETACEOUS

- Ks — Shoshonitic to latitic lava, dykes and porphyry intrusions (Ks).
- 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).
- Dd — Dolerite dykes (Dd).

PALEOZOIC — DEVONIAN – CARBONIFEROUS

- Dl — Lamprophyre (at Varna Bay) (Dl).
- Dgs — Undifferentiated granitic rocks (Dg); undifferentiated alkali-feldspar syenogranite/monzogranite, I-type (Dgs); S-type (Dgas); dominantly alkali-feldspar granite, I-type (Dgst); S-type (Dgats); dominantly syenogranite/monzogranite, I-type (Dgss); S-type (Dgass).
- Dgn — Dominantly granodiorite/monzogranite, (I-type) (Dgn).
- Dgr — Dominantly granodiorite, (I-type) (Dgr).
- Dp — Felsic pyroclastic rocks (Dp).

NORTHEAST TASMANIA

- Angular unconformity
- Dp — Felsic pyroclastic rocks (Dp).
- Angular unconformity
- SDps — Turbiditic sandstone and siltstone (SDp).
- SDpt — Turbiditic sandstone and some siltstone (SDps)
- SDpr — Dominantly siltstone with some sand-stone (SDpt).
- SDpy — Turbiditic sandstone and some siltstone and mudstone (SDpr).
- Interbedded mudstone and siltstone (SDpy).

Faulted contacts

- Ott — Phyllitic slate and sandstone (Ott).
- Ots — Turbiditic sandstone and slate (Ots).

MATHINNA SUPERGROUP — ELDON GROUP AND CORRELATES — WURAWINA SUPERGROUP — OWEN GROUP AND CORRELATES

ARTHUR METAMORPHIC COMPLEX

- Poc — Chloritic schist, with minor dolostone and magnesite (Poc).
- Pob — Amphibolite (Pob).
- Pop — Dominantly phyllite (Pop).

TOGARI GROUP AND CORRELATES

DONAH FORMATION

- Pot — Dominantly quartz mica schist and quartzite (Pot).

ROCKY CAPE GROUP AND CORRELATES

KING ISLAND

- Pb — Micaceous quartzite, schist, phyllite and minor amphibolite (Pb).

TYENNAN AND SIMILAR REGIONS

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

SUPPINE BAY FORMATION

IGNEOUS ROCKS

PALEOZOIC — CAMBRIAN — CAMBRIAN SERIES 3 – FURONGIAN

- Cdo — Tholeiitic dolerite (Cdd).
- Cdtl — Felsic lavas of Tyndall Group (Cdtl).
- Cdb — Basaltic to andesitic volcanics, shoshonitic in part (Cdb).
- Cdo — Dominantly andesitic volcanic rocks (Cdo).
- Cdv — Felsic – intermediate, calc-alkaline volcanic rocks (Cdv).
- Cqfp — Quartz-feldspar porphyry (Cqfp).
- Cg — Granite (Cgr).
- Cg — Gabbroic rocks (Cg).
- Cb — Low-Ti tholeiitic and boninitic lavas (Cb).
- Ct — Tonalite and associated rocks (Ct).
- Cs — Peridotite, serpentinite and associated rocks (Cs).
- Ccw — Tholeiitic basalt (Ccwb).

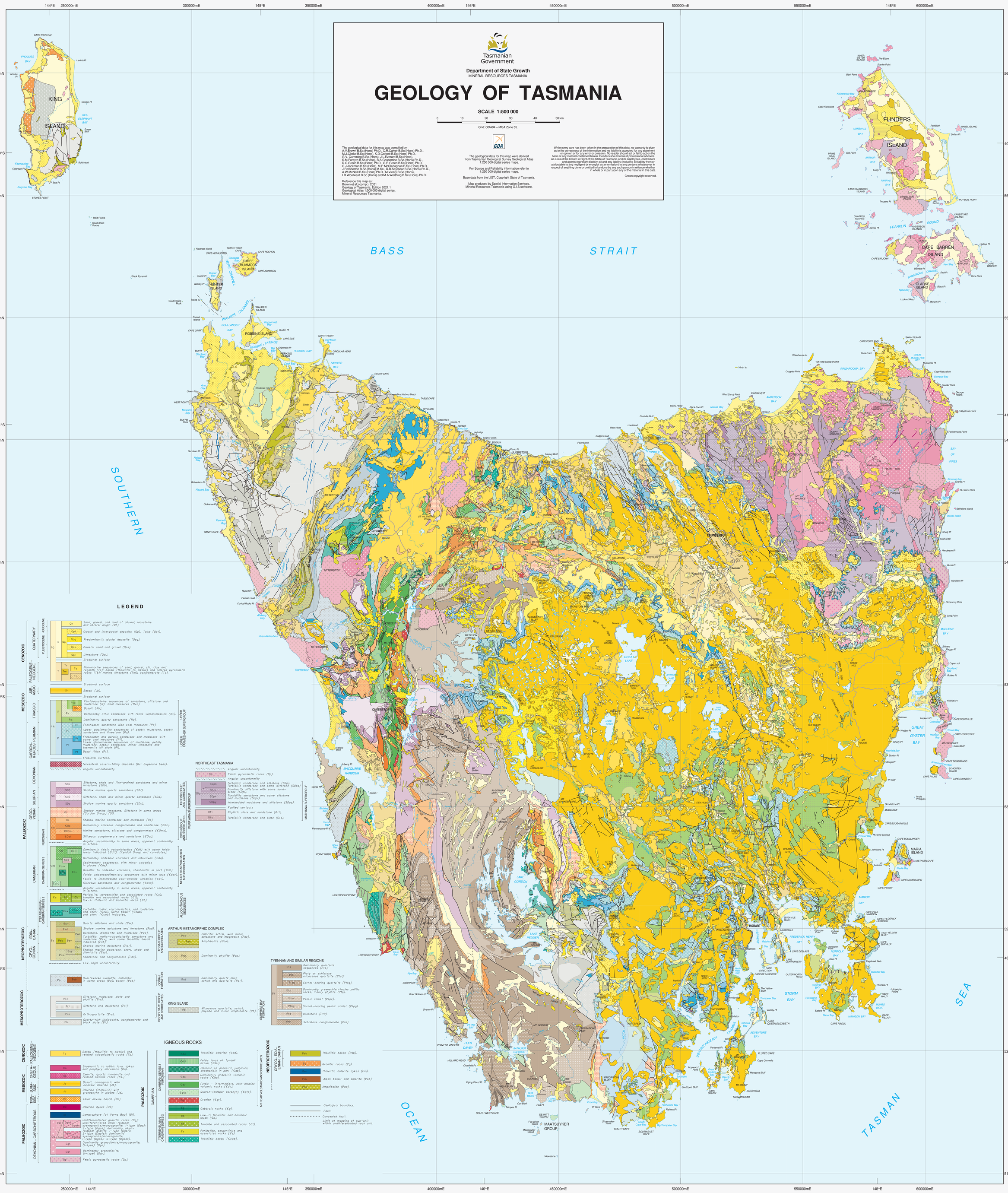
TERRENEVIAN – CAMBRIAN SERIES 2

NEOPROTEROZOIC — CRYOGENIAN, EDIACARAN

- Pdb — Tholeiitic basalt (Pdb).
- Pg — Granitic rocks (Pg).
- Pm — Tholeiitic dolerite dykes (Pm).
- Pob — Alkali basalt and dolerite (Pob).
- Poa — Amphibolite (Poa).

MT READ VOLCANICS AND CORRELATES

- Geological boundary.
- Fault.
- Concealed fault.
- Limit of mapping of sub-unit within undifferentiated rock unit.



THIS MAP IS EDITION 2021.1
BASED ON A STATEWIDE DATASET

WARNING: INKS ARE LIGHT SENSITIVE

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