Department of State Growth
MINERAL RESOURCES TASMANIA

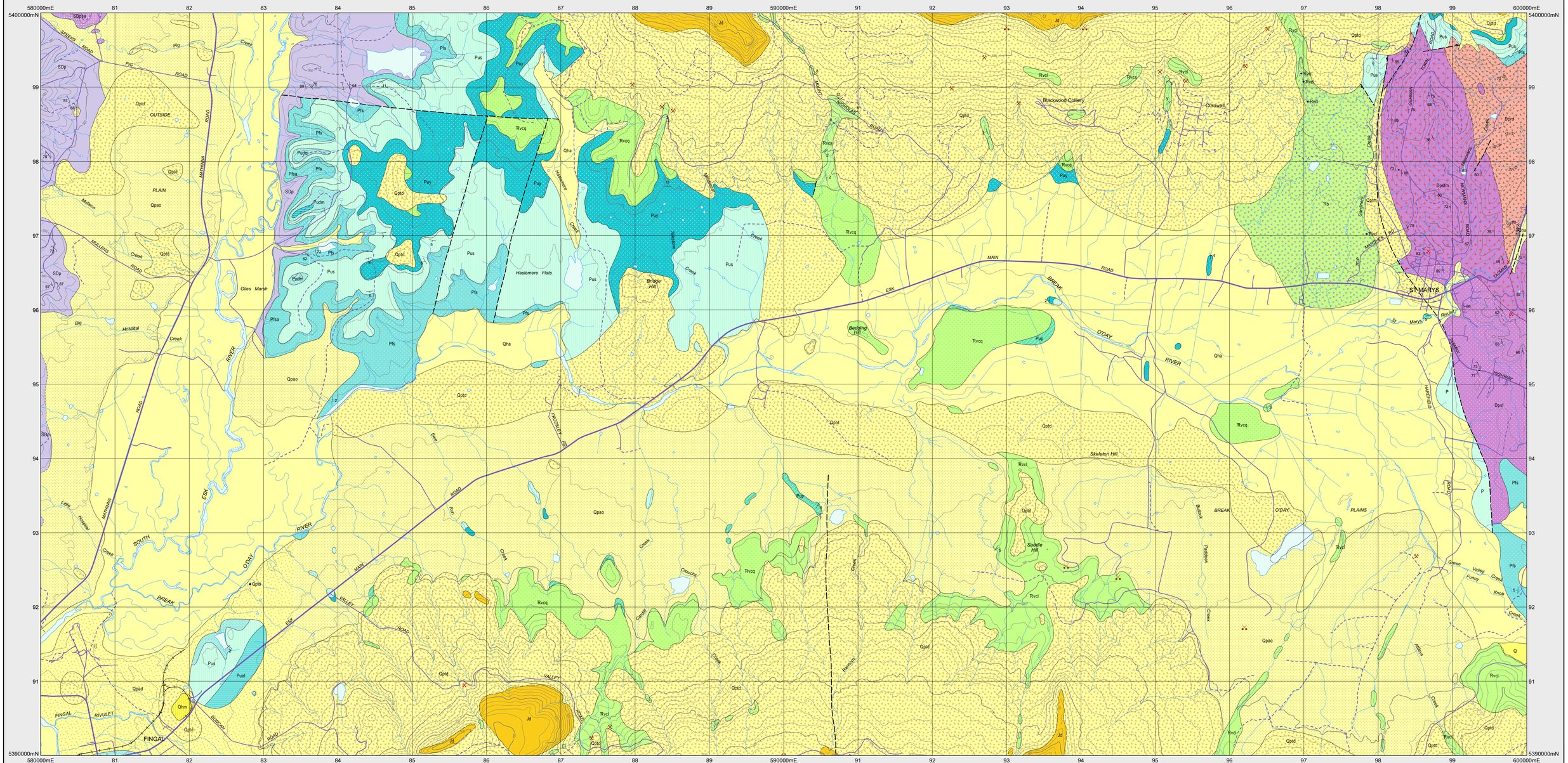
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
ST MARYS, SHEET 5839

ST MARYS

Scale 1:25 000

0 500 1000 1500 2000 2500m

Tasmanian Government



CENOZOIC

QUATERNARY — PLEISTOCENE – HOLOCENE (Q)

- **Qhm** — *Undifferentiated Quaternary sediments (Q). Mine tailings and man disturbed ground (Qhm).*
- **Qha** — *Stream alluvium, swamp and marsh deposits (Qha).*
- **Qpad** — *Older alluvium of river terrace, predominantly dolerite derived (Qpad).*
- **Qpao** — *Older alluvium of river terraces (Qpao).*
- **Qptd** — *Talus consisting dominantly of dolerite boulders (Qptd).*
- **Qptm** — *Mathinna Group talus (Qptm).*

Erosional surface.

MESOZOIC

TRIASSIC — UPPER PARMENER SUPERGROUP

- **Rvcl** — *Dominantly lithic sandstone with minor mudstone and coal (Rvcl).*
- **Rvcs** — *Lithic Sandstone (Rvcs).*
- **Rvcq** — *Interbedded cross-bedded white quartzose sandstone. quartz-rich lithic sandstone, siltstone and mudstone (Rvcq).*
- **Rb** — *Alkali olivine basalt (Rb).*

Erosional surface.

PALEOZOIC

PERMIAN — LOWER PARMENER SUPERGROUP

- **Pup** — *Undifferentiated Permo-Carboniferous sediments (P). Undifferentiated unfossiliferous, poorly sorted mudstone and poorly sorted glauconitic sandstone (Puy). Poorly sorted grey mudstone, siltstone and rare sandstone, unfossilliferous except for rare forams (Pup).*
- **Puy** — *Thickly bedded usually poorly sorted sandstone passing upwards into interbedded sandstone, siltstone and mudstone; marine fossils abundant in places (Pyg).*
- **Pug** — *Dominantly bioclastic limestone (Puel).*
- **Puel** — *Marine limestone, calcareous mudstone and sandstone; usually richly fossilliferous (Pus).*
- **Pus** — *Fine grained pebbly sandstone with phosphatic nodules. Marine fossils present in some areas (Puf).*
- **Puf** — *Mudstone, siltstone and poorly sorted sandstone. Uncommon marine fossil (Pudm).*
- **Pudm** — *Dominantly well sorted quartz sandstone, usually cross-bedded and commonly with interbedded and interlaminated carbonaceous shale, lesser conglomerate and rare coal (Pfs), Aberfoyle Formation (Pfsa).*
- **Pfs**

P — Lymingtonian Stage; Bernacchian Stage

Unconformity.

PALEOZOIC

DEVONIAN — MIDDLE DEVONIAN

- **Dprd** — *Two-pyroxene bearing, quartz porphyrite with very fine-grained groundmass, feeder dyke (Dprd) (Dgrd - St Marys Porphyry).*

SILURIAN (?) - DEVONIAN — LUDLOW (?) - LOWER DEVONIAN (SDp) — PANAMA GROUP — MATHINNA SUPERGROUP

- **Dpsf** — *Undifferentiated Panama Group sandstone, siltstone, and mudstone, primarily turbiditic in origin. Contains graptolite fossils of Ludlow age (SDp). Turbidite succession dominated by quartz-rich sandstones with minor siltstone and mudstone. Current related sedimentary structures abundant. Contains Devonian marine macrofossils, graptolites and vascular plant fossils (Dpsf). Metamorphosed by granitoid intrusion (Dpsfm) (Dpsf, Dpsfm: Scamander Formation).*
- **Dpsfm**
- **SDpsa** — *Dominantly medium- to fine-grained turbiditic quartz-rich sandstone, with some interbedded siltstone. Rare vascular plant fossils (possible correlate of Sideling Sandstone) (SDpsa).*

IGNEOUS ROCKS

MESOZOIC — JURRASSIC

- **Jd** — *Dolerite and related rocks (Jd).*

PALEOZOIC — DEVONIAN — MIDDLE DEVONIAN

- **Dprd** — *Two-pyroxene bearing, quartz porphyrite with very fine-grained groundmass, feeder dyke (Dprd) (Dgrd - St Marys Porphyry).*

CONTACTS

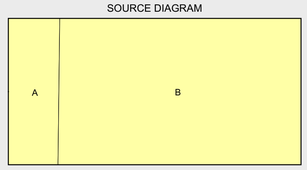
- *Geological contact.*
- *Geological contact - inferred.*
- *Unconformable lithological contact.*
- *Igneous intrusive contact.*
- *Limit of mapping of sub-unit within undifferentiated rock unit.*

FAULTS

- *Fault.*
- *Normal fault (downthrown side indicated).*

- *Strike and dip of bedding - right way up; overturned; facing unknown; vertical, facing indicated by single tic.*
- *Strike and dip of cleavage of unspecified type and relative age.*
- *Strike of vertical cleavage of unspecified type and relative age.*
- *Strike and dip of cleavage, relative local age S↕*
- *Strike and dip of foliation due to alignment of hornblende and/or biotite in granitic rock.*
- *Trend of preferred orientation of hornblende and/or biotite in granitic rock.*
- *Field station for adjacent readings on the map.*
- *Notable small outcrop with rock unit indicated.*
- *Notable small float or lag occurrence with rock unit indicated.*
- *Mineral deposit location - hardrock.*
- *Mineral deposit location - alluvial/tailings.*
- *Construction material/industrial mineral/gemstone location.*

SOURCE DIAGRAM



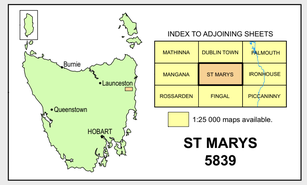
- Highly detailed (eg. more detailed than 1:25 000 scale mapping).
- Detailed systematic (eg.1:25 000 map or equivalent detail).
- Regional systematic (eg.1:50 000, 1:63 360 map or equivalent detail).
- Regional mapping less detailed than 1:63 360 map or equivalent (all other scales).
- Reconnaissance mapping with sparse ground traverses.
- Remote sensing and/or geophysical interpretation with limited or no ground information.

Compiled by D.C.Green, B.Sc.(Hons), Ph.D., 2006 from the following sources (see source diagram):

A CALVER, C.R., EVERARD, J.L., FINDLAY, R.H. and LENNOX, P.G. 1988. Geological Atlas 1:50 000 Series. Sheet 48 (8414N), Ben Lomond.

B TURNER, N.J., CALVER, C.R., CASTLEDEN, R.H. and BAILLIE, P.W. 1984. Geological Atlas 1:50 000 Series. Sheet 49 (8514N), St Marys.

LOCATION DIAGRAM



INDEX TO ADJOINING SHEETS

MATHINNA	DUBLIN TOWN	PALMOUTH
MANGANA	ST MARYS	IRONHOUSE
ROSSARDEN	FINGAL	PICCANINNY

1:25 000 maps available.

ST MARYS 5839

REFERENCE THIS MAP AS:

GREEN, D.C. 2006 (compiler). Digital Geological Atlas 1:25 000 Scale Series. Sheet 5839 St Marys. Mineral Resources Tasmania.

Base data from the LIST, Copyright State of Tasmania.

Map produced by Spatial Information Services, Mineral Resources Tasmania.

Website: www.mrt.tas.gov.au

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

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Map generated: 08-JAN-2024

WARNING: INKS ARE LIGHT SENSITIVE.