Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
PICCANINNY, SHEET 6038

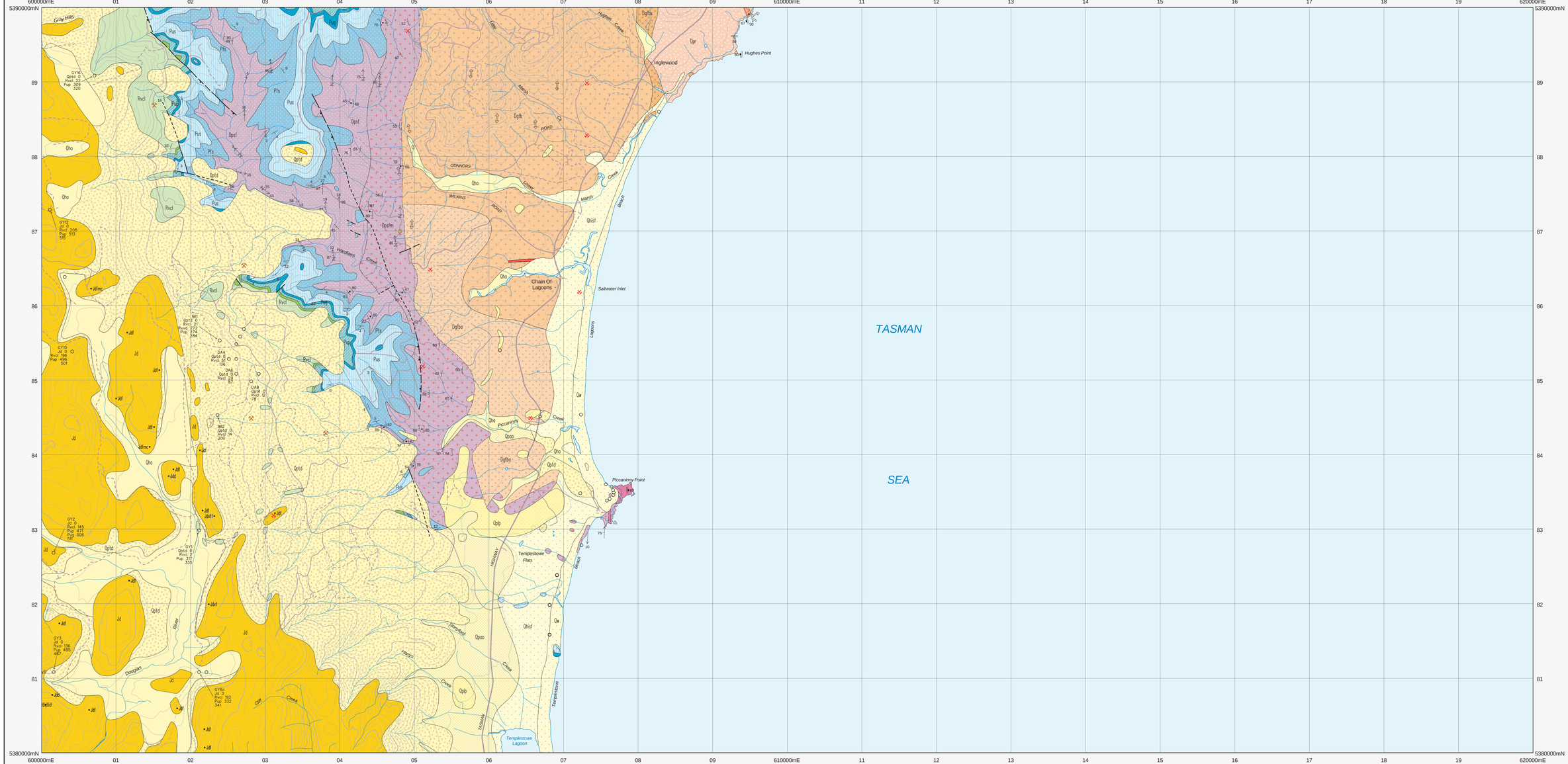
PICCANINNY

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmania
Explore the possibilities

600000mE 01 02 03 04 05 06 07 08 09 610000mE 11 12 13 14 15 16 17 18 19 620000mE
5390000mN 89 88 87 86 85 84 83 82 81 5380000mN



CENOZOIC

QUATERNARY — PLEISTOCENE – HOLOCENE

- Qha — *Stream alluvium, swamp and marsh deposits (Qha).*
- Qw — *Aeolian deposits and locally derived sand (Qw).*
- Qhist — *Sand, gravel and clay occasionally with ferruginous cement (Qhist).*
- Qptd — *Talus consisting dominantly of dolerite boulders (Qptd).*
- Qplp — *Lag deposit derived from sand and gravel beds consisting of vein quartz and detritus from Permeener Supergroup and older rocks (Qplp).*
- Qpao — *Older alluvium of river terraces (Qpao).*

~~~~~~~~~~~~ *Angular unconformity*

MESOZOIC

TRIASSIC — UPPER PARMENEER SUPERGROUP

- Rvcl — *Dominantly lithic sandstone with minor mudstone and coal (Rvcl).*
- Rvvq — *Dominantly quartz sandstone (Rvvq).*

Erosional surface.

PALEOZOIC

PERMIAN — LOWER PARMENEER SUPERGROUP

- Pup — *Poorly sorted grey mudstone, siltstone and rare sandstone, unfossiliferous except for rare forams (Pup).*
- Pug — *Thickly bedded usually poorly sorted sandstone passing upwards into interbedded sandstone, siltstone and mudstone. Marine fossils abundant in places (Pug).*
- Pus — *Marine limestone, calcareous mudstone and sandstone: usually richly fossiliferous (Pus).*
- Pfs — *Dominantly well sorted quartz sandstone, usually cross-bedded and commonly with interbedded and interlaminated carbonaceous shale lesser conglomerate and rare coal (Pfs).*

~~~~~~~~~~~~ *Angular unconformity*

PALEOZOIC

DEVONIAN — MIDDLE DEVONIAN — ST MARYS PORPHYRY

- Dpr — *Porphyry with phenocrysts of plagioclase, quartz, biotite, K-feldspar, hypersthene and augite, in a very fine-grained groundmass: single cooling unit of rhyodacite, with sporadic basal rhyolitic pyroclastics (Dpr).*
- Dprl — *Lithic-rich layers in porphyry (Dprl). (Dpr, Dprl – St Marys Porphyry).*

DEVONIAN — LOWER(?) DEVONIAN — PANAMA GROUP — MATHINNA SUPERGROUP

- Dpsf — *Turbidite succession dominated by quartz-rich sandstone with minor siltstone and mudstone. Current related sedimentary structures abundant. Contains Devonian marine macrofossils, graptolites and vascular plant fossils (Dpsf). Contact metamorphosed Dpsf (Dpsfm) (Dpsf, Dpsfm – Scamander Formation).*
- Dpsfm

IGNEOUS ROCKS

MESOZOIC — JURASSIC

- Jd — *Dolerite and related rocks (Jd); containing late aphanitic dykes (Jdd); very fine grained (1.2–0.7mm) (Jdvf); very fine– to fine–grained (0.2–1.5mm) (Jdvf1); fine grained (0.7–1.5mm) (Jdf); fine– to coarse–grained (>0.7mm) (Jdfmc).*

MINOR GRANITIC INTRUSIONS

- Dgph — *Quartz–feldspar–biotite–hornblende porphyry (Dgph).*

BLUE TIER BATHOLITH AND COEVAL EXTRUSIVE ROCKS

PALEOZOIC — DEVONIAN — MIDDLE DEVONIAN

- Dgfbfx — *Generally coarse–grained, equigranular to sparsely porphyritic (K–feldspar) biotite–hornblende–trace pyroxene monzogranite (Dgfb); with aplite intrusions (Dgfba).*
- Dgfb — *Medium–grained, sparsely porphyritic quartz diorite with abundant fine–grained mafic enclaves and sparse hornfels xenoliths (marginal phase of Dgfb) (Dgfbx). (Dgfb, Dgfba, Dgfbx – Piccaninny Creek Granite; I–type).*
- Dgfba

DEVONIAN — MIDDLE DEVONIAN

- Dpr — *Porphyry with phenocrysts of plagioclase, quartz, biotite, K–feldspar, hypersthene and augite, in a very fine–grained groundmass: single cooling unit of rhyodacite, with sporadic basal rhyolitic pyroclastics (Dpr). Lithic–rich layers in porphyry (Dprl). (Dpr, Dprl – St Marys Porphyry).*
- Dprl

DEVONIAN — LOWER DEVONIAN

- Dgref — *Coarse–grained, equigranular to medium–grained, sparsely porphyritic (feldspar) hornblende–biotite–minor pyroxene granodiorite, with very common mafic enclaves (Dgref) (Long Point Granodiorite; I–type; at Piccaninny Point on this sheet).*

Geological boundary – position approximate.
Unconformable boundary – position accurate or approximate.
Intrusive boundary – position accurate or approximate.
Fault – inferred.
Normal Fault (downthrown side indicated) – position accurate or approximate.
(white line) Limit of mapping of sub–unit within undefferentiated rock unit.

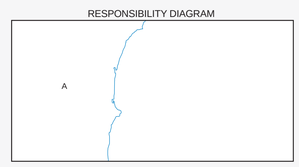
Strike and dip of bedding right way up, overturned, facing unknown.
Strike of vertical bedding, facing unknown.
Strike and dip of cleavage of unspecified type and relative age.
Trend and plunge of minor fold hingeline, unspecified relative age – with dip and dip direction of axial surface; with vertical axial surface.
Trend and plunge of minor fold hinge line, unspecified relative age: vergence dextral; with dip and dip direction of axial surface.
Strike and dip of mafic schlieren associated with granitic rock.
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.
Borehole with identification number, depth of rock units encountered, and final depth.
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 ha not been verified in every case.

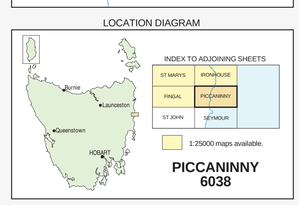
Compiled by D.C.Green, B.Sc.(Hons), Ph.D., 2007 from the following sources (see responsibility diagram):

A 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.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



PICCANINNY 6038

REFERENCE THIS MAP AS:

GREEN, D.C. 2007 (compiler). Digital Geological Atlas 1:25 000 Scale Series. Sheet 6038 Piccaninny. 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: 01-AUG-2011

WARNING: INKS ARE LIGHT SENSITIVE