Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

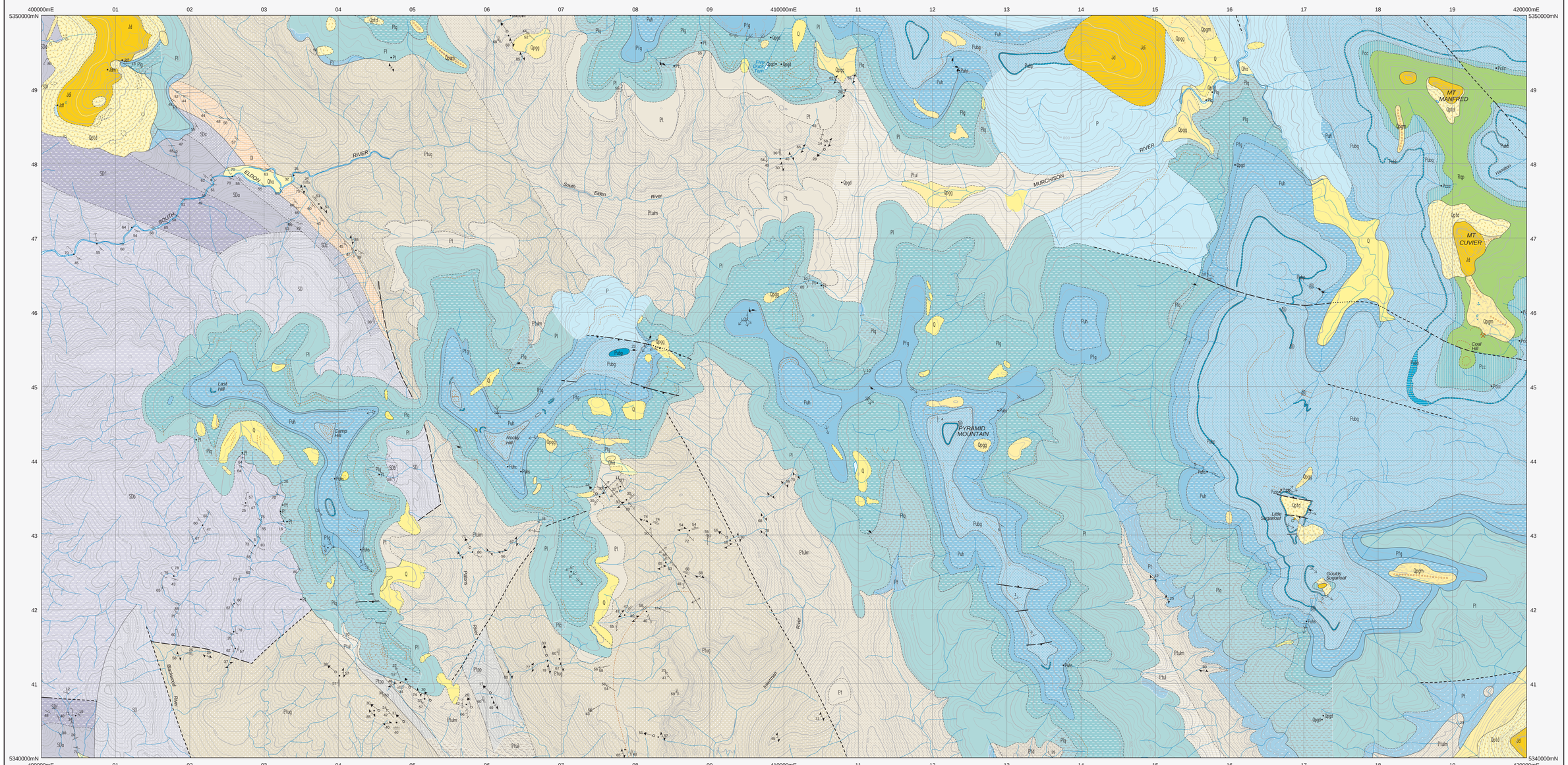
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
GOULDS, SHEET 4034

GOULDS

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmania
Explore the possibilities



CENOZOIC

QUATERNARY

HOLOCENE

- **Qha** — *Stream alluvium, swamp and marsh deposits (Qha).*
- **Qptrr** — *Scree of dolerite boulders (Qptrr).*
- **Qptd** — *Talus consisting dominantly of dolerite boulders (Qptd).*
- **Qptdp** — *Talus dominantly of Lower Permeener Supergroup rocks and Jurassic dolerite (Qptdp).*

PLEISTOCENE

- **Qpgy** — *Younger glacial deposits, mostly of till, unweathered or slightly weathered (Qpgy).*
- **Qpgg** — *Glacial and glacigene deposits (Qpgg), with isolated dolerite glacial erratics (Qpgd).*
- **Qpgm** — *Moraine and associated deposits (Qpgm).*

MESOZOIC

TRIASSIC

- **Rqp** — *Dominantly freshwater cross-bedded quartzose sandstone, micaceous siltstone and mudstone (correlate of Ossa Formation) (Rqp).*

PALEOZOIC

PERMIAN

- **Pcc** — *Freshwater feldspathic sandstone and siltstone, occasionally carbonaceous (correlate of Cygnet Coal Measures) (Pcc). Local occurances of coal seams within Pcc (Pccc).*
- **Pubg** — *Glacio-marine, sparsely fossiliferous, poorly-sorted mudstone, siltstone and silty sandstone with dropstones. Dropstones more common below Blackwood Conglomerate horizon (correlate of Bogan Gap Group) (Pubg).*
- **Pubb** — *Quartzose pebbly sandstone, granule to pebble conglomerate and sandstone and cross-bedded sandstone (possible correlate of Blackwood Conglomerate) (Pubb).*
- **Pubp** — *Well-sorted medium-to coarse-grained sandstone with thin conglomerate layers (possible correlate of Palmer Sandstone) (Pubp).*
- **Puh** — *Glacio-marine, generally richly fossiliferous siltstone, sandstone and subordinate conglomerate, sandstone and impure limestone (Puh); dark grey siltstone with Bernacchian Stage fauna (Puha).*
- **Pubc** — *Green conglomeratic sandstone (Pubc).*
- **Pfg** — *Cross-bedded, rippled or planar bedded quartz sandstone and carbonaceous siltstone, commonly enclosing a middle interval dominantly of siltstone, locally with dropstones and bioturbated (Pfg).*
- **Pfg** — *Glacio-marine siltstone and very fine-grained sandstone, sparsely fossiliferous with a middle interval including well-sorted bioturbated sandstone with conglomerate lenses and some richly fossiliferous beds (correlate of Golden Valley Group) (Pfg).*
- **Pfq** — *Massive to poorly bedded grey uniform fine-to medium-grained siltstone with occasional iron sulphide concretions and rare glendonites. Rare thin layers of fossils near top in some areas (correlate of Quamby Mudstone) (Pfq).*

CARBONIFEROUS

- **Pt** — *Cobble and subordinate boulder tillite with intervals of laminated mudstone and fine-grained sandstone, absent in some areas (Pt).*

UPPER PARMEENER SUPERGROUP

LOWER PARMEENER SUPERGROUP

PALEOZOIC

ORDOVICIAN SILURIAN DEVONIAN

- **SDb** — *Mudstone, siltstone, minor fine-grained sandstone and rare limestone (correlate of Bell Formation) (SDb).*
- **SDf** — *Fine-grained quartz sandstone and minor siltstone and mudstone (correlate of Florence Formation) (SDf).*
- **SDa** — *Mainly mudstone and siltstone with minor sandstone and rare limestone (correlate of Amber Formation) (SDa).*
- **SDc** — *Fine-to coarse-grained quartz-rich sandstone, calcareous sandstone and minor mudstone (correlate of Crotty Formation) (SDc).*
- **Ol** — *Dark grey limestone, dolomite, calcareous mudstone, minor quartz sandstone and black clay weathering products. In part fossiliferous (Gordon Group and correlates) (Ol).*

ELDON GROUP

GORDON GROUP

MESOPROTEROZOIC

- **Ptug** — *Lithologically undifferentiated, commonly garnetiferous, rocks of relatively high metamorphic grade, including massive schistose quartzite and fine-to coarse-grained pelitic quartz-mica schist (Ptug).*
- **Ptpp** — *Dominantly grey to green carbonaceous pelitic quartz-phengite phyllite. Non-garnetiferous and relatively low metamorphic grade (Ptpp).*
- **Ptul** — *Lithologically undifferentiated rocks of intermediate to low metamorphic grade (garnet minor to absent), including phyllite, fine-grained quartzite and dolomitic schist (Ptul).*
- **Ptum** — *Lithologically undifferentiated rocks of low metamorphic grade and unmetamorphosed rocks (Ptul).*
- **Ptul** — *Lithologically undifferentiated rocks of low metamorphic grade including non-garnetiferous quartzite and phyllite (Ptulm).*
- **Ptd** — *Massive, silicified and oolitic dolomite and dolomitic breccia interbedded with pelitic phyllite and fine-grained phengitic quartzite (Ptd).*

TYENNAN REGION METASEDIMENTS

INTRUSIVE ROCKS

MESOZOIC — JURASSIC

- **Jd** — *Dolerite and related rocks (Jd), including fine-grained (0.7–1.5mm) dolerite (Jdf), medium-grained (1.5–3mm) dolerite (Jdm), and inferred dolerite outcrop beneath surficial deposits (Jdi).*

- *Geological boundary – position accurate or approximate.*
- *Geological boundary – inferred.*
- *Transitional gological boundary – position approximate.*
- *Moraine Ridge Crests.*
- *Fault – unspecified type, position accurate or approximate.*
- *Fault – unspecified type, inferred.*
- *Fault – unspecified type, concealed.*
- *Normal fault (downthrown side indicated) – position accurate or approximate.*
- *Normal fault (downthrown side indicated) – inferred.*
- *Normal fault (downthrown side indicated) – concealed.*
- *Lithological trend line.*
- *Axial surface trace of major antiform.*
- *(white line) Limit of mapping of sub-unit within undifferentiated rock unit.*

- *Strike and dip of bedding facing known, right way up.*
- *Strike and dip of bedding, facing unknown.*
- *Strike and dip of compositional layering.*
- *Strike and dip of cleavage, type and relative age unspecified – dipping; vertical.*
- *Strike and dip of dominant joint set.*
- *Strike and dip of cleavage, relative local age S2, however locally S1 (in quartzite units) or S3 – dipping; vertical.*
- *Strike and dip of crenulation cleavage.*
- *Trend and plunge of lineation L2, formed by intersection of cleavages or foliations of relative local ages S1 and S2, relative local age F2.*
- *Trend and plunge of minor fold hingeline, unspecified relative age – with dip and dip direction of axial surface; with vertical axial surface.*
- *Generalised paleocurrent direction, showing sense of movement.*
- *Field station for adjacent readings on the map.*
- *Notable small outcrop.*
- *Fossil location.*
- *Mineral deposit location – hardrock – Data derived from Mineral Resources Tasmania DEPOSITS database. Data point position has not been verified in every case.*

Compiled by M.J. Vicary, B.Sc. (Hons), 2004 as part of the Western Tasmanian Regional Minerals Program, from the following sources (See Responsibility Diagram):

A CALVER, C.R. et al 1987. Geological Atlas 1:50 000 Series. Sheet58 (8013N), Lyell. Tasmania Department of Mines.

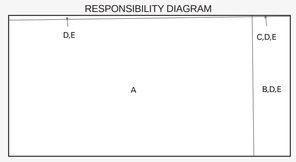
B GULLINE, A.B., LONGMAN, M.J., and MATTHEWS, W.L. 1963. Geological Atlas 1:63 360 series. N8113 I and III Zone 7 Sheet 59 St Clair. Tasmania Department of Mines.

C JENNINGS, I.B. et al 1961. Geological Atlas 1:63 360 series. Zone 7 Sheet 52 Du Cane. Tasmania Department of Mines.

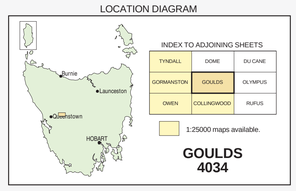
D S.M. Forsyth, Unpublished data.

E Air photograph interpretation by M. Vicary.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



REFERENCE THIS MAP AS:

VICARY, M.J. (compiler) 2004. Digital Geological Atlas 1:25 000 Scale Series. Sheet 4034. Goulds. Mineral Resources 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.

Plotfile for this map generated from digital data as at: 01-FEB-2012

WARNING:INKS ARE LIGHT SENSITIVE