Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

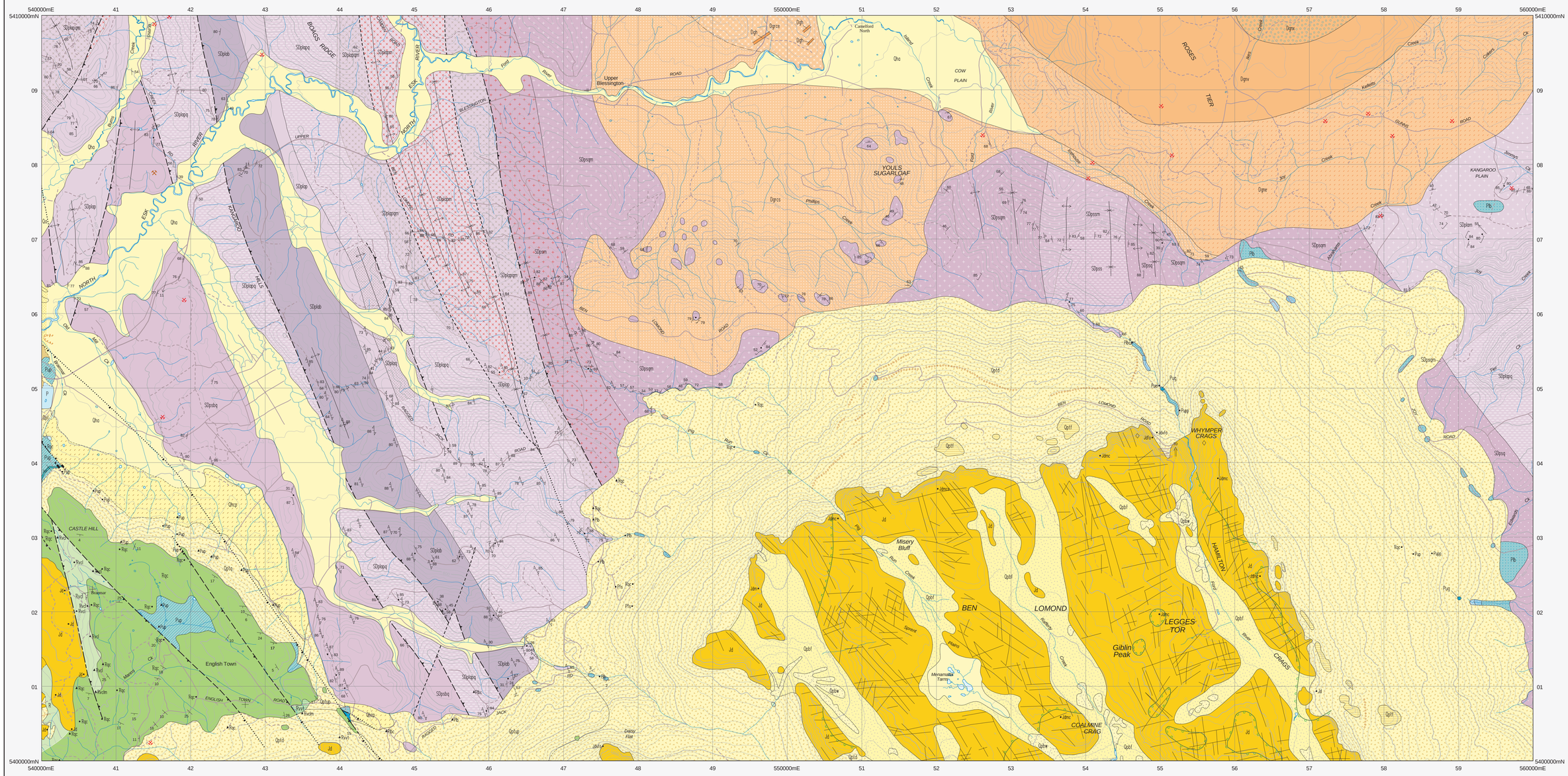
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
GIBLIN, SHEET 5440

GIBLIN

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmania
Explore the possibilities



CENOZOIC

QUATERNARY

HOLOCENE

- **Qa** — Qha: *Alluvial gravel, sand and clay (Qa). Stream alluvium, swamp and marsh deposits (Qha).*
- Qham: *Alluvium and marsh deposits of modern flood plains (Qham).*
- Qhc: *Colluvium (Qhc); sand derived from Upper Parmeener rocks (Qhcp).*

PLEISTOCENE

- Qpbf: *Dolerite block fields probably underlain by clay from weathered dolerite, with interstitial fines (Qpbf).*
- Qpbw: *Dolerite block fields probably underlain by clay from weathered dolerite, without interstitial fines (Qpbw).*
- Qpt: *Talus (Qpt); dominantly of dolerite boulders (Qptd); of dolerite and subordinate Upper Parmeener rocks (Qptup); dominantly of Upper Parmeener quartz sandstone (Qptq).*
- Qptf: *Toppled dolerite masses (>100m), coherent or partly disaggregated, produced by cliff failure (Qptf).*

PALEOGENE – NEOGENE

- Ts: *Dominantly non–marine sequences of gravel, sand, clay and regolith.*

Erosional surface.

MESOZOIC

TRIASSIC

R

- Rvcl: *Dominantly lithic sandstone with minor mudstone and coal (Rvcl).*
- Rvclm: *Dominantly mudstone (Rvclm).*
- Rvvt: *Quartz–rich lithic sandstone and minor quartz sandstone (Rvvt).*
- Rqc: *Cross–bedded quartz sandstone (Rqc).*

PALEOZOIC

PERMIAN

P

- Pup, Pupp: *Poorly–sorted grey mudstone, siltstone and rare sandstone, unfossiliferous except for rare forams (Pup). (Prospect Creek Mudstone). Pebbly sandstone (Pupp) (correlate of Palmer Sandstone).*
- Pug: *Thickly bedded usually poorly sorted sandstone passing upwards into interbedded sandstone, siltstone and mudstone (Pug) (Mistletoe Sandstone).*
- Puel: *Dominantly bioclastic limestone (Puel) (Burnt Gully Formation).*
- Pudm: *Mudstone siltstone and poorly sorted sandstone. Uncommon marine fossils (Pudm) (lower part of Castle Carey Mudstone).*
- Pfs: *Dominantly well sorted quartz sandstone, usually cross–bedded and commonly with interbedded and interlaminated carbonaceous shale lesser conglomerate and rare coal (Pfs) (Aberfoyle Formation).*
- Plb, Plbc: *Poorly sorted pebbly mudstone, sandstone and minor conglomerate, marine fossils present in places (Plb). Conglomerate with minor pebbly mudstone and sandstone (Plbc) (Plb, Plbc – Strickland Gorge Formation).*

UPPER PARMEENER SUPERGROUP / LOWER PARMEENER SUPERGROUP

Unconformity.

ALBERTON – MATHINNA AREA

PALEOZOIC — SILURIAN(?) – DEVONIAN — LUDLOW(?) – LOWER DEVONIAN — PANAMA GROUP — MATHINNA SUPERGROUP

- SDplam, SDplaqg: *Thin–bedded siltstone, with interbedded fine–grained quartz–rich sandstone increasing towards top, contact metamorphosed by granitic intrusion (SDplam).*
  Interbedded thin–bedded siltstone and fine–grained quartz–rich sandstone unit within SDplap (SDplaqg).
  (SDplam, SDplaqg – possible correlates of Sideling Sandstone).

BURNS CREEK – BLESSINGTON AREA

PALEOZOIC — SILURIAN(?) – DEVONIAN — LUDLOW(?) – LOWER DEVONIAN — PANAMA GROUP — MATHINNA SUPERGROUP

- SDpsm, SDpsbq, SDpsm, SDpsqm, SDpsq: *Dominantly fine–grained turbiditic quartz–rich sandstone, with some interbedded siltstone. Contains vascular plant fossil fragments, contact metamorphosed by granitic intrusion (SDpsm). In the east, dominantly micaceous, quartz–rich coarse– to very coarse–grained sandstone with minor interbedded siltstone (SDpsbq). In the west, thin–bedded, commonly laminated siltstone with minor interbedded quartz–rich sandstone (SDpsq), contact metamorphosed by granitic intrusion (SDpsm).*
  Medium– to fine–grained turbiditic, quartz–rich sandstone with interbedded laminated siltstone (SDpsq), contact metamorphosed by granitic intrusion (SDpsqm).
  (SDpsm, SDpsbq, SDpss, SDpssm, SDpsq, SDpsqm – possible correlates of Sideling Sandstone).
- SDplapm, SDplaqg: *Dominantly thin–bedded siltstone with minor quartz–rich sandstone (SDplap), contact metamorphosed by granitic intrusion (SDplapm).*
- SDplap, SDplaq: *Interbedded thin–bedded siltstone and fine–grained quartz–rich sandstone within SDplap (SDplaqg), contact metamorphosed by granitic intrusion (SDplapm).*
- SDplaq, SDplapm: *Fine– to medium–grained quartz–rich sandstone unit within SDplap (SDplaq).*
- SDplapm, SDplaqg: *Grey and black shale with graptolite fossils of Ludlow age and interbedded turbiditic siltstone unit within SDplap (SDplapm).*
- SDplab: *(SDplap, SDplapm, SDplaqg, SDplapqm, SDplaq, SDplab – possible correlates of Lone Star Siltstone).*

IGNEOUS ROCKS

MESOZOIC — JURASSIC

- Jd: *Dolerite (Jd). Grain size and textural features indicated – very fine–grained (<0.7mm) with orthopyroxene microphenocrysts (Jdvfo); fine–grained (0.7 – 1.5) (Jdfo); with orthopyroxene (Jdo), medium–grained (1.5 – 3.0mm) (Jdm), medium–to coarse grained (Jdmc); with abundant mesostasis (Jdmce); in situ or transported masses (Jdt).*

MINOR GRANITIC INTRUSIONS

PALEOZOIC — DEVONIAN

- Dgh: *Aplite (Dgh).*

SCOTTSDALE BATHOLITH

MIDDLE DEVONIAN

- Dgnv, Dgnx: *Medium to coarse–grained, variably equigranular, seriate or sparsely porphyritic (K–feldspar phenocrysts to 30mm), biotite–hornblende monzogranite/granodiorite (Dgnv); variety with very abundant fine–to coarse–grained quartz diorite xenoliths (Dgnx) (Dgnv, Dgnx – Hogarth Road Granite, I–type).*
- Dgne: *Coarse– to very coarse–grained, equigranular biotite +/– hornblende monzogranite/granodiorite (Dgne) (Russells Road Granite; I–type).*
- Dgrcs, Dgrce: *Coarse–grained, equigranular to seriate (K–feldspar) biotite hornblende granodiorite (Dgrcs); very coarse–grained (>10mm) variety (Dgrce) (Dgrcs, Dgrce – Upper Blessington pluton, I–type).*

- *Geological boundary – position approximate.*
- *Geological boundary – inferred.*
- *Geological boundary – transitional.*
- *Fault – inferred.*
- *Fault – concealed.*
- *Intrusive boundary along pre–existing fault, position approx.*
- *Normal fault (downthrown side indicated) – position accurate or approx.*
- *Normal fault (downthrown side indicated) – inferred.*
- *Normal fault (downthrown side indicated) – concealed.*
- *Thrust fault (teeth on upper plate) – position accurate or approx.*
- *Metamorphic boundary – position approx.*
- *Axial surface trace of major antiform.*
- *Axial surface trace of major synform.*
- *Slope break.*
- *Moraine ridges.*
- *Airphoto lineament.*
- *Limit of glacial smoothing of bedrock.*
- *(white line) Limit of mapping of sub–unit within undifferentiated rock unit.*

- *Strike and dip of bedding, right way up, overturned, facing unknown.*
- *Strike of vertical bedding, facing unknown.*
- *Horizontal bedding.*
- *Strike and dip of cleavage, type and relative age unspecified – dipping; vertical.*
- *Strike and dip of dyke or vein, rock type or mineral specified.*
- *Strike and dip of cleavage – relative local age S1: dipping, vertical.*
- *Trend and plunge of minor fold hinge line, unspecified relative age, with dip and dip direction of axial surface, symmetrical.*
- *Trend and plunge of minor fold hinge line, unspecified relative age, with dip and dip direction of axial surface, vergence sinistral.*
- *Trend and plunge of chevron–fold hinge line, unspecified relative age, with dip and dip direction of axial surface.*
- *Trend and plunge of kink–fold hinge line, with dip and dip direction of axial surface, and sense of displacement viewed down–plunge: dextral.*
- *Trend and plunge of columnar jointing.*
- *Vertical columnar jointing.*
- *Notable small outcrop.*
- *Notable float or log occurrence.*
- *Field station for adjacent reading on map*
- *Mineral deposit location – hardrock*
- *Construction material/industrial mineral/gemstone location*

Data derived from Mineral Resources Tasmania DEPOSITS database. Data point position has not been verified in every case.

Compiled by M.P. McClenaghan, B.Sc.(Hons), Ph.D., 2005 from the following sources (see responsibility diagram)

A McCLENAGHAN M.P., EVERARD J.L., GOSCOMBE B.D., FINDLAY R.H., CALVER C.R. 1993. Geological Atlas 1:50 000 Series. Sheet 40 (8415S), Alberton. Tasmania Department of Mines.

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

C LONGMAN M.J., MATTHEWS W.L., ROWE S.M. 1964. Geological Atlas 1:63 360 Series. Sheet 39 (8315S), Launceston. Tasmania Department of Mines.

D BLAKE F. 1959 Geological Atlas 1:63 360 Series. Sheet 47 (8314N), Longford. Tasmania Department of Mines.

E J.L. Everard, 2005. New geological mapping.

F S.M. Forsyth, 2006. Aerial photograph interpretation.

Updated by:

G D.C. Green, 2011. 1:25 000 scale geological mapping and interpretation of airborne geophysical data as part of the TasExplore project.

REFERENCE THIS MAP AS:

GREEN, D.C. 2011. Digital Geological Atlas 1:25 000 Scale Series. Sheet 5440, Giblin. 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

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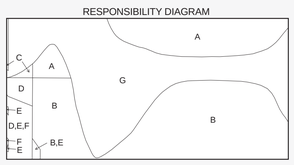
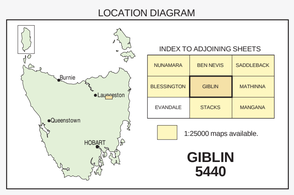
RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



INDEX TO ADJOINING SHEETS

NUNAMARA	BEN NEVIS	SADDLEBACK
BLESSINGTON	GIBLIN	MATHINNA
EVANDALE	STACKS	MANGANA

1:25000 maps available.

GIBLIN 5440

Plotfile for this map generated from digital data as at: 28-JUL-2011

WARNING: INKS ARE LIGHT SENSITIVE