Department of State Growth
MINERAL RESOURCES TASMANIA

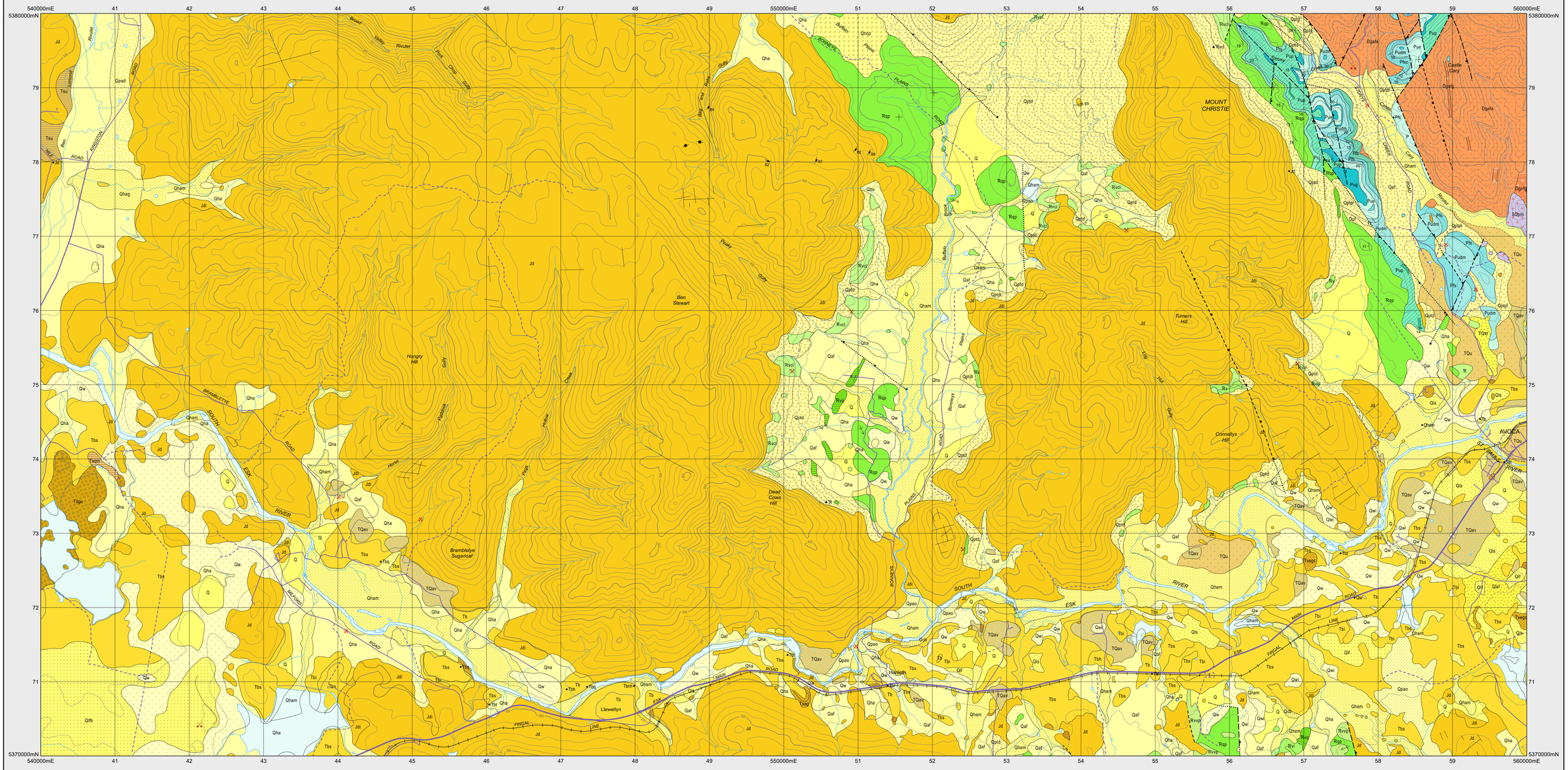
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
HANLETH, SHEET 5437

HANLETH

Scale 1:25 000

0 500 1000 1500 2000 2500m

Tasmanian Government



CENOZOIC

QUATERNARY

HOLOCENE

- **Qha** — *Undifferentiated Quaternary sediments (Q). Stream alluvium, swamp and marsh deposits (Qha); on modern flood plains (Qham); alluvial gravel deposits (Qhag).*
  - **Qham**
  - **Qhag**
- **Qaf** — *Alluvial fan deposits (Qaf).*
- **Qhcp** — *Colluvium; sand derived from Upper Parmeener rocks (Qhcp).*
- **Qcb** — *Colluvium derived from basalt (Qcb).*
- **Qw** — *Aeolian dune and sheet deposits, including locally derived sand and silt (Qw); aeolian deposits inferred from air-photo interpretation (Qwi).*
- **Qlf** — *Lag deposits of dominantly Cenozoic ferruginous fragments (Qlf); including ferruginous buckshot gravel with evidence of original Cenozoic material in some localities (Qlfb).*
- **Qls** — *Lag deposits of Cenozoic siliceous rock fragments (Qls).*
- **Qlsf** — *Lag deposits of mixed Cenozoic ferruginous and siliceous rock fragments (Qlsf).*
- **Qpao** — *Alluvial terrace deposits (Qpao).*
- **Qpad** — *Older alluvium of river terraces, predominantly dolerite-derived (Qpad).*
- **Qpt** — *Talus and remobilised talus deposits (Qpt); consisting dominantly of basalt (Qptb); of dolerite boulders (Qptd); of dolerite and subordinate Upper Parmeener lithic sandstone (Qptdl); of Upper Parmeener quartz sandstone (Qptq); of Lower Parmeener rocks (Qptpl); of granite (Qptg).*

PLEISTOCENE ?

- **TQtd** — *Talus deposits with boulders consisting dominantly of dolerite, of probable pre-last glacial age (TQtd).*

NEOGENE (?) ?

- **TQu** — *Aeolian, alluvial and piedmont deposits in floors of major valleys, with basement thinly covered in places (TQu).*
- **TQav** — *Alluvium of dominantly quartzose granule- to cobble-sized clasts, partly consolidated and commonly overlying basalt (TQav).*

PALEOGENE ?

- **Tf** — *Undifferentiated Tertiary (T). Ferricrete (Tf).*
- **Tsqm** — *Silicastone, including greybilly and silcrete (Tsqm).*
- **Tb** — *Basalt (Tb); tholeiitic basalt (Tbs); inferred basalt beneath soil or Cenozoic deposits indicated (Tbi); point localities of quartz tholeiite (Tbq); olivine tholeiite (Tbt); transitional olivine basalt (Tbr); hawaiite (Tbh) and nepheline hawaiite (Tbnh) indicated.*
- **Tseg** — *Poorly consolidated mudstone, sandstone, quartz granule sandstone and conglomerate (Tseg); some areas of coarser beds (Tseqc) and silicification (Tsegs) indicated.*
- **Tsgu** — *Unconsolidated and poorly consolidated quartz gravel (Tsgu).*
- **Tsu** — *Clay, sandy clay and consolidated and poorly consolidated sand (Tsu).*

~~~~~~~~~~ *Unconformity.*

PALEOZOIC

MESOZOIC

TRIASSIC ?

- **Rv** — *Undifferentiated Upper Parmeener Supergroup rocks (R). Sequences of dominantly lithic sandstone (Rvj); Dominantly lithic sandstone, inferred from air-photo interpretation (Rvi). Upper sequence of dominantly fine- to very coarse-grained volcaniclastic lithic sandstone with subordinate carbonaceous mudstone, coal seams, silicified wood and, in upper parts, tuff layers and extrabasinal clasts (Rvcl); intervals of dominantly mudstone (Rvclm).*
  - **Rvcl**
  - **Rvq** — *Areas of dominantly quartz sandstone within poorly exposed sequences of Rv indicated (Rvq).*
  - **Rvvp** — *Lenticular variable medium- to coarse-grained sandstone, generally containing quartz granules (Rvvp).*
- **Rqp** — *Dominantly freshwater cross-bedded quartzose sandstone, micaceous siltstone and mudstone (correlate of Ross Formation) (Rqp).*
  - **Rcj** — *Fine-grained, slightly feldspathic quartz sandstone, micaceous shale and minor carbonaceous mudstone (correlate of Jackey Formation) (Pcj).*

PERMIAN ?

- **Pup** — *Undifferentiated Permo-Carboniferous sediments (P). Poorly sorted mudstone, siltstone and rare sandstone; unfossiliferous except for rare foraminifera (Prospect Creek Mudstone) (Pup).*
  - **Pupp** — *Bed of pebbly sandstone, 1-4m thick, indicated in places (possible correlate of Palmer Sandstone) (Pupp).*
- **Pug** — *Thickly bedded, usually poorly sorted sandstone passing up into interbedded sandstone, siltstone and mudstone. Marine fossils locally present (Mistletoe Sandstone) (Pug).*
- **Puel** — *Dominantly bioclastic limestone or silicified beds (Burnt Gully Limestone) (Puel).*
- **Pue** — *Marine fossiliferous mudstone, siltstone and minor sandstone and bioclastic limestone (Pue).*
  - **Puf** — *Fine-grained pebbly sandstone with phosphate nodules and locally with marine fossils; unit about 2m thick (Fonthill Sandstone Member) (Puf).*
- **Pudm** — *Mudstone, siltstone and minor poorly sorted sandstone, with uncommon marine fossils (Pudm). (Pue, Puf, Pudm: Castle Cary Mudstone).*
- **Pfs** — *Dominantly fine-grained, well-sorted quartz sandstone, commonly with interbedded and interlaminated carbonaceous beds, subordinate conglomerate and rare coal (Pfs); dominantly very coarse-grained arkosic sandstone and granule conglomerate (Pfsc). (Pfs, Pfsc: Aberfoyle Formation).*
- **Plb** — *Interbedded conglomerate, sandstone and poorly sorted mudstone (correlate of Strickland Gorge Formation) (Plb).*

~~~~~~~~~~ *Unconformity.*

SILURIAN(?) - DEVONIAN

- **SDp** / **SDpm** — *Quartzwacke turbidite sequence of interbedded sandstone and siltstone, with minor mudstone (SDp); hornfels resulting from contact metamorphism by granite intrusions (SDpm). (SDp, SDpm: Undifferentiated Panama Group).*

UPPER PARMEENER SUPERGROUP
LOWER PARMEENER SUPERGROUP
REKINIAN SERIES: Lymingtonian Stage; Bernacchian Stage; Tamarian Stage
MATHINNA SUPERGROUP

INTRUSIVE ROCKS

MESOZOIC — JURASSIC

- **Jd** — *Dolerite (Jd); dolerite inferred beneath soil or Cenozoic deposits (Jdi).*

BEN LOMOND BATHOLITH — PALEOZOIC — DEVONIAN

- **Dgafa** — *Medium- to coarse-grained, equigranular to sparsely porphyritic alkali feldspar granite, with variably abundant K-feldspar phenocrysts and pink surficial weathering (Dgafa).*
- **Dgafg** — *Fine- to medium-grained, variably porphyritic alkali feldspar granite, with quartz and K-feldspar phenocrysts (Dgafg). (Dgafa, Dgafg: Henbury Granite, I-type).*

CONTACTS

- *Geological contact.*
- *Geological contact - inferred.*
- *Limit of mapping of sub-unit within undifferentiated rock unit.*
- *Limit of detailed mapping.*

FAULTS

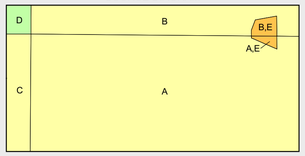
- *Fault - inferred.*
- *Fault - concealed.*
- *Normal fault (downthrown side indicated).*
- *Normal fault (downthrown side indicated) - inferred.*
- *Normal fault (downthrown side indicated) - concealed.*

LINEARS

- *Lineament - visible on aerial photographs.*

- *Strike and dip of bedding, right way up.*
- *Horizontal bedding.*
- *Generalised palaeocurrent direction, showing sense of movement.*
- *Trend and plunge of columnar jointing.*
- *Strike and dip of dominant joint set; vertical.*
- *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 J.L. Everard, B.Sc. (Hons), 2016 from the following sources (see source diagram):

A GULLINE A.B., FORSYTH, S.M., EVERARD, J.L. and MATTHEWS, W.L. 1991. Geological Atlas 1:50 000 Series. Sheet 55 (8414S), Snow Hill. Tasmania. Department of Resources and Energy.

B 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. Tasmania. Department of Mines.

C MATTHEWS, W.L., 1974. Geological Atlas 1:50 000 Series. Sheet 54 (8314S), Lake River. Tasmania. Department of Mines.

D MATTHEWS, W.L., 1974. Longford Basin Geology (1:100 000 map). In Geological Survey Bulletin 59. Geology and Groundwater Resources of the Longford Tertiary Basin. Tasmania. Department of Mines.

E J.L. Everard and S.M. Forsyth. Field mapping 2016.

REFERENCE THIS MAP AS:

EVERARD, J.L. (compiler) 2016. Digital Geological Atlas 1:25 000 Series. Sheet 5437 Hanleth. 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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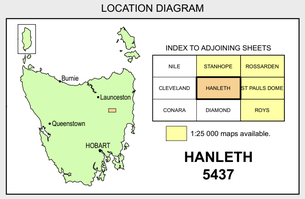
LOCATION DIAGRAM



INDEX TO ADJOINING SHEETS

NILE	STANHOPE	ROSSARDEN
CLEVELAND	HANLETH	ST PAULS DOME
CONARA	DIAMOND	ROYS

1:25 000 maps available.

HANLETH
5437

Map generated: 19-DEC-2023

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