Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

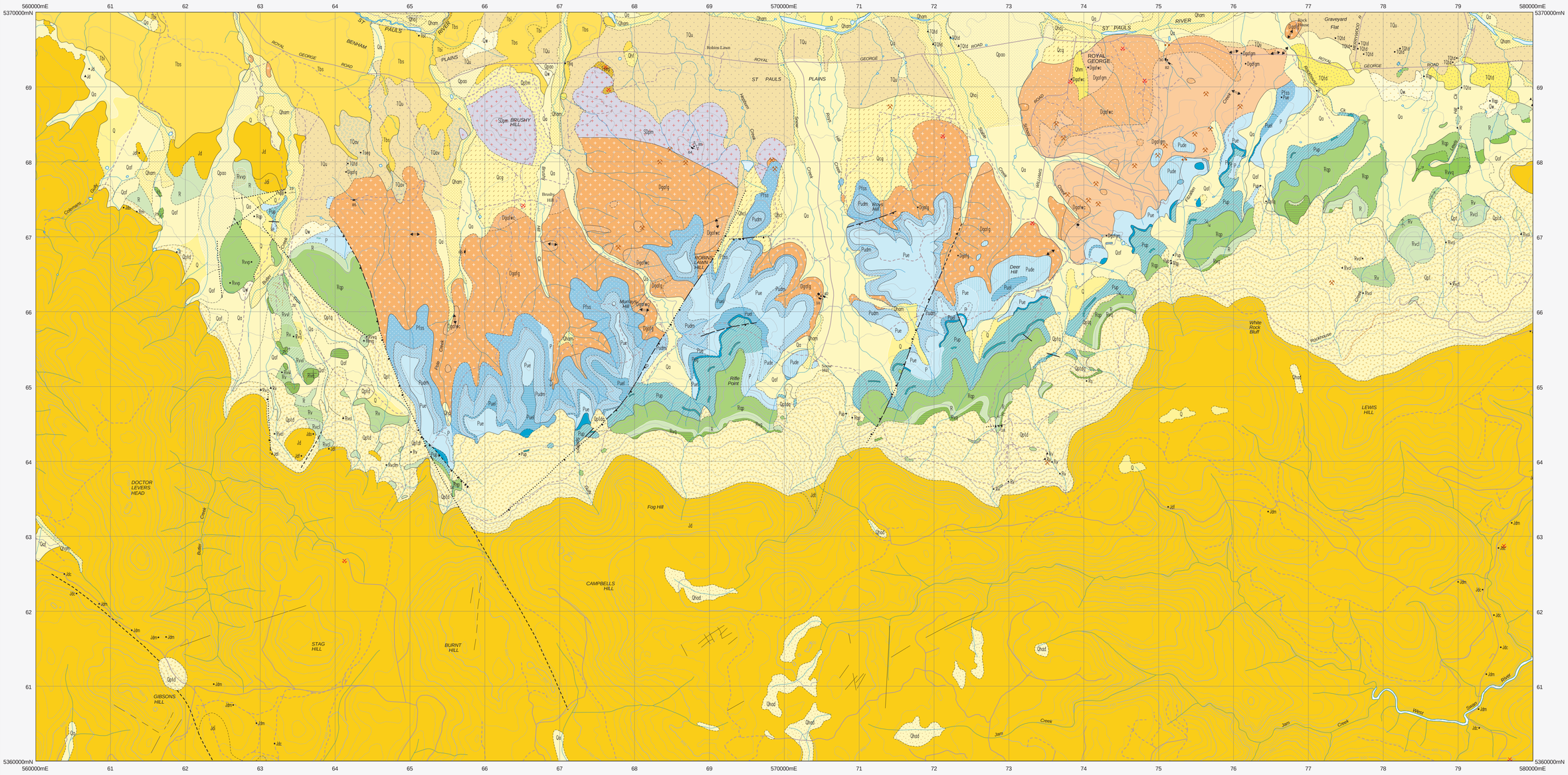
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
ROYS, SHEET 5636

ROYS

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmania
Explore the possibilities



CENOZOIC

QUATERNARY

HOLOCENE

- **Qhm** — Selected mine tailings and man disturbed ground indicated (Qhm).
- **Qw** — Aeolian dune and sheet deposits, including locally derived sand and silt (Qw).
- **Qhad** — Highland marsh deposits with common protruding dolerite outcrops and boulders (Qhad).
- **Qhf** — Lag deposit after ferricrete (Qhf).
- **Qhc** — Colluvium (Qhc), derived predominantly from Lower Permeener rocks (Qhcl), piedmont colluvium of clayey quartz–granule gravel derived from granitic rocks (Qcg).
- **Qham** — Alluvial gravel sand and clay (Qa), stream alluvium, swamp and marsh deposits, locally associated with wind blown deposits (Qha), alluvial fans (Qaf) alluvial fans with clasts dominantly of dolerite (Qafd). Holocene alluvium (Qhaj), alluvial and marsh deposits of modern flood plains, – gravel, sand, silt and clay commonly with dark coloured top layer in stable environments and loose sand and gravel near major active channels (Qham).
- **Qpao** — Alluvial terrace deposits (Qpao).

PLEISTOCENE

- **Qpt** — Talus and remobilised talus deposits (Qpt), dominantly of dolerite boulders (Qptd), dominantly of Upper Permeener quartz sandstone and sand (Qptq), dominantly of lower Permeener rocks (Qptpl), and talus of mixed clasts of dolerite and Upper Permeener lithic sandstone (Qptd), of dolerite and notable amounts of Upper Permeener silicified wood, tuff and reworked pre–Triassic clasts (Qptzw), and of dolerite and Upper Permeener quartz sandstone (Qptzq).
- **Qptm** — Talus dominantly of Mathinna Supergroup rocks (Qptm).
- **TQta** — Talus and possible alluvial deposits of probable pre–last glacial age (TQta).
- **TQtd** — Talus deposits with boulders consisting dominantly of dolerite, of probable pre–last glacial age (TQtd).
- **TQu** — Aeolian, alluvial and piedmont deposits in floors of major valleys, with basement thinly covered in some areas (TQu).
- **TQav** — Alluvium of dominantly quartzose granule– to cobble–size clasts, partly consolidated and commonly located supra–basalt (TQav).

PALEOGENE–NEOGENE

- **Tf** — Ferricrete (Tf).
- **Tb** — Basalt (Tb), tholeiitic basalt (Tbs), quartz tholeiite (Tbq), olivine tholeiite (Tbt), inferred basalt beneath soil or Cenozoic deposits (Tbi).
- **Tseg** — Dominantly poorly–consolidated mudstone, sandstone and quartzose granule sandstone, locally may include some undifferentiated poorly–consolidated quartzose conglomerate (Tseg).

Erosional surface.

MESOZOIC

TRIASSIC

- **Rvcl** — Upper Permeener rocks contact metamorphosed by Jurassic dolerite (Rm). Mudstone at isolated locality (Rs).
- **Rvcm** — Predominantly 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 dominantly of mudstone (Rvcm).
- **Rvcg** — Concealed interbedded cross–bedded white quartzose sandstone, quartz–rich lithic sandstone, siltstone and mudstone known from drill holes not shown on map (Rvcq).
- **Rv** — Dominantly quartz sandstone intervals of uncertain stratigraphic position between units Rvcg and Rvvp (Rvq).
- **Rvvl** — Interbedded yellow brown or grey carbonaceous siltstone, mudstone and thin– to thick–bedded quartz–rich lithic, arkosic sandstone, some carbonaceous beds (Rvvl).
- **Rvvq** — Dominantly quartz sandstone, commonly fine–grained and ripple laminated (Rvvq).
- **Rvvp** — Lenticular variable medium– to coarse–grained sandstone, generally containing quartz granules (Rvvp). Rv = Rvq + Rvcl + Rvvl + Rvvq + Rvvp.

PERMIAN

- **Rqp** — Dominantly freshwater cross–bedded quartzose sandstone, micaceous siltstone and mudstone (correlate of Ross Formation) (Rqp).
- **Rcq** — Freshwater cross–bedded arkosic to quartzose sandstone and micaceous siltstone (possible correlate of Jackey Shale) (Rcq).
- **Pup** — Poorly–sorted grey mudstone, siltstone and rare sandstone, unfossiliferous except for rare Foraminifera (Pup). Bed of pebbly sandstone, 1–4m thick, indicated in places (Pupp). (Pup – Prospect Creek Mudstone, Pupp – possible correlate of Palmer Sandstone).
- **Pug** — Thickly bedded, usually poorly–sorted sandstone passing up into interbedded sandstone, siltstone and mudstone. Marine fossils present in places (Mistletoe Sandstone) (Pug).
- **Pue** — Marine mudstone, siltstone and minor sandstone and bioclastic limestone (Pude); richly fossiliferous beds (Pue); dominantly bioclastic limestone or silicified beds (Puel).
- **Puel**
- **Pudm** — Dominantly mudstone and siltstone with generally sparse marine fossils, and in some places phosphatic nodules typically near the top of the unit (Pudm). Pude = Pue + Puel + Pudm – Castle Carey Mudstone.
- **Pfss** — Quartz sandstone, arkose and conglomerate (Aberfoyle Formation) (Pfss).

Unconformity

SILURIAN(?)–DEVONIAN

- **SDpm** — Undifferentiated Panama group rocks contact metamorphosed by granitic intrusion (SDpm).

UPPER PARMEENER SUPERGROUP
LOWER PARMEENER SUPERGROUP: Lymingtonian Stage; Bernacchian Stage
REKUNIAN SERIES
PANAMA GROUP
MATHINNA SUPERGROUP

INTRUSIVE ROCKS

MESOZOIC — JURASSIC

- **Jd** — Dolerite (Jd), with orthopyroxene (Jdo), insitu or transported dolerite masses (Jdt), dolerite inferred beneath soil or Cenozoic deposits (Jdi). Dolerite of grainsize 0.7–1.5mm (Jdf), 1.5–3mm (Jdm) indicated, > 3mm (Jdc) indicated.

BEN LOMOND BATHOLITH

PALEOZOIC — DEVONIAN — UPPER DEVONIAN — ROYAL GEORGE GRANITE

- **Dgafg** — Fine– to medium–grained, variably porphyritic alkali feldspar granite, with quartz and K–feldspar phenocrysts (Dgafg).
- **Dgafgm** — Fine–grained equigranular alkali feldspar granite (microgranite) (Dgafgm).
- **Dgafwc** — Medium– to coarse–grained, equigranular to sparsely porphyritic alkali feldspar granite, with variably abundant K–feldspar phenocrysts (Dgafwc).

Geological boundary – position accurate or approximate.
Geological boundary – inferred.
Lineament visible on aerial photographs.
Scarp
Lithological trend line, including bedding trace interpreted from aerial photographs.
(white line) Limit of mapping of sub–unit within undifferentiated rock unit.
Fault – inferred.
Fault – concealed.
Normal fault (downthrown side indicated) – position accurate or approximate.
Normal fault (downthrown side indicated) – inferred.
Normal fault (downthrown side indicated) – concealed.

Strike and dip of bedding, right way up.
Horizontal bedding.
Generalised palaeocurrent direction, showing sense of movement.
Strike and dip of cleavage – relative local age S1; vertical.
Trend of preferred orientation of K–feldspar phenocrysts in granitic rock.
Strike and dip of dominant joint set; vertical.
Notable small outcrop.
Notable float or lag occurrence.
Field station for adjacent reading on map

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 has not been verified in every case.)

Compiled by S.M. Forsyth, B.Sc. (Hons) 2005 from the following source (see Responsibility Diagram):

A GULLINE A.B., FORSYTH, S.M., EVERARD, J.L., CALVER, C.R. and MATTHEWS, W.L. 1991. Geological Atlas 1:50 000 series, sheet 55 (84143) Snow Hill. Department of Resources and Energy.

RESPONSIBILITY DIAGRAM

A

LOCATION DIAGRAM

INDEX TO ADJOINING SHEETS

HANLETH	ST PAULS DOME	ST JOHN
DIAMOND	ROYS	HENRY
AMPBELL TOWN	SNOW	APSLAWN

1:25000 maps available.

ROYS
5636

REFERENCE THIS MAP AS:

GULLINE, A.B. (deceased), EVERARD, J.L., FORSYTH, S.M. and CALVER, C.R. 2007. Digital Geological Atlas 1:25 000 Series, Sheet 5636. Roys. 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.

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