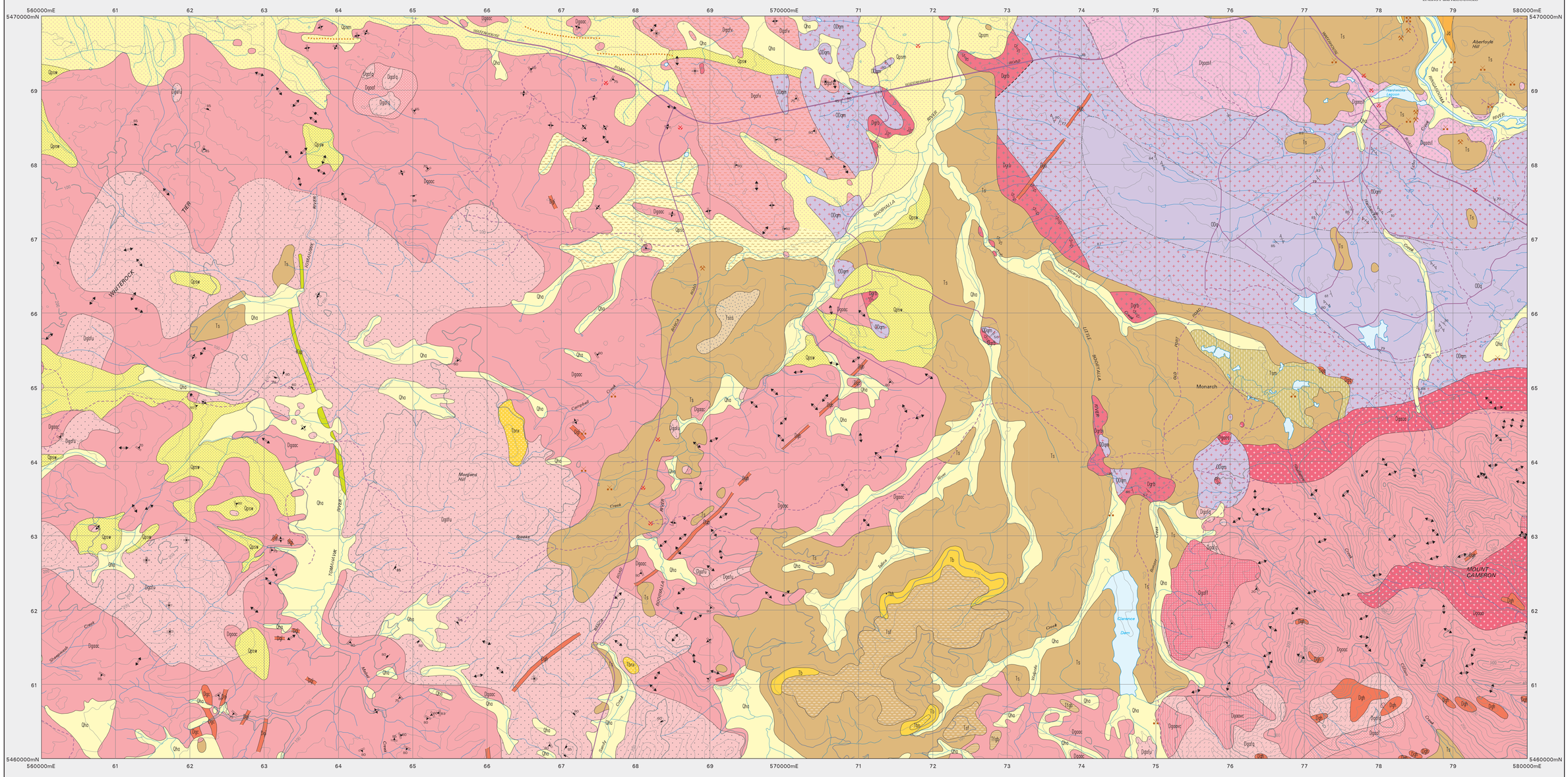
MINERAL RESOURCES TASMANIA
DIGITAL GEOLOGICAL ATLAS 1:25 000 SERIES
MONARCH, SHEET 5646

MONARCH

Scale: 1:25 000

0 500 1000 1500 2000 2500m

MINERAL RESOURCES TASMANIA
Tasmania
DEPARTMENT of INFRASTRUCTURE ENERGY and RESOURCES



QUARTERNARY – HOLOCENE

Qha — *Stream alluvium, swamp and marsh deposits (Qha).*

Qpsw — *Marine terrace deposits of gravel, sand, clay, shells and organic material (Qpsm). Older aeolian sand and sand dunes (Qpsw).*

Qpsm, Qpsc — *Clay, sand, minor peat and gravel containing marine shells (Qpsc).*

TERTIARY

Tb, Tsm — *Conglomerate, gravel, sand, silt and mud disturbed by mining (Tsm). Basalt (Tb).*

Ts, Tsss — *Dominantly non-marine sequences of gravel, sand, silt, clay and regolith (Ts). Lag and outcrop of silicified quartz sandstone and conglomerate (Tsss).*

Tfgb — *Grey-billy and silcrete (Tfgb).*

Tsf — *Sands and gravels cemented by iron oxides (Tsf).*

DEVONIAN

ODq, ODqm — *Quartzwacke turbidite sequence of interbedded sandstone siltstone and mudstone (ODq). Contact metamorphosed quartzwacke-turbidite sequence of sandstone, siltstone and mudstone (ODqm).*

IGNEOUS ROCKS

TERTIARY

Tb — *Basalt (Tb), hawaiite (Tbh) indicated.*

Tbn — *Olivine nephelinite (Tbn), with lherzolite nodules (Tbnx).*

CRETACEOUS

Ksp — *Phonolite dyke (Ar/Ar plateau age 75.8 +/- 0.3 Ma) (Ksp).*

JURASSIC

Jd — *Dolerite and related rocks (Jd).*

MINOR GRANITIC INTRUSIONS

Dgi — *Fine grained equigranular granite/adamellite (Dgi). Aplite (Dgh). Fine grained porphyritic granite/adamellite (Dgc). Quartz-muscovite granite (Dgq).*

Dgf — *Quartz - feldspar porphyry (Dgf). Garnetiferous quartz-feldspar porphyry (Dgb).*

MAJOR GRANITIC INTRUSIONS

EDDYSTONE BATHOLITH

Dgaosf — *Porphyritic fine- to coarse-grained garnet-bearing, biotite muscovite granite adamellite (Dgaosf).*

BLUE TIER BATHOLITH

DEVONIAN

Dgafu, Dgafv — *Equigranular to porphyritic (K feldspar +/- rounded quartz) fine to coarse grained biotite muscovite alkali-feldspar granite/adamellite (Dgafu). Equigranular medium-grained, biotite - variable, muscovite granite/adamellite (Dgafv).*

Dgafq — *Porphyritic (feldspar and rounded quartz) fine to medium grained biotite - muscovite alkali feldspar granite/adamellite (Dgafq).*

Dgaof, Dgaofl — *Porphyritic (feldspar) fine- to medium-grained, biotite-muscovite granite/adamellite (Dgaof). Porphyritic fine- to medium-grained biotite-minor muscovite granite/adamellite with sparse feldspar phenocrysts (Dgaofl).*

Dgaoc, Dgaovc — *Coarse grained porphyritic (K-feldspar) to equigranular, biotite, minor muscovite granite/adamellite (Dgaoc). Very coarse grained porphyritic (KF) biotite - minor muscovite granite/adamellite (Dgaovc).*

Dgaoa — *Medium- to coarse-grained sparsely porphyritic (K-feldspar) biotite-minor muscovite adamellite (Dgaoa).*

Dgrb — *Medium- to coarse-grained biotite granodiorite (Dgrb).*

Geological boundary - position approximate.
Geological boundary - inferred.
Fault inferred.
Dune Crests.
(White line) *Limit of mapping of sub-unit within undifferentiated rock unit.*
• *Notable small outcrop or float / log occurrence.*
Transitional boundary.

Strike and dip of bedding, facing known.
Strike and dip of bedding, facing unknown - dipping; vertical.
Strike and dip of foliation due to alignment of K-feldspar phenocrysts in granite rock - dipping; vertical; horizontal.
Trend of preferred orientation of K-feldspar phenocrysts in granite rock.
Strike of vertical foliation due to alignment of hornblende and/or biotite in granite rock.
Trend of preferred orientation of hornblende and/or biotite in granite rock.
Strike and dip of cleavage or foliation, relative local age S1 - dipping; vertical.
Strike and dip of dominant joint set - dipping; vertical.
Mineral deposit location - hardrock } *Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.*
Mineral deposit location - alluvial
Construction materials location - Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.

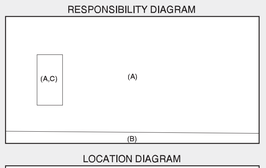
Compiled by A.R. Reed, B.Sc.(Hons), Ph.D., 1998 from the following sources (see responsibility diagram):

A Geological atlas 1:50,000 series, sheet 24 (8416S) Boobyalla 1978. Tasmania Department of Mines.

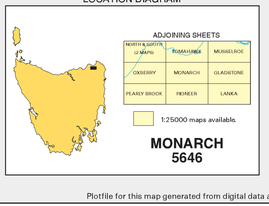
B Geological atlas 1:50,000 series, sheet 32 (8415N) Ringarooma 1977. Tasmania Department of Mines.

C Everard, J.L.; Sutherland, F.L. & Zwingmann, H. 2004. A Cretaceous phonolite dyke from the Tomahawk River, northeast Tasmania. Papers and Proceedings of the Royal Society of Tasmania 138:11-33.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



Base data from the LIST, Copyright State of Tasmania.

Map produced by the Data Management Branch of Mineral Resources Tasmania using G.I.S. software.

AGD66 - AMG Zone 55. Contour Interval: 20 metres.

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