Department of State Growth
MINERAL RESOURCES TASMANIA

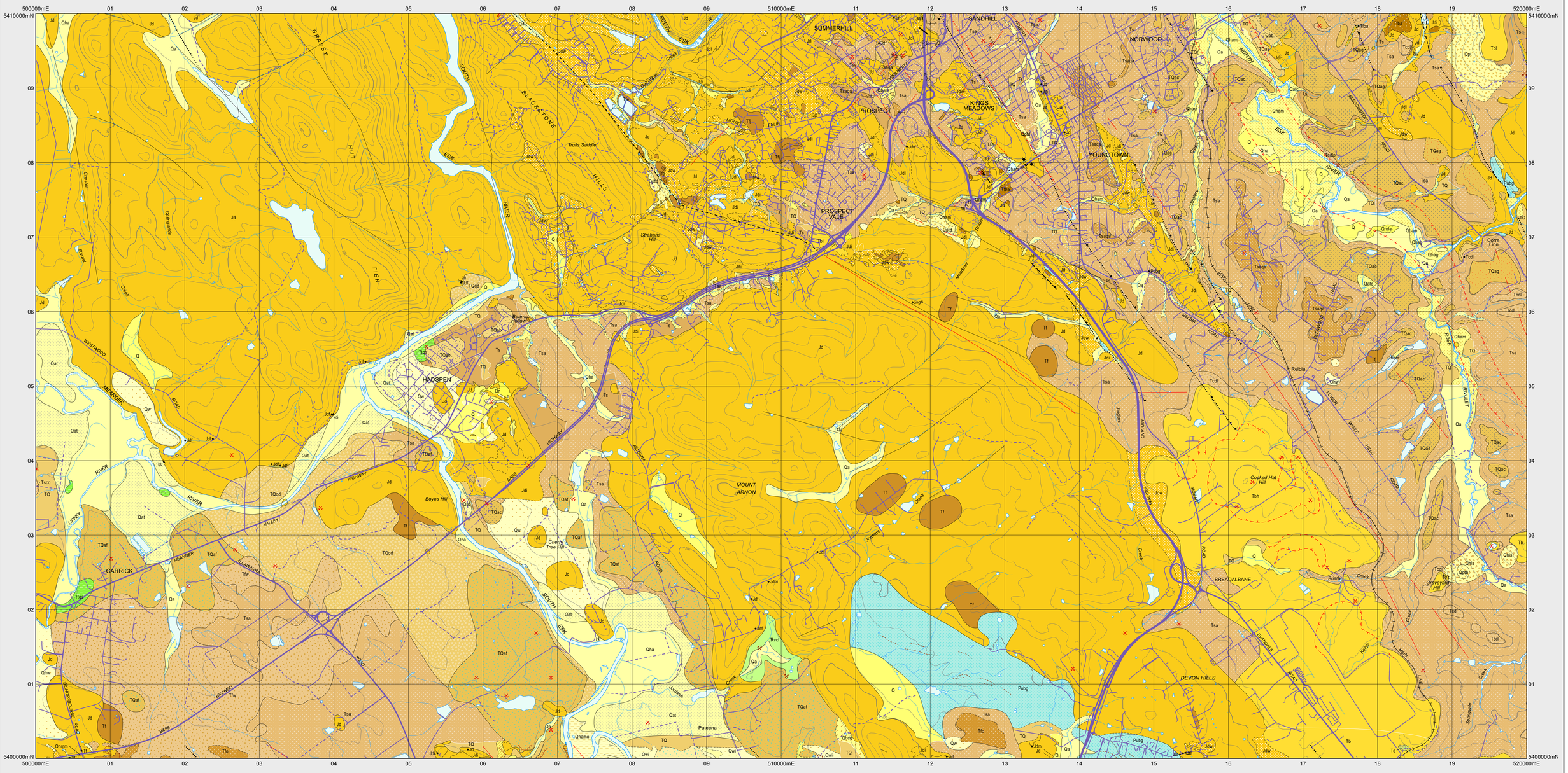
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
PROSPECT, SHEET 5040

PROSPECT

Scale 1:25 000

0 500 1000 1500 2000 2500 m

Tasmanian Government



CENOZOIC

QUATERNARY

HOLOCENE

Qhmm — *Undifferentiated Cenozoic sediments (TQ). Undifferentiated Quaternary sediments (Q). Man made deposits including some levee banks interpreted from 1966 aerial photography (Qhmm).*

Qhls — *Landslip and debris flow deposits (Qhls).*

Qhamf — *Stream alluvium, swamp and marsh deposits (Qha). Alluvium of floodplain terraces adjacent to current stream channels including levee? deposits in some areas (part of Canola Surface) (Qhamf).*

Qha — *Alluvium related to former channel locations and commonly exhibiting multiple levee? ridges and channel furrows that have resulted from progressive channel migration (Qhamo).*

Qhamo — *Alluvial and swamp deposits of gravel, sand, silt and clay, commonly with organic-rich top layer (Qham); alluvial gravel deposits (Qhag).*

Qham — *Colluvial deposits of gravel, sand and clay (Qhc); clayey gravel derived from dolerite (Qhcd); with dolerite clasts derived from Paleogene - Neogene dolerite conglomerate (Qhcc); with siliceous clasts derived from Cenozoic deposits (Qhcs).*

Qhc — *Photo-interpreted dune form (Qhda).*

Qhda — *Pisolitic ironstone gravel, cemented in places, of lag, alluvial and colluvial origin (Qn).*

Qn — *Selected lag deposits of ferruginous pisoliths and ferricrete fragments (Qln).*

Qln — *Alluvial gravel, sand and clay (Qa).*

Qa — *Low (<5m above present stream) alluvial terraces of sand, silt and clay (Qat).*

Qat — *Alluvial fan deposits predominantly of dolerite clasts (Qafd); alluvial fan deposits predominantly of mud, silt and sand, with pebbles in some areas (Qafc).*

Qafd — *Aeolian deposits and locally derived sand (Qw); windblown and locally derived sand (Qhw); Photo-interpreted aeolian deposits predominantly of sheet or low hummocky form (Qwi).*

Qw — *Lag deposit of quartz sandstone and pebbly sandstone, possibly derived from Paleogene - Neogene sandstone (Qlss).*

Qlss — *Alluvial terrace deposits predominantly composed of dolerite cobbles (Qpad).*

Qpad — *Older alluvium of minor stream terraces (Qpao).*

Qpao — *Talus composed predominantly of Jurassic dolerite (Qptd); of Paleogene - Neogene basalt (Qptb).*

Qpt — *Talus composed predominantly of Jurassic dolerite (Qptd); of Paleogene - Neogene basalt (Qptb).*

PLEISTOCENE

TQaa — *Late Cenozoic terrace deposits of siliceous pebble gravel and sand cemented by iron oxides in places, 5-10m above sea level, loose to poorly consolidated, clast composition poorly known, dominantly siliceous in some areas of probable Pleistocene age (TQaa).*

TQab — *Late Cenozoic terrace deposits of siliceous pebble gravel and sand cemented by iron oxides in places, ~20m above sea level or local base level, of probable Pleistocene age (TQab).*

TQac — *Late Cenozoic terrace deposits of siliceous pebble gravel and sand with rare boulder-sized clasts, cemented by iron oxides in places, 25-40m and ~50m above sea level or local base level (TQac).*

CENOZOIC

PALEOGENE - NEOGENE

TQag — *Undifferentiated Cenozoic sediments (TQ). Late Cenozoic terrace deposits of siliceous pebble gravel and sand with rare boulder-sized clasts, cemented by iron oxides in places, ~70m above sea level (TQag).*

TQaj — *Erosional/depositional terrace cut in Paleogene - Neogene strata, generally lacking fluvial morphology, may include undifferentiated alluvium of minor streams and piedmont gravels derived from adjacent lateral slopes (probably mostly part of Brumby Terrace) (TQaj).*

TQaf — *Late Cenozoic terrace deposits of siliceous pebble gravel and sand cemented by iron oxides in places, siliceous pebble gravel and sand with little or no dolerite; part of 'Brickendon soil association' (TQaf).*

TQpd — *Partly consolidated gravel of cobbles of predominantly weathered dolerite and lesser quartzite, and sand; with surficial siliceous gravel lag (TQpt).*

TQse — *Ferruginous cemented sandstone (TQse).*

Tfw — *Insitu lateritic profile, lag and dispersed ferruginous ferricrete fragments and pisoliths, locally may include palid part of profile or lower horizons, distribution indicated by soil maps ('Woodstock soil association') (Tfw).*

Tf — *Ferricrete, laterite and bauxite with cemented and soft layers (Tf). Lateritic profile, bauxite or other ferricrete inferred from limited outcrop or loose ferricrete fragments (Tf). Lower remnants of lateritic profile grading down to very weathered rock lacks silicastone and generally lacks substantial occurrences of ferricrete; commonly developed over dolerite (Tfe).*

Tfo — *Selected miocene? ferruginous laterite profile with ferricrete masses, clay with ferruginous pisoliths and younger essentially lag deposits of ferruginous pisoliths (part of Woodstock Surface) (Tfo).*

Tc — *Undifferentiated conglomerate, gravel and grit (Tc).*

Tb — *Basalt (Tb); inferred basalt beneath soil or Cenozoic deposits (Tbi); limburgite (Tbl); basalt displaced downslope (Tbz); hawaiite (Tbh).*

Tsco — *Inter-and sub-basalt gravels of predominantly quartzite pebbles (Tsco).*

Ts — *Undifferentiated Paleogene - Neogene sediments; non-marine sequences of gravel, sand, silt, clay and regolith (Ts).*

Tsaqb — *Partly consolidated clay, silt, and clayey labile sand with rare gravel and lignite; some iron oxide-cemented layers and concretions; some leaf fossils (Tsa); poorly consolidated quartz-rich micaceous sandstone and conglomerate interbedded with siltstone and mudstone, commonly with some ferruginous and rarely siliceous cement (Tsaqa); underlying Paleogene - Neogene basalt at Abels Hill (Tsaqb).*

Tsa — *Moderately consolidated, dominantly cobble grade with lesser pebble and boulder grade dolerite conglomerate, some sandstone and rare siltstone; common zeolite and calcite cements (Tcdl); dominantly of cobble conglomerate and sandstone with lignite and carbonaceous beds containing Lygistepollenites balmei Zone palynoflora of Palaeocene age (Tcdlp).*

Tcdl — *Bauxite profile developed on pre-Paleogene rocks and overlain by Paleogene rocks (Tfba).*

Tcdlp — *Bauxite profile developed on pre-Paleogene rocks and overlain by Paleogene rocks (Tfba).*

Tfba — *Bauxite profile developed on pre-Paleogene rocks and overlain by Paleogene rocks (Tfba).*

MESOZOIC - PALEOZOIC

TRIASSIC

Rvcl — *Dominantly lithic sandstone with minor mudstone and coal (Rvcl).*

Rl — *Undifferentiated Upper Parmeener Supergroup rocks below coal measures (Rl).*

Rqs — *Cross-bedded quartz sandstone, feldspathic sandstone and shale (Rqs).*

PERMIAN

Pubg — *Unfossiliferous pebbly siltstone, siltstone and sandstone (Bogan Gap Group) (Pubg).*

PARMEENER SUPERGROUP

INTRUSIVE ROCKS

MESOZOIC CENOZOIC — PALEOGENE - NEOGENE

Tbb — *Intrusive basalt (Tbb) at 517650mE, 5407855mN, 519055mE, 5405555mN and 519515mE, 5402835mN.*

MESOZOIC — JURASSIC

Jdw — *Predominantly deeply-weathered dolerite (Jdw).*

Jd — *Dolerite (Jd). Dolerite of grainsize 0.7-1.5mm (Jdf); 1.5-3mm (Jdm); 3-6mm (Jdc) indicated. Inferred dolerite beneath soil or Cenozoic deposits (Jdi).*

CONTACTS

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

FAULTS

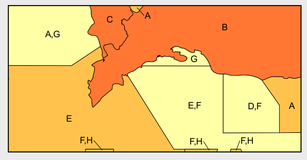
- *Fault - inferred.*
- *Fault - concealed.*
- *Fault - concealed, inferred from magnetic data.*
- *Normal fault (downthrown side indicated).*
- *Normal fault (downthrown side indicated) - concealed.*

LINEARS

- *Scarp.*
- *Dune crest.*
- *Slope break.*
- *Lineament - visible on aerial photographs.*
- *Lineament - visible in magnetic data.*
- *Magnetic gradient or lineament (direction towards lower values indicated).*
- *Lithological trend line, including bedding trace interpreted from aerial photographs.*

- *Strike and dip of bedding - right way up.*
- *Strike of vertical bedding, facing indicated by single tic.*
- *Generalised palaeocurrent direction, showing sense of movement.*
- *Stike and dip of dominant joint set - dipping; vertical.*
- *Strike and dip of outcrop-scale fault of unspecified relative age.*
- *Field station for adjacent readings on the map.*
- *Notable small outcrop 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 S.M. Forsyth, B.Sc., and C.R. Calver, B.Sc.(Hons), Ph.D., 2005 from the following sources (see source diagram):

A C.R. Calver, 2001-2003, 1:25 000 mapping.

B FORSYTH, S.M. 1996, Geology map, Launceston area, Urban Engineering Geology Series, Tasmanian Geological Survey (recompiled 2005).

C Moore, W.R. 1989, Slope stability and engineering geology of the Blackstone Heights area. Compilation report. Department of Mines unpublished report 1989/06.

D FORSYTH, S.M. 1:25 000 mapping 1991-1993; with reference to Blake, F. 1959, Longford 1:63 360 Geological Map.

E C.R. Calver, 2004, 1:25 000 mapping; with reference to BLAKE, F. 1959, Longford 1:63 360 Geological Map, and Nicolls, K.D. 1957, Longford Reconnaissance Soil Map, CSIRO Division of Soils.

F BLAKE, F. 1959, Longford 1:63 360 Geological Map, with minor revision by C.R. Calver.

G LONGMAN, M.J.; MATTHEWS, W.L.; ROWE S.M.; 1963 Launceston 1:63 360 Geological Map; minor revision by C.R. Calver.

H S.M. Forsyth, 2004, new geological mapping.

REFERENCE THIS MAP AS:

FORSYTH, S.M. and CALVER, C.R. (compilers) 2005. Digital Geological Atlas 1:25 000 Scale Series. Sheet 5040 Prospect. 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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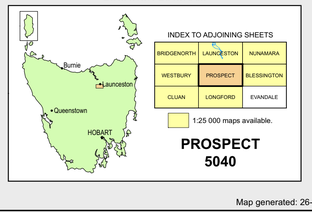
LOCATION DIAGRAM



Map generated: 26-MAR-2024

WARNING: INKS ARE LIGHT SENSITIVE.