Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

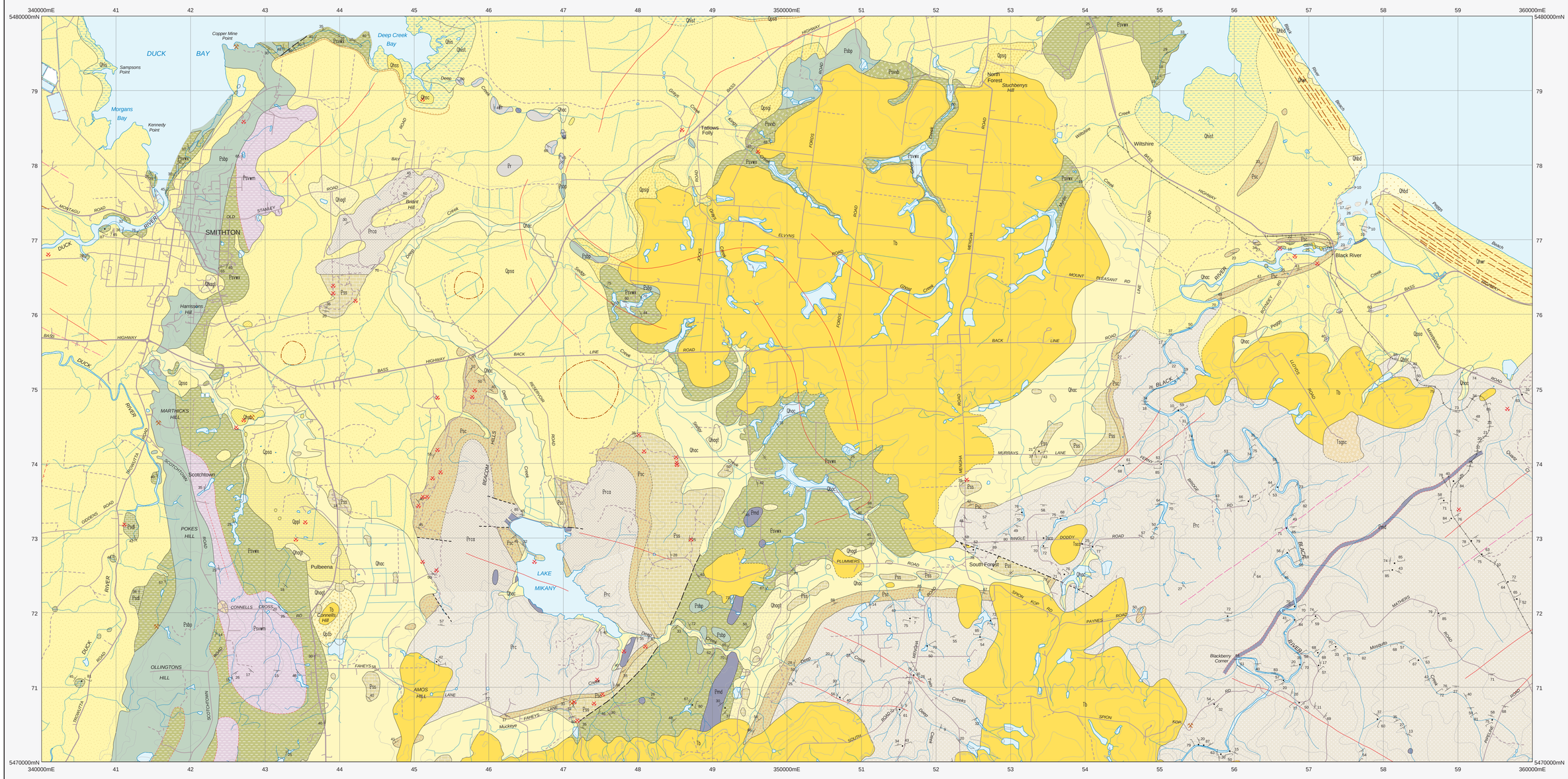
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
SMITHTON, SHEET 3447

SMITHTON

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmania
Explore the possibilities



CENOZOIC

QUATERNARY

HOLOCENE

Qhoc / Qhogt — Alluvium and colluvium – including alluvial deposits of sand, clay-rich sand or gravel, talus and slope-wash deposits; swamp deposits of sand, clay and peat; and deposits rich in chert lag derived with associated soil from underlying Proterozoic dolomite sequences (Qhoc). River terrace gravel deposits (Qhogt).

Qhsc / Qhss — Spring mound deposits: calcareous (Qhsc); siliceous (Qhss).

Qhis — Paralic clay, silt, sand and minor gravel deposits of modern salt marsh and associated tidal flats (Qhis); and of coastal tea-tree swamp (Qhist).

Qhbd — Younger active dune and beach sand and beach gravel (Qhbd).

Qhwr — Sand of stabilised longitudinal beach ridges (Qhwr).

PLEISTOCENE

Qpsa — Older stabilised aeolian sand of predominantly coastal plain, with underlying marine sands in places; may show relict landforms including terraces, lunettes, linear or barchan dunes, and beach ridges related to regressive strandlines of Last Interglacial Stage (Qpsa).

Qptb — Basalt talus (Qptb).

Qpsg — Gravel deposits of probably strandline origin, probably related to higher sea-level during Last Interglacial Stage (Qpsg); with associated ironstone gravel in some areas (Qpsg).

Qppl — Limestone of freshwater origin (Qppl). (Pulbeena Limestone).

Erosional Surface.

PALEOGENE – NEOGENE

Tsgsc — Siliceous gravel and coarse-grained sand deposits (Tsgsc).

Tb — Basalt lava (Tb).

Tsco — Sub-basalt conglomerate, quartz-stone or claystone (Tsco).

Angular unconformity.

NEOPROTEROZOIC

TOGARI GROUP

Psdl — Well bedded to massive, shallow marine dolomite and dolomitic limestone, of subtidal to ?supratidal facies, and cherty silicified equivalents in some localities (Psdl). (Correlate of Smithton Dolomite).

Psvwx — Interbedded lithic wacke (massive to well bedded, turbiditic and/or mafic volcaniclastic in part), laminated siltstone/mudstone, and minor polymict lithic conglomerate; includes some occurrences of coarse breccia or mixtite with clasts of mafic volcanic rocks (Psvwx). (Correlate of Keppel Creek Formation, may include some equivalents of Croles Hill Mixtite).

Psbp — Massive and amygdaloidal, dominantly tholeiitic basalt, commonly with pillows (Psbp). (Correlate of Spinks Creek Volcanics). Mixtite with rounded clasts of basic igneous and other rocktypes (Psvrb). (Correlate of Croles Hill Mixtite). Non-volcanic units with positive magnetic signature within Keppel Creek Formation, probably ferruginous siltstone or ironstone, with lateritic soil development in some areas (Psvwm).

Psvwm / Psvrb

Pss — Interbedded dolomite, chert, siltstone and mudstone (Pss). (Correlate of Black River Dolomite).

Psc — Interbedded, dominantly monomict siliceous pebble-cobble to rarely boulder conglomerate (commonly occurring at base of formation; with clasts dominantly of laminated to massive quartzite), lithic arenite, and thick-bedded white saccharoidal quartzarenite with cross-bedding at some localities (Psc). (Forest Conglomerate and Quartzite and correlates).

Erosional and transgressive surface; low angle unconformity at some localities.

MESOPROT – EROZOIC

ROCKY CAPE GROUP

Pr / Prc / Prca — Undifferentiated Rocky Cape Group (Pr). Interbedded, black, dark grey and green, commonly pyritic, laminated siltstone and mudstone, with rare sandstone and mud pellet conglomerate Prc). Laminated fine-grained quartzite and cherty siltstone, commonly pink and green in colour and distinctively banded, with small-scale ripple marks and cross-lamination in some outcrops (Prca). (Prc, Prca: correlates of Cowrie Siltstone).

NEOPROT – EROZOIC

CENOZOIC — PALEOGENE – NEOGENE

IGNEOUS ROCKS

Tb — Basalt lava (Tb).

Psbp — Massive and amygdaloidal, dominantly tholeiitic basalt, commonly with pillows (Psbp). (Correlate of Spinks Creek Volcanics).

Pmd — Dolerite dyke (Pmd).

Geological boundary – position accurate or approximate.

Geological boundary – inferred.

Geological boundary, unspecified type, inferred from airborne magnetic and/or radiometric data.

Fault, unspecified type, position accurate or approximate.

Fault, unspecified type, inferred.

Lineament visible in airborne magnetic data.

Lineament visible in airborne radiometric data.

Magnetic gradient – direction towards lower values indicated.

Margin of relict lunette and associated swamp.

Trends of older stabilised Holocene beach ridges.

Terrace edge.

Limit of mapping.

(White line) Limit of mapping of sub-unit within undifferentiated rock unit.

Strike and dip of bedding, right way up.

Strike and dip of bedding, facing unknown – dipping, vertical.

Strike and dip of cleavage, type and relative age unspecified – dipping, vertical.

Trend and plunge of hingeline of minor fold, relative age unspecified; with dip and dip direction of axial surface; with vertical axial surface.

Notable small outcrop with rock unit indicated.

Mineral deposit location – hardrock

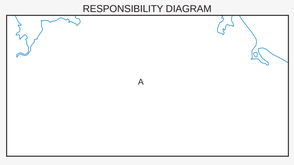
Construction material/industrial mineral/gemstone location –

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

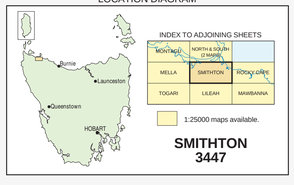
Compiled by D.B. Seymour, B.Sc.(Hons), PhD., 2002 from the following sources (see responsibility diagram):

A Lennox, P.G., Corbett, K.D., Baillie, P.W., Corbett, E.B. and Brown, A.V. 1982. Geological Atlas 1:50 000 Series. Sheet 21 (7916S). Smithton. Department of Mines Tasmania.
Re-compiled from original 1:15 840 compilations and original structural data, with modifications and additions based on interpretation of airborne magnetic and radiometric data collected under the Western Tasmanian Regional Minerals Program 2001.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



REFERENCE THIS MAP AS:

SEYMOUR, D.B. (compiler) 2002. Digital Geological Atlas 1:25 000 Scale Series. Sheet 3447 Smithton. Mineral Resources Tasmania.

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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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