Department of State Growth
MINERAL RESOURCES TASMANIA

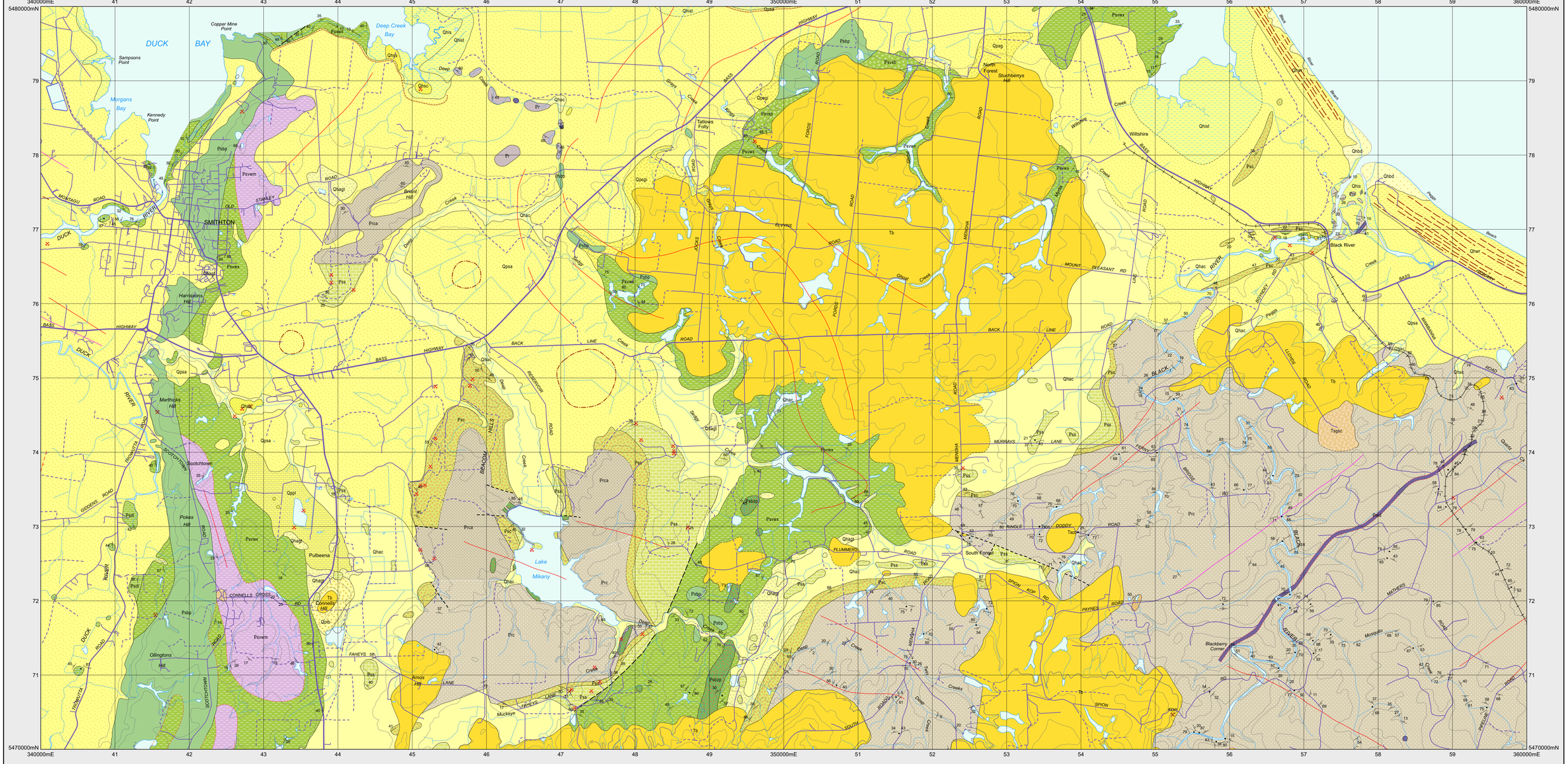
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
SMITHTON, SHEET 3447

SMITHTON

Scale 1:25 000

0 500 1000 1500 2000 2500m

Tasmanian Government



CENOZOIC

QUATERNARY

HOLOCENE

- Qhac — Qhagt — *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 (Qhac). River terrace gravel deposits (Qhagt).*
- 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).*
- 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).*

?PLEISTOCENE

- Qptb — *Basalt talus (Qptb).*
- Qpsg — *Gravel deposits of probably strandline origin, probably related to higher sealevel during Last Interglacial Stage (Qpsg); with associated ironstone gravel in some areas (Qpsgi).*
- 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 — TOOARI 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 / Psbp / Psvwm / Psvxb — *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). 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 (Psvxb). (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).*
- 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.

?MESOPROTEROZOIC — 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).*

IGNEOUS ROCKS

NEOPROTEROZOIC	CRYOGENIAN	Pmd — *Dolerite dykes (Tayatea Dyke Swarm) (Pmd).*
CENOZOIC	PALEOGENE - NEOGENE	Tb — *Basalt lava (Tb).*
NEOPROTEROZOIC	EDIACARAN	Psbp — *Massive and amygdaloidal, dominantly tholeiitic basalt, commonly with pillows (Psbp). (Correlate of Spinks Creek Volcanics).*
		Psbzp — *Intrusives of picritic composition (Psbzp).*

CONTACTS

- *Geological contact.*
- *Geological contact - inferred.*
- *Geological contact - inferred from magnetic data.*
- *Geological contact - inferred from radiometric data.*
- *Limit of mapping of sub-unit within undifferentiated rock unit.*
- *Limit of detailed mapping.*

FAULTS

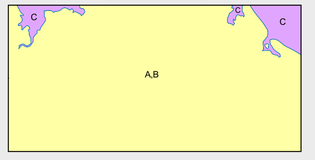
- *Fault.*
- *Fault - inferred.*

LINEARS

- *Scarp.*
- *Margin of relict lunette and associated swamp.*
- *Trend of relict beach ridge related to regressive strandline of Last Interglacial Stage.*
- *Trend of older stabilised Holocene beach ridge.*
- *Lineament - visible in magnetic data.*
- *Lineament - visible in radiometric data.*
- *Magnetic gradient or lineament (direction towards lower values indicated).*

- *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.*
- *Field station for adjacent readings on the map.*
- *Notable small outcrop with rock unit indicated.*
- *Mineral deposit location - hardrock.*
- *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 D.B. Seymour, B.Sc.(Hons), PhD., 2002 from the following sources (see source diagram):

A LENNOX, P.G., CORBETT, K.D., BAILLIE, P.W., CORBETT, E.B., BROWN, A.V. 1982. Geological Atlas 1:50 000 Series. Sheet 21 (7916S). Smithton. Tasmanian Department of Mines.

B D.B. Seymour, 2001, interpretation of aerial photographs and airborne magnetic radiometric data collected under the Western Tasmanian Regional Minerals Program, 2001.

C D.B. Seymour, 2001, Unpublished interpretation of Western Tasmanian Regional Minerals Program airborne magnetic data covering offshore areas.

REFERENCE THIS MAP AS:

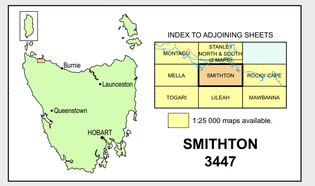
SEYMOUR, D.B. (compiler) 2002. Digital Geological Atlas 1:25 000 Scale Series. Sheet 3447 Smithton. Mineral Resources Tasmania.

Map produced by Spatial Information Services, Mineral Resources Tasmania.

Website: www.mrt.tas.gov.au

GDA94 - MGA Zone 55. Contour Interval: 20 metres.

LOCATION DIAGRAM



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Map generated: 07-JUN-2024

WARNING: INKS ARE LIGHT SENSITIVE.