Department of State Growth
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
MARRAWAH WEST, SHEET 3046

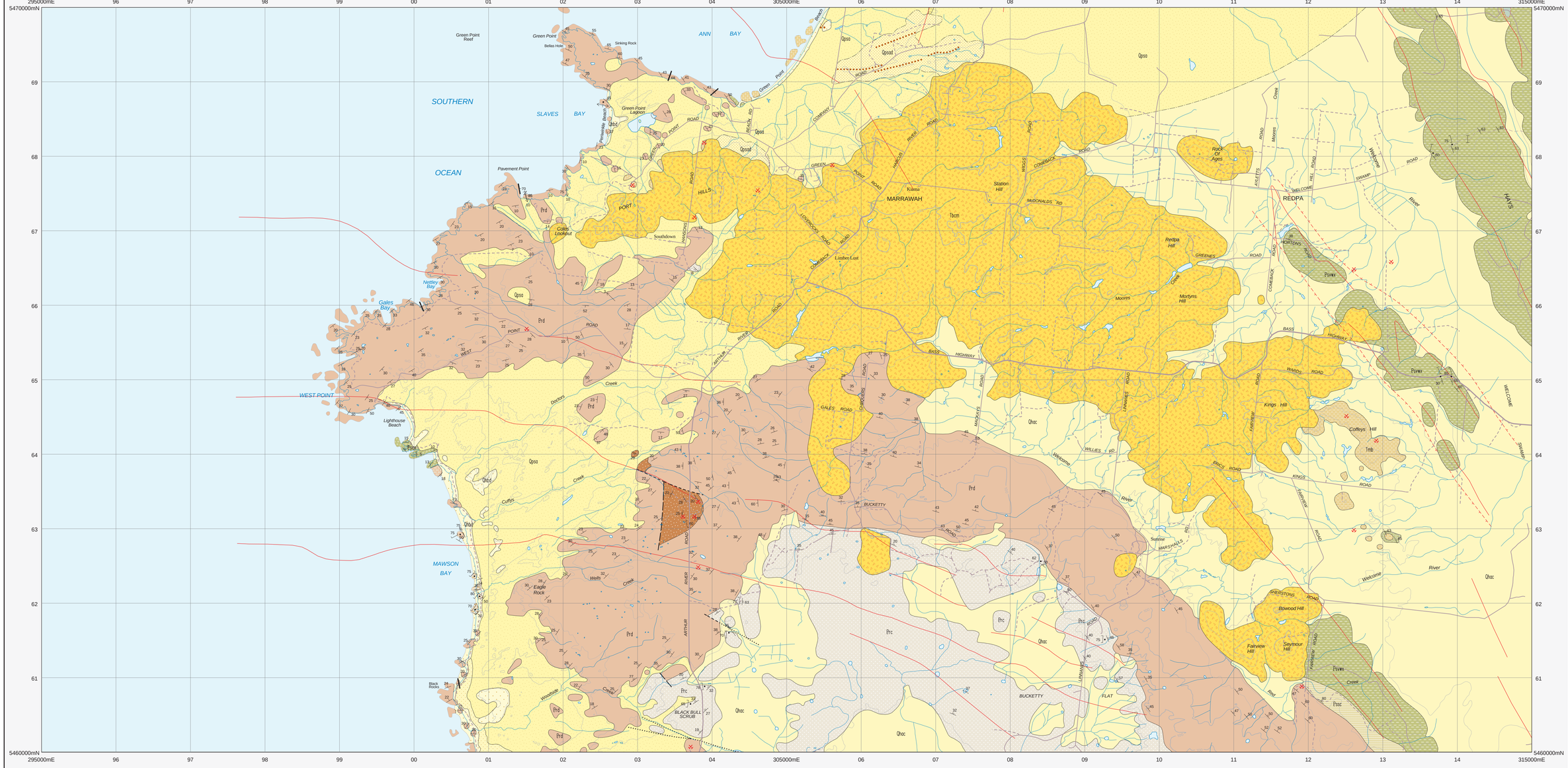
MARRAWAH WEST

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmanian Government

295000mE 96 97 98 99 00 01 02 03 04 305000mE 06 07 08 09 10 11 12 13 14 315000mE
5470000mN 69 68 67 66 65 64 63 62 61 5460000mN



CENOZOIC

QUATERNARY

HOLOCENE

- **Qhac** — 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).
- **Qhd** — Dune sand (Qhd).
- **Qhbd** — Younger active dune and beach sand and beach gravel (Qhbd).

PLEISTOCENE

- **Qpso** / **Qpsad** — 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 (Qpso); some areas with preserved relict dune forms indicated (Qpsad).
- **Qpsg** — Gravel deposits of probable strandline origin, probably related to higher sealevel during Last Interglacial Stage (Qpsg).

Erosional Surface.

PALAEOGENE – NEOGENE

- **Tmb** — Bioclastic shallow marine limestone, of Early Miocene (U. Langfordian to Batesfordian) biostratigraphic age (Tmb).
- **Tbcm** — Crudely bedded basaltic pyroclastic rocks, pillow and tachylitic breccias and hyaloclastite, with subordinate olivine basalt lava and pillow lava (Tbcm). (Marrawah Volcanics).

Angular unconformity.

PALAEOZOIC

CAMBRIAN

- **Psr** — Pale-weathering, thin-bedded, laminated quartz siltstone with subordinate interbedded fissile shale; commonly silicified (Psr: Salmon River Siltstone).

EDIACARAN

- **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).

NEOPROTEROZOIC

CRYOGENIAN

- **Psvwx** / **Psb** — 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 minor amygdaloidal, dominantly tholeiitic basalt (Psb). (Correlate of Spinks Creek Volcanics).
- **Pssc** — Massive to banded or mottled black, white and grey chert (after shallow marine dolomite), locally with stromatolitic textures, with subordinate interbedded black mudstone. (Pssc: correlate of Black River Dolomite).
- **Pscx** — Monomict (with dominantly quartzarenite clasts) and minor polymict, massive coarse lithic breccia, and bedded lithic conglomerate with subordinate cross-laminated quartzarenite (Pscx). (Correlate of Forest Conglomerate and Quartzite).

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

KANUNNAH SUBGROUP, TOGARI GROUP

MESOPROTEROZOIC

ECTASIAN

- **Pri** / **Prid** — Laminated grey siltstone and mudstone (Pri).
  Interbedded laminated dolomitic siltstone, dolomitic oolidal and pelloidal grainstones, and ?algal-laminated dolomite with possible stromatolites; commonly red-weathering (Prid).
  (Pri, Prid: correlate of Irby Siltstone).
- **Prd** / **Prdp** — Pale weathering, variably silicified quartzarenite, well bedded and commonly with cross-lamination of trough and planar-tabular types and oscillation ripple bedforms, and with minor horizons of laminated siltstone; tidal influence suggested by bed to bed reversals of cross-lamination polarity in some sections. (Prd).
  Interbedded grey, thinnly laminated siltstone (Prdp).
  (Prd, Prdp: correlate of Detention Subgroup).
- **Prc** — Mid to dark grey, thin-bedded laminated siltstone and mudstone, locally with minor thin interbeds of cross-laminated and oscillation ripple-marked quartzarenite.
  (Prc: correlate of Cowrie Siltstone).

ROCKY CAPE GROUP

IGNEOUS ROCKS

CENOZOIC — PALEOGENE – NEOGENE

- **Tbcm** — Crudely bedded basaltic pyroclastic rocks, pillow and tachylitic breccias and hyaloclastite, with subordinate olivine basalt lava and pillow lava (Tbcm). (Marrawah Volcanics).

NEOPROTEROZOIC — TERRITORIAL

- **Psb** — Massive and minor amygdaloidal, dominantly tholeiitic basalt (Psb). (Correlate of Spinks Creek Volcanics).

- Geological boundary – position accurate or approximate.
- Geological boundary – inferred.
- Geological boundary – transitional. Position of this boundary between units Qhac and Qpsa is very approximate and indicative only.
- Geological boundary, unspecified type, inferred from airborne magnetic data.
- Fault, unspecified type, position accurate or approximate.
- Fault, unspecified type, inferred.
- Fault, unspecified type, concealed.
- Fault, unspecified type, inferred from airborne magnetic data.
- Fault, unspecified type, concealed, inferred from airborne magnetic data.
- Lineament visible in airborne magnetic data.
- Magnetic gradient – direction towards lower values indicated.
- Crest of remnant old stabilised longitudinal dune.
- Limit of mapping.
- (White line) Limit of mapping of sub-unit within undifferentiated unit.

- Strike and dip of bedding – facing known; unknown.
- Strike and dip of cleavage, type and relative age unspecified – dipping, vertical.
- Trend of horizontal minor fold hinge line, unspecified relative age, with dip of axial surface.
- Trend and plunge of crenulation lineation.
- Trend and plunge of hingeline of minor fold, relative age unspecified; with dip direction and dip of axial surface; with vertical axial surface; with dextral vergence.
- Strike and dip of outcrop-scale fault, unspecified type and relative age – dipping; vertical.
- Mineral deposit location – hardrock
- Mineral deposit location – alluvial/tailings
- Construction material/industrial mineral/gemstone location

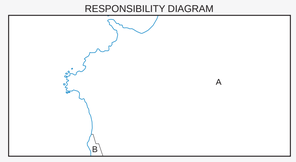
Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.

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

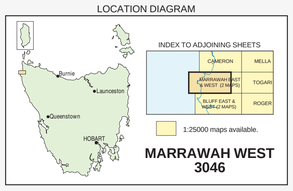
A SEYMOUR, D.B. and BAILLIE, P.W. 1992. Geological Atlas 1:50 000 Series. Sheet 20 7816S, Woolnorth. Department of Mines Tasmania. With modifications and additions based on interpretation of airborne magnetic and radiometric data collected under the Western Tasmanian Regional Minerals Program 2001.

B G.V. Cumming, new field mapping 2015.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



MARRAWAH WEST 3046

REFERENCE THIS MAP AS:

SEYMOUR, D.B. (compiler) 2015. Digital Geological Atlas 1:25 000 Scale Series. Sheet 3046 Marrawah. Mineral Resources Tasmania.

Map produced by Spatial Information Services, Mineral Resources Tasmania using G.I.S. software.

Website: www.mrt.tas.gov.au

GDA94 – MGA Zone 55. Contour Interval: 25 metres.

Plotfile for this map generated from digital data as at: 26-AUG-2016

WARNING: INKS ARE LIGHT SENSITIVE