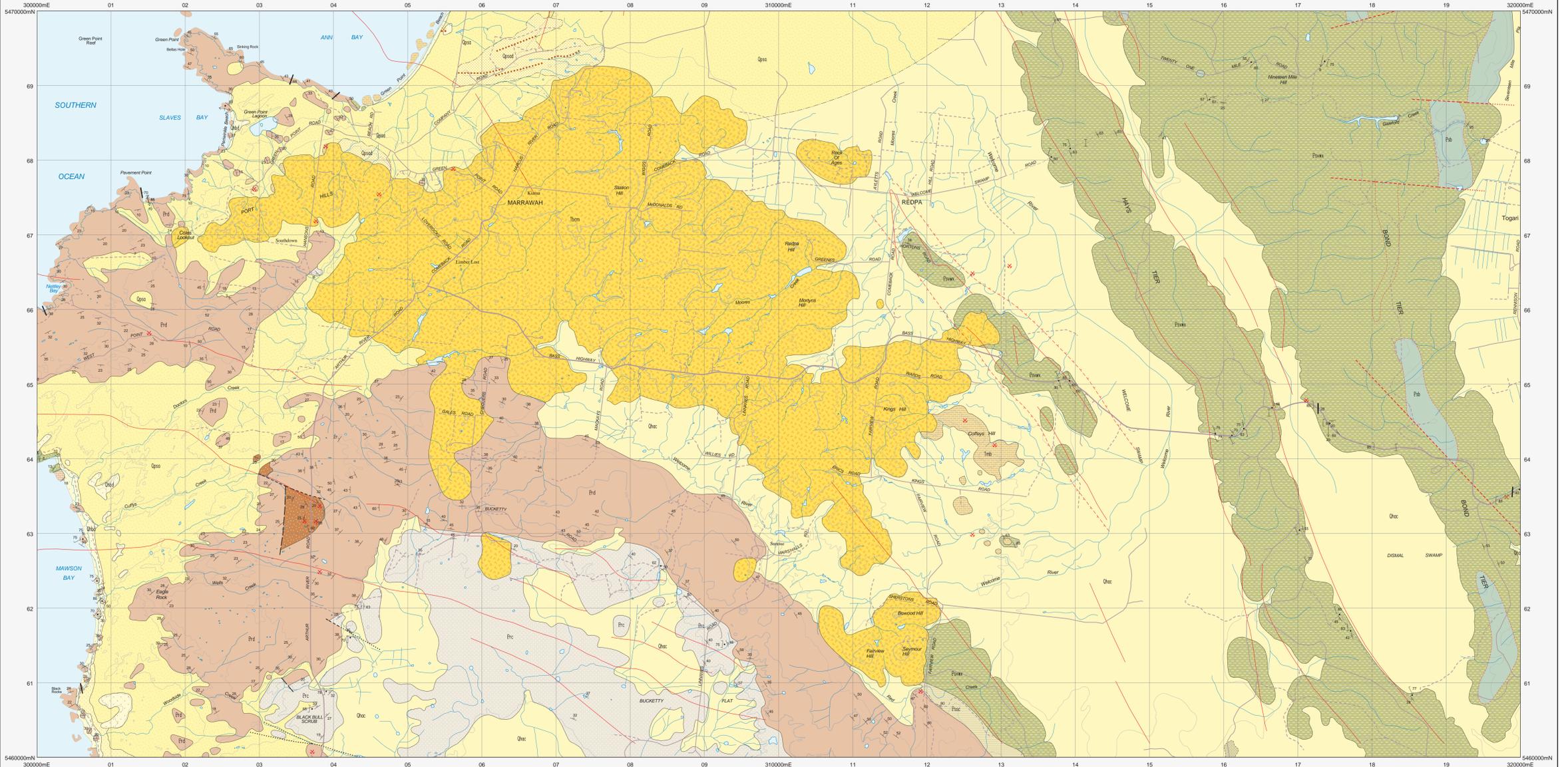


MARRAWAH EAST

Scale: 1:25 000



PERIOD	UNIT	DESCRIPTION
QUATERNARY	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 from associated soil from underlying Proterozoic dolomite sequences. (Qhac)
	Qhd	Dune sand (Qhd)
	Qhd1	Younger active dune and beach sand and beach gravel (Qhd1)
PLEISTOCENE	Qpsa	Older stabilised aeolian sand of predominantly coastal plain, with underlying marine sands in places, may show relic landforms including terraces, lunettes, linear or barchan dunes, and beach ridges related to regressions of the Last Interglacial Stage (Qpsa), some areas with preserved relic dune forms indicated (Qpsa1)
	Qpsb	Drift deposits of probable strandline origin, probably related to higher sea-level during Last Interglacial Stage (Qpsb)
PALEOCENE - CAMBRIAN	Tmb	Biohermal shallow marine limestone, of Early Miocene (L. Langfordian to Batesfordian) biostratigraphic age (Tmb)
	Tbcm	Crudely bedded basaltic pyroclastic rocks, pillow and tachylitic breccias and hyaloclastite, with subordinate olivine basal lava and pillow lava (Tbcm) (Marrawah Volcanics)
NEOPROTEROZOIC	Fst	Pale-weathering, thin-bedded, laminated quartz siltstone with subordinate interbedded feldspar gneiss; commonly silicified (Fst; Saxon River Siltstone)
	Fsd	Well bedded to massive, shallow marine dolomite and dolomitic limestone, of subtidal to supratidal facies, and cherty silicified equivalents in some localities (Fsd). (Correlate of Smitton Dolomite)
	Fsv	Interbedded lithic wacke (massive to well bedded, turbiditic and/or mafic volcanoclastic in part), laminated siltstone/mudstone and minor polymict lithic conglomerate, includes some argillaceous (L. Cooper Group) or silty with coarse grained volcanic rock clasts. (Correlate of Spout Creek Formation, may include some equivalents of Crokes Hill Mafics). (Fsv)
MIOCENE	Fss	Massive to bedded or mottled black, white and grey chert (after shallow marine dolomite), locally with stromatolitic textures, with subordinate interbedded black mudstone (Fss; correlate of Black River Dolomite)
	Fsq	Mesomictic (with dominantly quartzarenite clasts) and minor polymict massive coarse lithic breccia, and bedded lithic conglomerate with subordinate cross-laminated quartzarenite (Fsq). (Correlate of Forest Conglomerate and Quartzite)
MESOPROTEROZOIC	Fst	Laminated grey siltstone and mudstone (Fst)
	Fsd	Interbedded laminated dolomitic siltstone, dolomitic oolite and peloidal grainstones, and fossiliferous dolomite with possible stromatolites; commonly red-weathering (Fsd). (Fst; Fsd correlate of Ivy Siltstone)
ECTASIAN	Fst	Pale-weathering, variably silicified quartzarenite, well bedded and commonly with cross-lamination of trough and plane-tabular types and oscillation ripple bedforms, and with minor horizons of laminated siltstone; foliar influence suggested by bed to bed reversal of cross-lamination polarity in some sections (Fst)
	Fst	Interbedded grey, thinly laminated siltstone (Fst)
ROCKY CAPE GROUP	Fst	Mid to dark grey, thin-bedded laminated siltstone and mudstone, locally with minor thin interbeds of cross-laminated and oscillation ripple-marked quartzarenite. (Fst; correlate of Cowrie Siltstone)

UNIT	DESCRIPTION
Tbcm	Crudely bedded basaltic pyroclastic rocks, pillow and tachylitic breccias and hyaloclastite, with subordinate olivine basal lava and pillow lava (Tbcm) (Marrawah Volcanics)
Psb	Massive and minor amygdaloid, dominantly tholeiitic basalt (Psb). (Correlate of Spike Creek Volcanics)

SYMBOL	DESCRIPTION
—	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.

SYMBOL	DESCRIPTION
↖ ↘	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 hinge line of minor fold, relative age unspecified; with dip direction and dip of axial surface; with vertical axial surface.
↖ ↘	Strike and dip of outcrop-scale fault, unspecified type and relative age - dipping, vertical.
—	Mineral deposit location - hardrock.
—	Mineral deposit location - alluvial/alluvial.
—	Construction material/industrial mineral/gemstone location.

Compiled by D.B. Seymour, B.Sc.(Hons), PHD., 2002 from the following sources (see Responsibility Diagram):
A. SEYMOUR, D.B. and BALLE, P.W. 1990. Geological Atlas 1:50 000 Series. Sheet 20 7163, Warrarah. 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.

REFERENCE THIS MAP AS:
SEYMOUR, D.B. (compiler) 2015. Digital Geological Atlas 1:25 000 Scale Series, Sheet 3046 Marrawah. Mineral Resources Tasmania.
Base data from the LUST, Copyright State of Tasmania.
Map produced by Spatial Information Services, Mineral Resources Tasmania using G.I.S. software.
Website: www.mrt.tas.gov.au
GD94 - MGA Zone 55. Contour interval: 20 metres.

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