Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

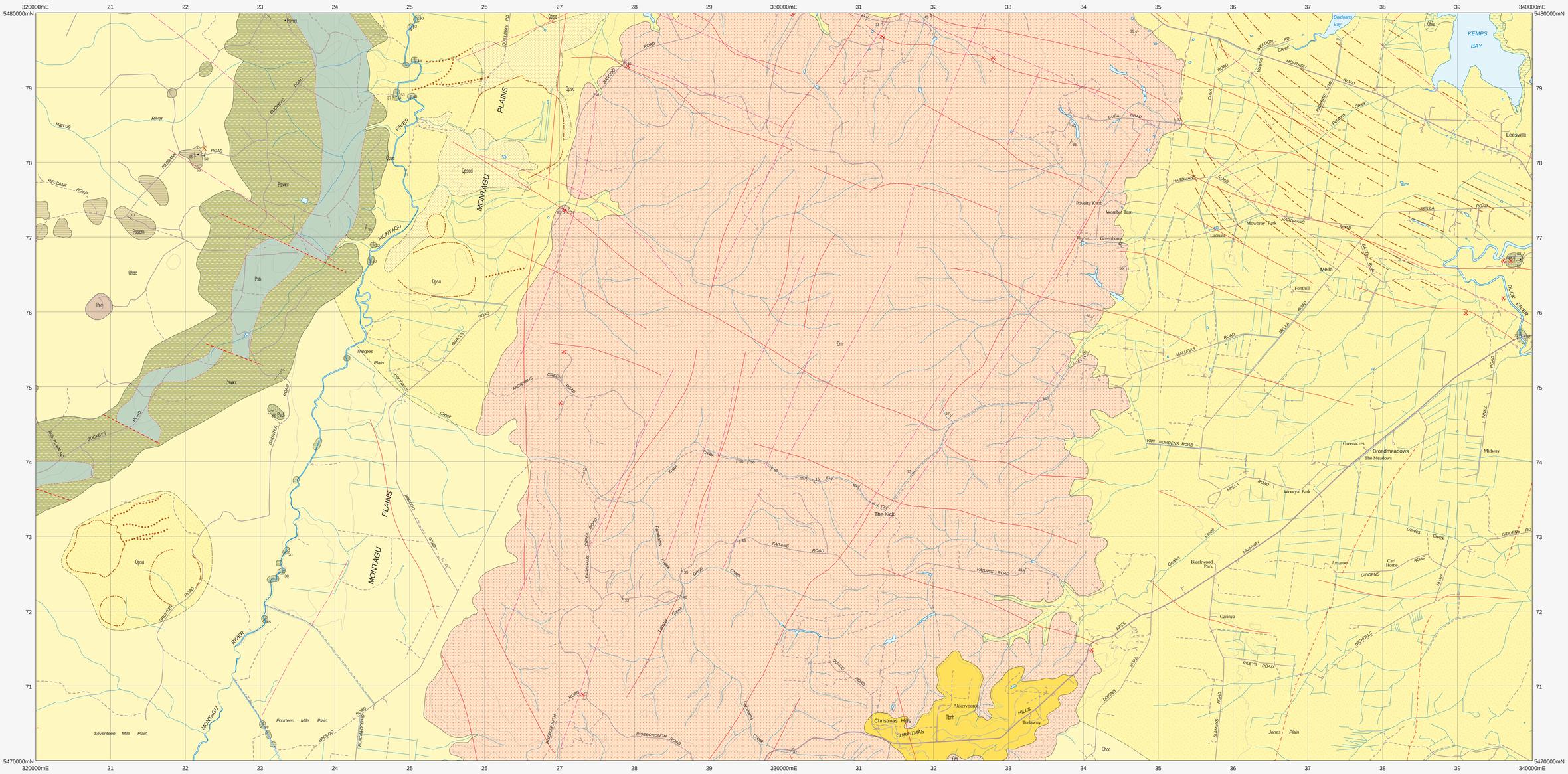
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
MELLA, SHEET 3247

MELLA

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmania
Explore the possibilities



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).*

Qhis — *Paralic clay, silt, sand and minor gravel deposits of modern salt marsh and associated tidal flats (Qhis).*

?PLEISTOCENE

Qpsa / 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 (Qpsa); some areas with preserved relict dune forms indicated (Qpsad).*

Erosional Surface.

PALEOGENE – NEOGENE

Tbnh — *Nepheline hawaiite lava (Tbnh).*

Angular unconformity.

PALEOZOIC

CAMBRIAN

CAMBRIAN SERIES 3 - FURONGIAN

Em — *Reddish–brown weathering, interbedded lithic wacke, litharenite, lithic conglomerate and laminated siltstone/mudstone, generally well bedded and commonly in thick fining–upward cycles, turbiditic in part; contains marine fossils of Cambrian Series 3 age at 331 310mE 5 468 080mN, and of Furongian age at 333 610mE 5 480 600mN, south and north of this mapsheet respectively (Em). (Scopus Formation).*

Inferred disconformity

NEOPROTEROZOIC

TOGARI GROUP

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

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 mixite 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).*

Psscm — *Massive to banded or mottled, black, white and grey chert (after shallow marine carbonate), with subordinate interbedded laminated black mudstone, and with preserved oolitic and stromatolitic textures in places (Psscm). (Correlate of Black River Dolomite).*

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

?MESOPROTEROZOIC

Prq — *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 (Prq). (Rocky Cape Group correlate).*

IGNEOUS ROCKS

CENOZOIC – PALEOGENE – NEOGENE

Tbnh — *Nepheline hawaiite lava (Tbnh).*

NEOPROTEROZOIC

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

Geological boundary – position accurate or approximate.

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, inferred from airborne magnetic data.

Lineament visible in airborne magnetic data.

Lineament visible in airborne radiometric data.

Magnetic gradient – direction towards lower values indicated.

Crest of remnant old stabilised longitudinal dune.

Margin of relict lunette and associated swamp.

Trend of relict beach ridge related to regressive strandline of Last Interglacial Stage.

Strike and dip of bedding – facing known; facing unknown.

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

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

Notable small outcrop with rock unit indicated.

Mineral deposit location – hardrock

Construction material/industrial mineral/gemstone location

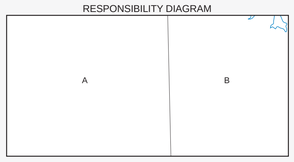
Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.

Compiled by D.B. Seymour, B.Sc.(Hons), PhD., 2001 from the following sources (see responsibility diagram):

A SEYMOUR, D.B. and BAILLIE, P.W. 1992. Geological Atlas 1:50 000 Series. Sheet 21 (7916S), Woolnorth. Department of Mines Tasmania.
With modifications and additions based on new interpretation of airborne magnetic and radiometric data.

B 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.
With modifications and additions based on interpretation of airborne magnetic and radiometric data collected under the Western Tasmanian Regional Minerals Program 2001

RESPONSIBILITY DIAGRAM



REFERENCE THIS MAP AS:

SEYMOUR, D.B. (compiler) 2001. Digital Geological Atlas 1:25 000 Scale Series Sheet 3247. Mella. 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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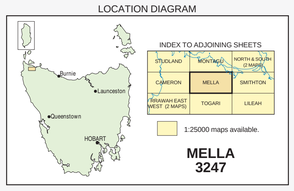
LOCATION DIAGRAM



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Plotfile for this map generated from digital data as at: 18-JUL-2011

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