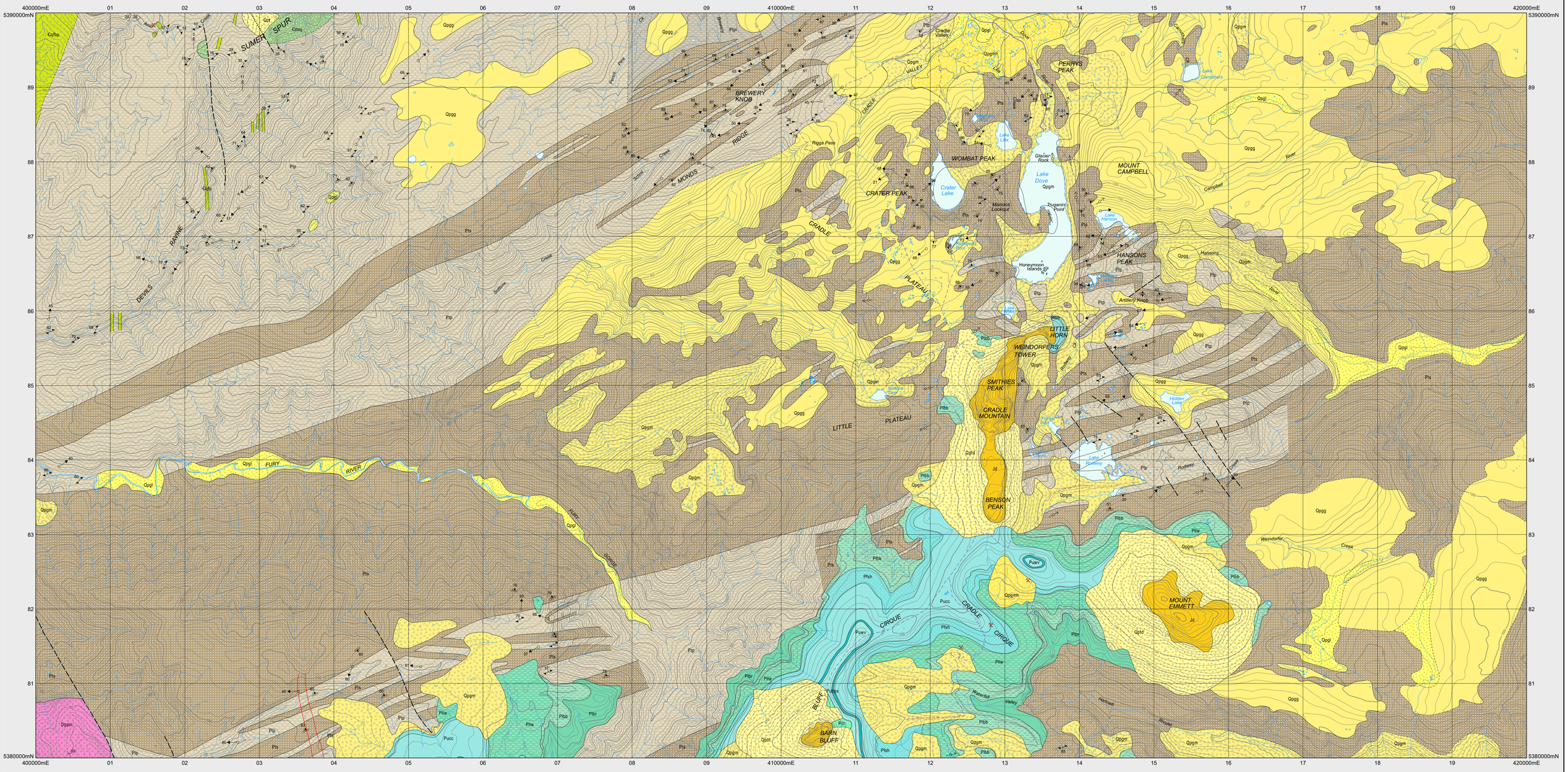
Department of State Growth
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
CRADLE, SHEET 4038

CRADLE

Scale 1:25 000

0 500 1000 1500 2000 2500m



CENOZOIC

QUATERNARY

PLEISTOCENE

- **Qpt** — *Undifferentiated talus deposits (Qpt).*
- **Qptd** — *Talus consisting dominantly of dolerite boulders (Qptd).*
- **Qpgg** — *Glacial and glacigene deposits (Qpgg).*
- **Qpgl** — *Fluvioglacial and lacustrine deposits (Qpgl).*
- **Qpgmh** — *Hummocky moraine (Qpgmh).*
- **Qpgm** — *Moraine and associated deposits (Qpgm).*

PALEOZOIC

PERMIAN

LOWER PARMEENER SUPERGROUP — UPPER PARMEENER SUPERGROUP

- **Pci** — *Well bedded to massive quartzo-feldspathic sandstone, bioturbated argillaceous mudstone and carbonaceous shale and sandstone (Mt Inglis Sandstone) (Pci).*
- **Puwv** — *Predominantly blue-grey unfossiliferous mudstone and siltstone (Waterfall Valley Siltstone) (Puwv).*
- **Pubps** — *Fine to coarse grained quartzo-feldspathic sandstone and minor pebble conglomerate (Benson Peak Sandstone) (Pubps).*
- **Pucc** — *Well bedded micaceous and argillaceous siltstone with minor pebbly siltstone, calcareous siltstone and fossiliferous limestone (Cradle Cirque Siltstone) (Pucc).*
- **Pfsh** — *Black carbonaceous siltstone, quartzose siltstone and quartzo-feldspathic sandstone (Lake Holmes Coal Measures) (Pfsh).*
- **Pliw** — *Well stratified sequence of siltstone and conglomerate, calcareous siltstone, mudstone and sandstone (Lake Will Pebbly Siltstone) (Pliw).*
- **Pibb** — *Massive, poorly bedded and sorted pebble-boulder grade conglomerate (Barn Bluff Conglomerate) (Pibb).*
- **Pibr** — *Pebbly siltstone and conglomerate with minor limestone and sandstone (Bluff River Pebbly Siltstone) (Pibr).*

CAMBRIAN

CAMBRIAN SERIES 3 — MT READ VOLCANICS

- **€dsq** — *Undifferentiated Sticht Range Beds - siliciclastic sandstone and conglomerate with interbedded micaceous siltstone and minor volcaniclastic rocks. Rare marine fossils (€dsq).*

MESOPROTEROZOIC

TYENNAN REGION METASEDIMENTS

- **Pts** — *Dominantly quartzite (Pts).*
- **Ptp** — *Dominantly phyllite, with minor schist, quartzite and siltstone. Unmetamorphosed to relatively low metamorphic grade (Ptp).*
- **Ptpi** — *Dominantly dark grey quartz-mica phyllite and schist, sometimes porphyroblastic and occasionaly containing albite-chlorite-biotite-phengite and minor garnet. Intermediate metamorphic grade (Ptpi).*
- **Ptpg** — *Fine-to coarse-grained, often thinly banded, pelitic, garnetiferous, quartz-mica schist, commonly containing phengite, almandine, albite and chlorite. Relatively high metamorphic grade (Ptpg).*

INTRUSIVE ROCKS

MESOZOIC — JURASSIC

- **Jd** — *Dolerite and related rocks (Jd).*

PALEOZOIC — DEVONIAN

- **Dgasr** — *Medium- to coarse-grained, porphyritic (K-feldspar) to equigranular, biotite-muscovite-bearing alkali feldspar granite (Granite Tor Granite; S-type) (Dgasr).*

PALEOZOIC — CAMBRIAN — CAMBRIAN SERIES 3

MT READ VOLCANICS

- **€qfp** — *Quartz - feldspar porphyry, dominantly intrusive (€qfp).*
- **€qfbp** — *Quartz - feldspar ± biotite ± hornblende porphyry (€qfbp).*

CONTACTS

- *Geological contact.*
- *Geological contact - inferred.*
- *Limit of mapping of sub-unit within undifferentiated rock unit.*

FAULTS

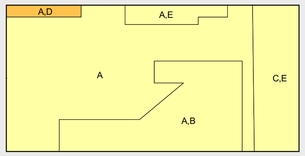
- *Fault.*
- *Fault - concealed.*

LINEARS

- *Moraine ridge crest.*
- *Lineament - visible in magnetic data.*

- *Strike and dip of bedding, right way up.*
- *Strike and dip of cleavage of unspecified type and relative age.*
- *Strike and dip of metamorphic foliation other than cleavage, parallel to compositional layering - dipping; vertical.*
- *Strike and dip of cleavage, relative local age S_2 - dipping; vertical.*
- *Trend and plunge of lineation of unspecified type.*
- *Trend and plunge of lineation L_2 formed by intersection of cleavages or foliation of relative local ages S_1 and S_2 realitive local age F_2.*
- *Trend and plunge of crenulation lineation on S_2 in pelitic rocks, and strong quartz mineral lineation in quartzitic rocks, relative local age F_{4-5}.*
- *Trend and plunge of minor fold hinge line, relative local age F_2.*
- *Glacial striae, showing sense of movement.*
- *Field station for adjacent readings on the map.*
- *Mineral deposit location - hardrock.*

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 M.J. Vicary, B.Sc.(Hons), 2004 as part of the Western Tasmanian Regional Minerals Program from the following sources (see source diagram):

A BARTON, C.M., BURNS, K.L., GEE, R.D., GROVES, D.I., GULLINE, A.B., JENNINGS, D.J., LONGMAN, M.J., MARSHALL, B., MATHEWS, W.L., MOORE, W.R., NAQVI, I.H., THREADER, V.M., and URQUHART, G. 1966. Geological Atlas 1 Mile Series. 8014N I & IV Zone 7 Sheet 44, Mackintosh. Tasmania Department of Mines.

B GEE, R.D. and BURNS, K.L. 1968. Permian stratigraphy and sedimentation in the Barn Bluff area, central Tasmania. Rep. Geol. Surv. Tasm. 10.

C JENNINGS, I.B. and BURNS, K.L. 1958. Geological Atlas 1 Mile Series. Zone 7 Sheet 45, Middlesex. Tasmania Department of Mines.

D VICARY, M.J. and PEMBERTON, J. 1988. Mount Read Volcanics Project Map 7. Geology of the Back Peak - Cradle Mountain Link Road area. Geol. Surv. Tasmania. Dept. of Mines, Hobart.

E Air photograph interpretation by M Vicary.

REFERENCE THIS MAP AS:

VICARY, M.J. (compiler) 2004. Digital Geological Atlas 1:25 000 Scale Series. Sheet 4038 Cradle. Mineral Resources Tasmania.

Base data from the LIST, Copyright State of Tasmania.

Map produced by Spatial Information Services, Mineral Resources Tasmania.

Website: www.mrt.tas.gov.au

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

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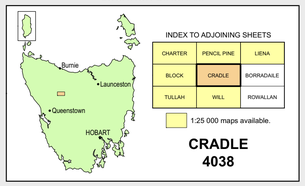
LOCATION DIAGRAM



INDEX TO ADJOINING SHEETS

CHARTER	PENCIL PINE	LIENA
BLOCK	CRADLE	BORRADAILE
TULLAH	WILL	ROWALLAN

1:25 000 maps available.

CRADLE
4038

Map generated: 08-JUN-2023

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