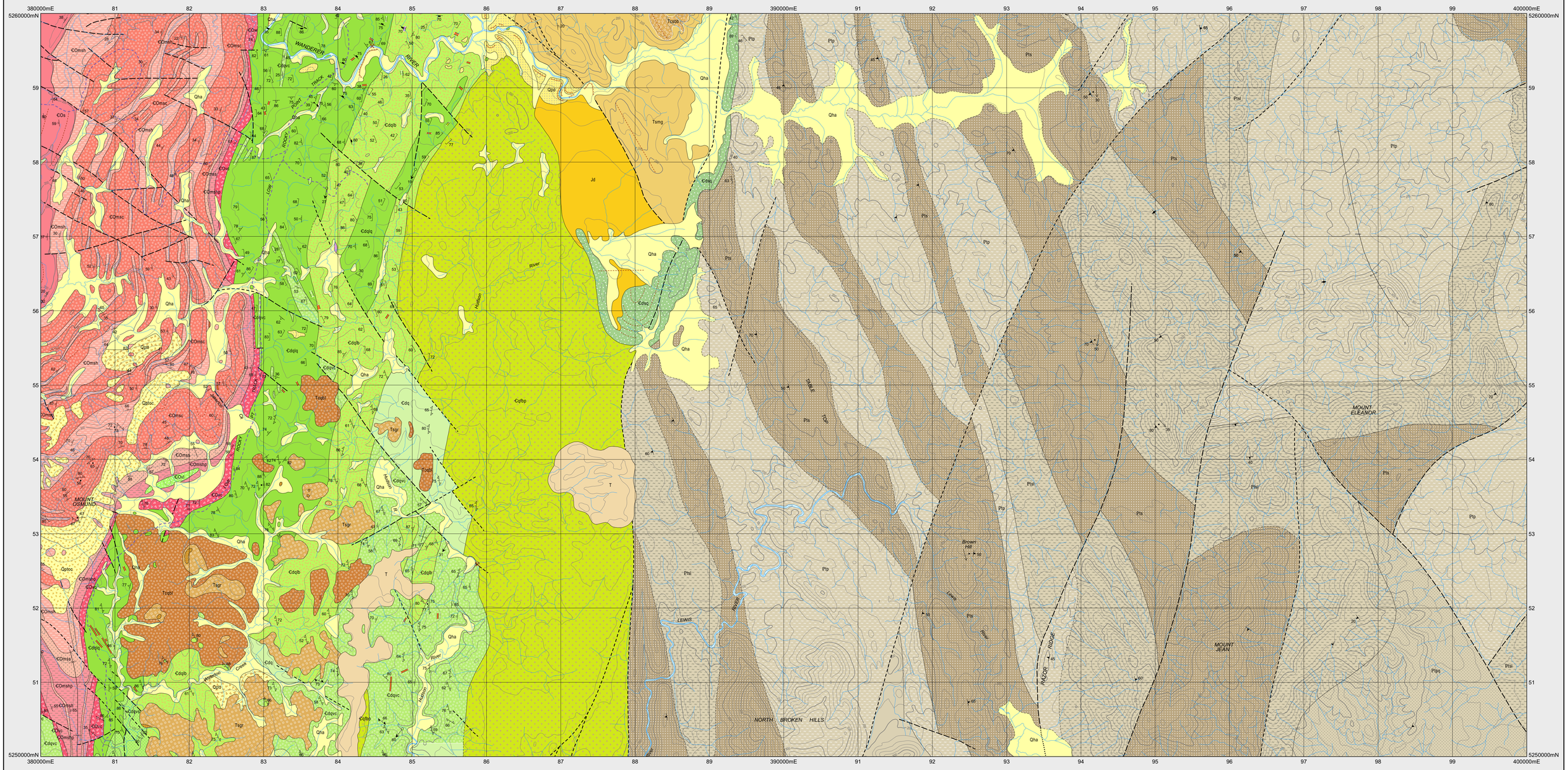
Department of State Growth
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
OSMUND, SHEET 3825

OSMUND

Scale 1:25 000

0 500 1000 1500 2000 2500m



CENOZOIC

QUATERNARY – HOLOCENE

- **Qha** — *Stream alluvium, swamp and marsh deposits (Qha).*
- **Qpt** — *Talus (Qpt).*
- **Qptoc** — *Talus derived from Ordovician conglomerate (Qptoc).*

? PLEISTOCENE(?)

- **Qpo** — *Older alluvial gravels, mainly on raised terraces developed on Paleogene - Neogene deposits and showing a gradational relationship to younger alluvium (Qpo).*

Erosional surface.

LATE PALEOGENE - NEOGENE(?)

- **T** — *Undifferentiated Paleogene - Neogene (T).*
  - **Tsgr** — *Rounded gravel, mainly vein quartz (Tsgr).*
  - **Tcmsg** — *Silicified gravel deposits (Tcmsg).*
  - **Tcqbl** — *Basal lag deposit of mainly subangular vein quartz clasts (Tcqbl).*
- **Tsmg** — *Semi-consolidated interbedded sands, pebble-cobble gravels (up to boulder grade in some places), silts and clays; some horizons contain coalified wood and rare amber (Tsmg).*
  - **Tcsbb** — *Coarse bouldery deposits with clasts to 5m. Mostly developed near graben margin, with clasts of local derivation (Tcsbb).*

Angular unconformity.

PALEOZOIC

CAMBRIAN – FURONGIAN

- **€Os** — *Sandstone, grey to pink, trough cross-bedded, micaceous, with minor pebble conglomerate and siltstone (€Os).*
- **€Oms** — *Dominantly marine sequence of interbedded sandstone, conglomerate and siltstone (€Oms).*
  - **€Omsc** — *Mainly interbedded granule-pebble conglomerate and sandstone, with minor siltstone (€Omsc).*
  - **€Omsh** — *Green to grey, thin-bedded micaceous siltstone and sandstone (€Omsh).*
  - **€Omss** — *Dominantly interbedded sandstone and siltstone (€Omss).*
  - **€Ow** (WATERLOO CREEK GROUP)
    - **€Omshp** — *Shale-siltstone unit with basal volcaniclastic conglomerate (€Ow).*
    - *Mainly black pyritic shale and siltstone (€Omshp).*
    - **€Ovl** — *Local unit of quartz-feldspar-phyric lava or intrusive (€Ovl).*
    - **€Ovc** — *Volcaniclastic conglomerate and sandstone (€Ovc).*

CORRELATE OF OWEN GROUP

Unconformity.

CAMBRIAN SERIES 3

- **€dq** — *Mainly felsic volcaniclastic, volcanic and intrusive rocks, typically quartz-feldspar-phyric (€dq).*
  - **€dqvc** — *Dominantly felsic volcaniclastic rocks, well bedded to massive. Includes sandstone, siltstone, minor conglomerate, probable pyroclastic rocks and minor felsic lavas (€dqvc).*
  - **€dqlq** — *Quartz-feldspar-phyric lava and/or intrusive, commonly spherulitic (€dqlq).*
  - **€dqvs** — *Dominantly volcaniclastic sandstone with minor siltstone, typically well bedded (€dqvs).*
  - **€dqvsb** — *Felsic volcaniclastic rocks containing significant detrital biotite (€dqvsb).*
  - **€dqlb** — *Quartz-feldspar-biotite-phyric lava and/or intrusive (€dqlb).*
  - **€da** — *Intermediate lava or intrusive (€da).*
  - **€dsq** — *Siliceous sandstone and pebble conglomerate with some interbedded siltstone and minor volcaniclastic rocks (correlate of Sticht Range Beds) (€dsq).*

CORRELATE OF EASTERN QUARTZ-PHYRIC SEQUENCE

CORRELATES OF MOUNT READ VOLCANICS

MESOPROTEROZOIC

- **Pt** (TYENNAN REGION METASEDIMENTARY ROCKS)
  - **Pts** — *Metamorphic rocks, dominantly metaquartzite and metapelite (Pt); dominantly quartzite (Pts).*
  - **Ptsl** — *Platey or schistose micaceous quartzite (Ptsl).*
  - **Ptp** — *Dominantly phyllite (Ptp).*
  - **Ptpq** — *Dominantly phyllite and quartz schist (Ptpq).*

INTRUSIVE ROCKS

- **Jd** (PALEOZOIC MESOZOIC, JURASSIC) — *Dolerite and related rocks (Jd).*
- **qv** — *Quartz vein (qv).*
- **€qfbp** (PALEOZOIC MESOZOIC, CAMBRIAN, CAMBRIAN SERIES 3) — *Quartz-feldspar-biotite porphyry, coarse-grained (€qfbp).*

CORRELATE OF MT READ VOLCANICS

CONTACTS

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

FAULTS

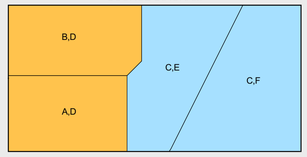
Fault.
Fault - inferred.
Fault - concealed.

LINEARS

Axial surface trace of major antiform.
Axial surface trace of major synform.
Scarp.
Lithological trend line, including bedding trace interpreted from aerial photographs.

Strike and dip of bedding - right way up; facing unknown.
Strike and dip of cleavage of unspecified type and relative age.
Strike and dip of cleavage of unspecified type and relative age; vertical.
Strike and dip of cleavage or foliation, relative local age S_1, S_2.
Trend and plunge of hinge line of minor fold, unspecified relative age; vertical axial surface.
Strike and dip of dominant joint set.
Strike and dip of igneous banding of platy alignment; vertical.
Strike and dip of ductile shear-band.
Strike and dip of metamorphic foliation; vertical.
Trend and plunge of mineral elongation lineation.
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 R.O. Reid, B.Sc.(Hons) and D.C. Green, B.Sc.(Hons), Ph.D. 2000 from the following sources (see source diagram):

A PEMBERTON, J., VICARY, M.J., BRADBURY, J. and CORBETT, K.D. 1991. Geology of the Elliott Bay - Mt Osmund area. Map 10. Mt Read Volcanics Project. Department of Mines, Tasmania.

B VICARY, M.J., PEMBERTON, J., BRADBURY, J. and CORBETT, K.D. 1992. Geology of the Wanderer River - Moores Valley area. Map 11. Mt Read Volcanics Project. Department of Mines, Tasmania.

C HALL, W.D.M. et al. 1969. Geological Atlas 1 Inch:Mile Rocky Point Geological Map. Broken Hill Proprietary Company Limited. TCR 69_0555.

Updated by:

D CORBETT, K.D. 2004. Updating and revision of the 1:25 000 scale series geological maps covering the Mt Read Volcanics belt in western and northwestern Tasmania. Tasmanian Geological Survey Record 2004/03. Mineral Resources Tasmania.

E VICARY, M.J. 2005. Additional map compilation and review of existing maps in western Tasmania. Tasmanian Geological Survey Record 2005/05. Mineral Resources Tasmania.

F Air photograph interpretation by W.D.M. Hall and M.J. Vicary, 2006.

REFERENCE THIS MAP AS:

REID, R.O. and GREEN, D.C. (compilers) 2006. Digital Geological Atlas 1:25 000 Scale Series. Sheet 3825 Osmund. 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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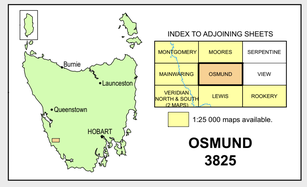
LOCATION DIAGRAM



Map generated: 08-FEB-2024

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