MINERAL RESOURCES TASMANIA
DIGITAL GEOLOGICAL ATLAS 1:25 000 SERIES
LEWIS, SHEET 3824

LEWIS

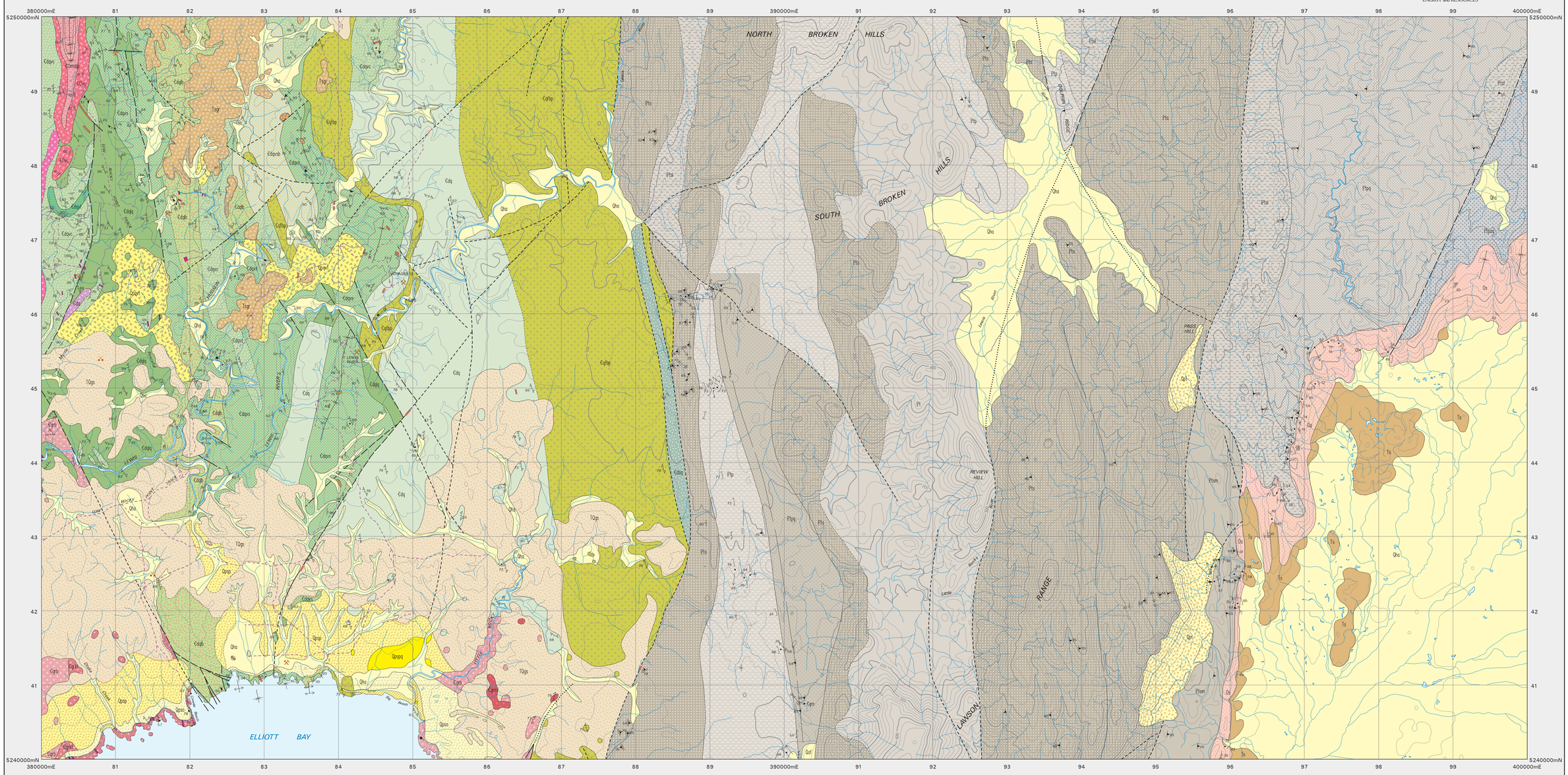
Scale: 1:25 000

0 500 1000 1500 2000 2500m

MINERAL RESOURCES TASMANIA

Tasmania

DEPARTMENT of INFRASTRUCTURE ENERGY and RESOURCES



CENOZOIC

QUATERNARY

- **Qha** — *Stream alluvium, swamp and marsh deposits (Qha).*
- **Qhdb** — *Modern shore face and associated aeolian dune sand (Qhdb).*
- **Qf** — *Ferricrete deposit of probable Quaternary age (Qf).*
- **Qaf** — *Alluvial fans (Qaf).*
- **Qpt** — *Talus, till and scree of probable Pleistocene age (Qpt).*
- **Qpqvt** — *Quartz vein–derived talus and scree (Qpqvt).*
- **Qpso** — *Older aeolian sand and sand dunes (Qpso).*
- **Qpsp / Qpspq** — *Sands and gravels associated with older marine platforms – probably includes marine, alluvial and slope deposits (Qpsp). Silicified gravel deposits, generally occuring as loose blocks (Qpspq).*

Erosional surface.

? LATE TERTIARY

- **TQgs** — *Gravel and sand deposits associated with surface approx. 50m a.s.l. Includes vein quartz lag and probable younger alluvial deposits (TQgs).*
- **Tsgr** — *Undifferentiated Tertiary (T). Rounded gravel, mainly vein quartz (Tsgr).*
- **T / Ts** — *Predominantly unconsolidated gravel, commonly rounded (Ts).*
- **Tcqbl** — *Basal lag deposit of mainly subangular vein quartz clasts (Tcqbl).*

Angular unconformity.

PALEOZOIC

ORDOVICIAN (GORDON GROUP ?)

- **Ol** — *Dark grey limestone, dolomite, calcareous mudstone, minor quartz sandstone. In part fossiliferous (Ol).*
- **Os** — *Mostly siliceous sandstone, grey to pink (Os).*

LATE CAMBRIAN (WATERLOO CREEK GROUP ? / CORRELATE OF OWEN GROUP ?)

- **€Omshp** — *Mainly black pyritic shale and siltstone (€Omshp).*
- **€Omsh** — *Unit of green–grey thin–bedded micaceous siltstone (€Omsh).*
- **€Ovc** — *Volcaniclastic conglomerate and sandstone, with some siliceous sandstone in places (€Ovc).*

Unconformity.

MIDDLE CAMBRIAN (CORRELATE OF EASTERN QUARTZ–PHYRIC SEQUENCE / CORRELATE OF MOUNT READ VOLCANICS)

- **€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).*
- **€dqvs** — *Dominantly volcaniclastic sandstone with minor siltstone, typically well bedded (€dqvs).*
- **€dqvsb** — *Felsic volcaniclastic rocks containing significant detrital biotite (€dqvsb).*
- **€dqvt** — *Vitric ash unit (€dqvt).*
- **€dqlq** — *Quartz–feldspar–phyric lavas and/or intrusives (€dqlb).*
- **€dqlb** — *Quartz–feldspar–biotite–phyric lava and/or intrusive (€dqlb).*
- **€dqsq** — *Bedded volcaniclastic sandstone, siltstone and minor siliceous sandstone abutting Precambrian rocks (correlate of Slicht Range Beds) (€dqsq).*

PROTEROZOIC

MESOPROTEROZOIC (TYENNAN REGION METASEDIMENTARY ROCKS)

- **Pt / Ptts** — *Metamorphic rocks, dominantly metaquartzite and metapelite (Pt). Dominantly quartzite (Ptts).*
- **Ptsl** — *Platey or schistose micaceous quartzite (Ptsl).*
- **Ptsm** — *Quartzite with interlayered quartz–mica and mica–quarz phyllite (Ptsm).*
- **Ptp** — *Phyllite and quartz–schist (Ptpq). Dominantly phyllite (Ptp).*
- **Ptpq / Ptpaq** — *Quartz–mica and mica–quartz phyllite of predominantly light– to dark–grey colour (Ptpaq).*
- **Ptpg** — *Fine– to coarse–grained, often thinly banded, pelitic, garneliferous quartz–mica and mica–quartz schist, commonly containing phengite, biotite, almandine, albite and chlorite. Minor gneiss, amphibolite and granite. Relatively high metamorphic grade (Ptpg).*

INTRUSIVE ROCKS

DEVONIAN

- **Dl** — *Lamprophyre dykes (Dl).*
- **qv** — *Quartz vein (qv).*

PALEOZOIC — MIDDLE CAMBRIAN (MOUNT READ VOLCANICS)

- **€dbc** — *Mafic dyke, typically chlorite–altered (€dbc).*
- **€grb** — *Biotite granite–adamellite, medium to coarse–grained (€grb).*
- **€grs** — *Granite with strongly sericitised feldspar and biotite altered to apaques, muscovite and chlorite (€grs).*
- **€grm** — *Microgranite and porphyritic microgranite (€grm).*
- **€grms** — *Intensely sericite–quartz altered microgranite. May include minor thermally altered country rocks (€grms).*
- **€grkt** — *K–feldspar–phyric granite, medium to coarse–grained (€grkt).*
- **€gra** — *Granite–related aplite, microgranite or quartz–feldspar porphyry dyke (€gra).*
- **€qfbp** — *Quartz–feldspar–biotite porphyry, coarse–grained (€qfbp).*
- **€dqlb** — *Quartz–feldspar–biotite–phyric lava and/or intrusive (€dqlb).*
- **€da** — *Intermediate intrusive and/or lava (€da).*
- **€dqlq** — *Quartz–feldspar–phyric lava and/or intrusive (€dqlq).*
- **• €grn** — *Local occurrence of granite, associated with high grade metamorphic rocks (€grn).*

Geological boundary – position accurate or approximate.
Geological boundary – inferred.
Fault – unspecified type, position accurate or approximate.
Fault – unspecified type, inferred.
Fault – unspecified type, concealed.
Scarp.
Lineament visible on aerial photographs.
Axial surface trace of major fold, antiform.
Axial surface trace of major fold, synform.
(white line) Limit of mapping of sub–unit within undifferentiated rock unit.

Strike and dip of bedding – right way up; overturned; facing unknown.
Strike of vertical bedding; facing unknown.
Strike and dip of cleavage of unspecified type and relative age; vertical.
Strike and dip of cleavage or foliation, relative local age S1; vertical.
Strike and dip of cleavage or foliation, relative local age S2; vertical.
Strike and dip of cleavage of unspecified type and relative age parallel to bedding, facing unknown.
Trend and plunge of minor fold hinge line, unspecified relative age; horizontal.
Trend and plunge of minor fold hinge line, unspecified relative age, symmetrical; vergence sinistral.
Trend and plunge of hinge line of reclined minor fold, unspecified relative age, symmetrical.
Trend and plunge of hinge line of minor fold with vertical axial surface, relative local age F2.
Trend and plunge of hinge line of unspecified relative age, minor synform.
Strike and dip of dominant joint set; vertical.
Strike and dip of igneous banding or platy alignment.
Strike and dip of ductile shear–band.
Strike and dip of mafic schlieren associated with granitic rock.
Strike and dip of metamorphic foliation other than cleavage; vertical; parallel to compositional layering.
Strike of dyke or vein, rock type or mineral specified in digital data; with dip; vertical.
Strike of vertical crenulation cleavage.
Generalised palaeocurrent direction, showing sense of movement.
Trend and plunge of mineral elongation lineation.
Field station for adjacent readings on the map.
Mineral deposit location – hardrock } *Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.*
Mineral deposit location – alluvial } *Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.*
Construction materials location – Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.

Compiled by R.O. Reid and D.C. Green, 2000 from the following sources (see Responsibility Diagram):

A Pemberton, J.; Vicary, M.J.; Bradbury, J.; Corbett,K.D. 1991: Geology of the Elliott Bay - Mt Osmund area. Mt Read Volcanics Project, Map 10.

B Hall, W.D.M. et al. 1969. 1 Inch:mile Rocky Point and De Witt Geological Maps. Broken Hill Proprietary Company Limited. TCR 69_0555.

Updated by:

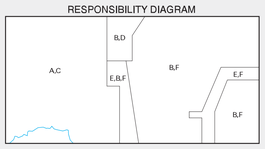
C Corbett, K.D. (2004), as part of the Western Tasmanian Regional Minerals Program.

D Air photo and WTRMP geophysical data interpretation by M.J. Vicary, 2004.

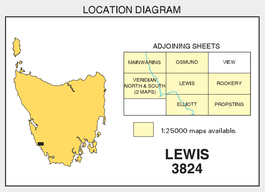
E Limited traverses by W.D.M. Hall and M.J. Vicary, 2006.

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

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



REFERENCE THIS MAP AS:

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AGD66 - AMG Zone 55. Contour Interval: 20 metres.

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