MINERAL RESOURCES TASMANIA
DIGITAL GEOLOGICAL ATLAS 1:25 000 SERIES
LIVINGSTONE, SHEET 3438

LIVINGSTONE

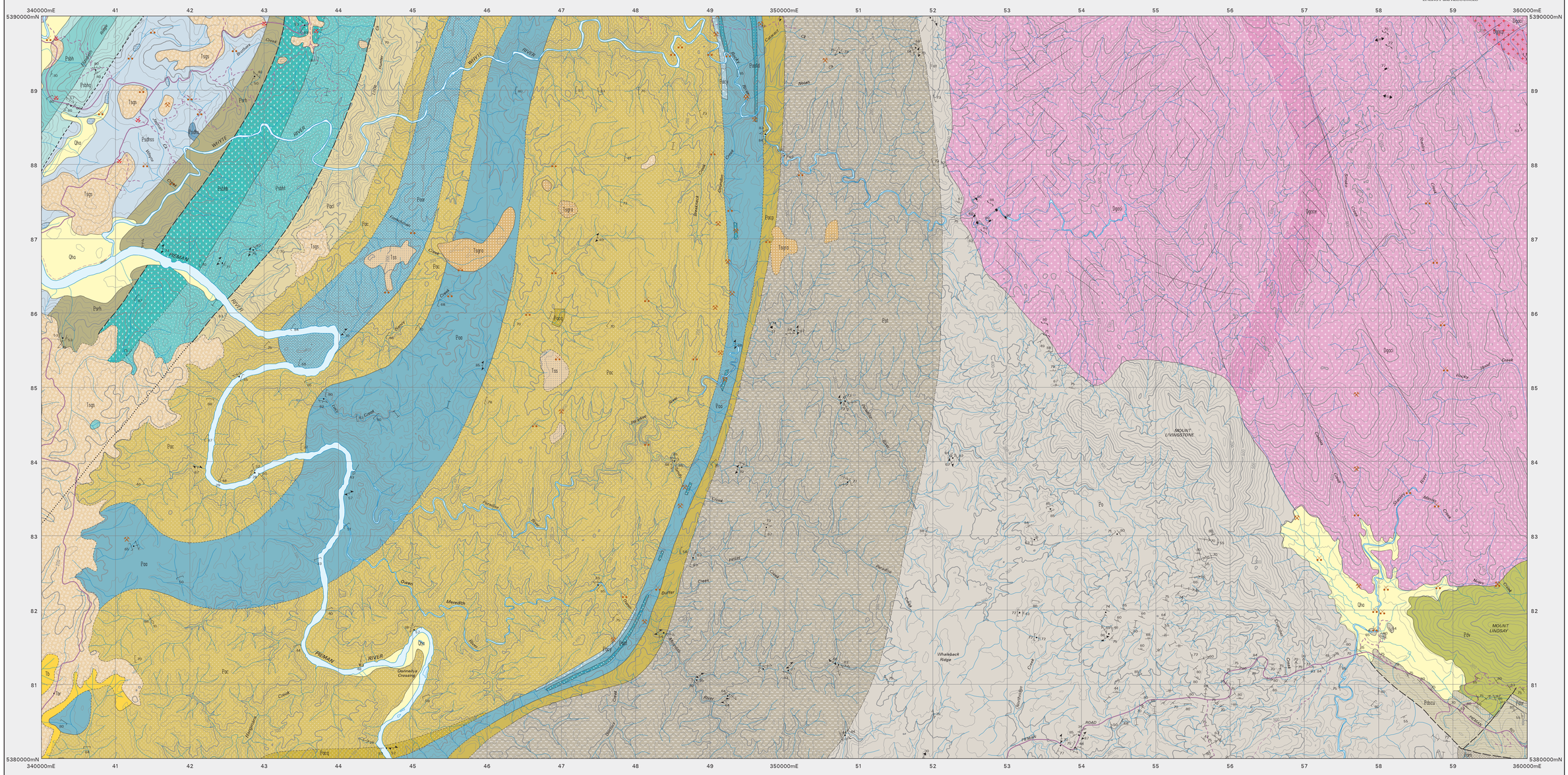
Scale: 1:25 000

0 500 1000 1500 2000 2500m

MINERAL RESOURCES TASMANIA

Tasmania

DEPARTMENT of INFRASTRUCTURE ENERGY and RESOURCES



CAINOZOIC

QUATERNARY

Qha — *Marsh and swamp deposits, alluvium, river gravels and slope wash deposits (Qha).*

Erosional surface.

TERTIARY

Tss — *Quartzose gravel and sand (Tss).*

Tb — *Basalt (Tb), including local occurrence of transitional olivine basalt (Tbr) at 340170mE 5380880mN.*

Tsgs / Tsgra — *Quartzose gravel and sand with lignite silty clay (Tsgs), with upper Eocene–Oligocene microflora at 347900mE 5389170mN; minor gravel with log of gravel and bedrock–derived vein quartz (Tsgra).*

Angular unconformity.

PROTEROZOIC

NEOPROTEROZOIC

Pdv — *Mafic volcaniclastic lithicwacke, siltstone and mudstone, with minor carbonate and tholeiitic basalt (Crimson Creek Formation) (Pdv).*

SUCCESS CREEK GROUP

Pdsr — *Red chert mudstone with minor conglomerate layers (upper 'red rock' member of Renison Bell Formation) (Pdsr).*

Pdscu — *Black mudstone, laminated siliceous to calcareous siltstone and minor sandstone with conglomerate horizons (Pdscu).*

Angular unconformity.

DONAH FORMATION

Pom — *Thinly bedded, dark grey, slaty to relatively massive pelitic siltstone and mudstone with minor chert (Pom).*

Po — *Graded beds of quartzwacke, interlayered with sparsely chloritic pelitic siltstone and mudstone with interbeds containing coarse detrital muscovite (Pou).*

Transitional metamorphic boundary.

Pot — *Micaceous quartz schist with locally preserved graded beds, interlayered with grey and green, pelitic phyllite and minor fine–grained schist (correlate of Keith Schist) (Pot).*

Transitional to relatively sharp lithological boundary.

ARTHUR METAMORPHIC COMPLEX (WHYTE SCHIST)

TIMMS GROUP

Pac — *Interbedded green to grey phyllite and fine–grained schist, usually comprising muscovite and quartz with trace to dominant chlorite, albite and dolomite; and containing scattered thin layers of actinolitic amphibolite (Pac).*

Pacq — *Interbanded phyllite, fine–grained schist and minor actinolitic amphibolite, with micaceous quartz schist and relatively minor porphyroblastic schist (Pacq).*

Pacp — *Grey phyllite common to dominant (Pacp).*

Pacl — *Interbanded phyllite, fine–grained schist and minor actinolitic amphibolite, with intervals of boudinaged thin beds and probable flattened clasts of annealed meta–quartzarenite (Pacl).*

PALAEOZOIC

INTRUSIVE ROCKS

LATE DEVONIAN–(EARLY CARBONIFEROUS)

Dgacl — *Very coarse–grained equigranular biotite granite, with very abundant intrusions of fine–to coarse–grained porphyritic (quartz, K feldspar, plagioclase) biotite granite (Dgacl). Some areas of pink (Dgacp), and grey to white (Dgace) medium–to coarse–grained equigranular granite shown. Quartz–tourmaline nodules locally abundant. (Dgacl, Dgacp, Dgace: felsic phase of Meredith Granite).*

Geological boundary – position approximate.

Geological boundary – position inferred.

Transitional geological boundary – position approximate.

Fault – position approximate.

Fault – inferred.

Fault – concealed.

Photo lineament.

(white line) *Colour boundary*

Strike and dip of bedding, facing known – right way up; facing indicated by single tic; overturned.

Strike and dip of bedding, facing unknown – dipping; vertical.

Strike and dip of cleavage – dipping; vertical.

Strike and dip of cleavage, relative local age S1 – dipping; vertical.

Strike and dip of cleavage, relative local age S2 – dipping; vertical.

Strike and dip of crenulation cleavage – dipping; vertical.

Trend and plunge of hingeline of minor fold; with dip and dip direction of axial surface indicated.

Trend and plunge of hingeline of minor fold; with dip and dip direction of axial surface indicated, relative local age F1; F2; F3.

Trend of apparent lineation of K–feldspar phenocrysts on horizontal surface of granitic rock.

Strike and dip of dyke or vein, rock type or mineral specified by RCODE in Point Attribute Table.

Strike and dip of dominant joint set – dipping; vertical.

Strike and dip of kink band, movement sense unspecified – dipping; vertical.

Mineral deposit location – hardrock / *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.

PROTEROZOIC

NEOPROTEROZOIC

TIMMS GROUP — ARTHUR METAMORPHIC COMPLEX (WHYTE SCHIST)

Paa — *Dominant to common layers of foliated, fine–to rarely coarse–grained, occasionally chloritised, hornblendic subalkaline amphibolite with common magnetite, interlayered with usually chloritic phyllite and schist (Paa).*

Paar — *Dominantly amphibolite with rare magnetite, interlayered with chloritic phyllite and schist (Paar).*

Paald — *Dominantly amphibolite with lenses of richly disseminated magnetite (–subordinate pyrite), interlayered with chloritic phyllite and schist (Paald).*

Paam — *Dominantly amphibolite with lenses of massive magnetite (–subordinate pyrite), interlayered with chloritic phyllite and schist (Paal).*

Pacy — *Dominantly felsic albite schist with relict medium–grained microline–albite granitoid (Pacg).*

Faulted contacts with Psbh etc.

Psrh — *Grey slaty pelitic siltstone with minor banded chert and thin layers of silicified oolitic carbonate (Psrh).*

Conformable boundaries.

CORINNA DOLOMITE — AHRBERG GROUP

Psdh — *Pale grey and cream, massive, fine–grained dolomite (Lsdh).*

Psdhs — *Variably silicified dolomite (Psdhs).*

Psdhss — *Mainly lag of silicification products of dolomite (Psdh), including silica flour, commonly obscured by Tertiary derived slope wash deposits (Psdhss).*

Faulted boundaries on this sheet, conformable elsewhere.

BERNA–OLI VOLCANICS — AHRBERG GROUP

Psbh — **Psbhb** — *Abundant metabasalt, with grey tuffaceous and pelitic siltstone (Psbhb).*

Psbht — *Interbanded slaty or phyllitic to relatively massive, green to grey, tuffaceous and pelitic, chloritic metasiltstone with minor fine–grained foliated metamorphosed basalt and basaltic wacke (Psbht).*

Psbhg — *Dominantly grey tuffaceous and pelitic metasiltstone (Psbhg).*

Compiled by J.L. Everard, 2001 from the following sources (see responsibility diagram):

A. Turner,N.J; Brown, A.V; McClenaghan, M.P. & Soetrisno, I. 1991. Geological Atlas 1:50,000 series sheet 43 (7914N). Corinna.

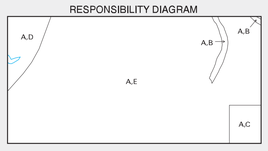
B. Sharples, C. 1992. Subdivisions in the southern part of the Meredith Granite. Appendix 5 in Tasmania Department of Mines Report 1992/06.

C. Brown,A.V. 1986. Geology of the Dundas-Mt Lindsay-Mt Youngbuck Region. Geological Survey Bulletin 62. Tasmania Department of Mines.

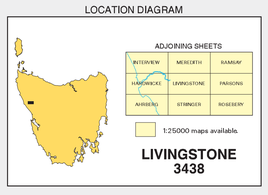
D. Additional information from Calver, C.R. 1996. Reconnaissance isotope chemostratigraphy of Neoproterozoic carbonate rocks in Western Tasmania. Tasmanian Geological Survey Record 1996/10.

E. Updated by M.J. Vicary. 2004 as part of the Western Tasmanian Regional Minerals Program.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



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Map produced by the Data Management Branch of Mineral Resources Tasmania using G.I.S. software.

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

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