MINERAL RESOURCES TASMANIA
DIGITAL GEOLOGICAL ATLAS 1:25 000 SERIES
ULVERSTONE, SHEET 4244

ULVERSTONE

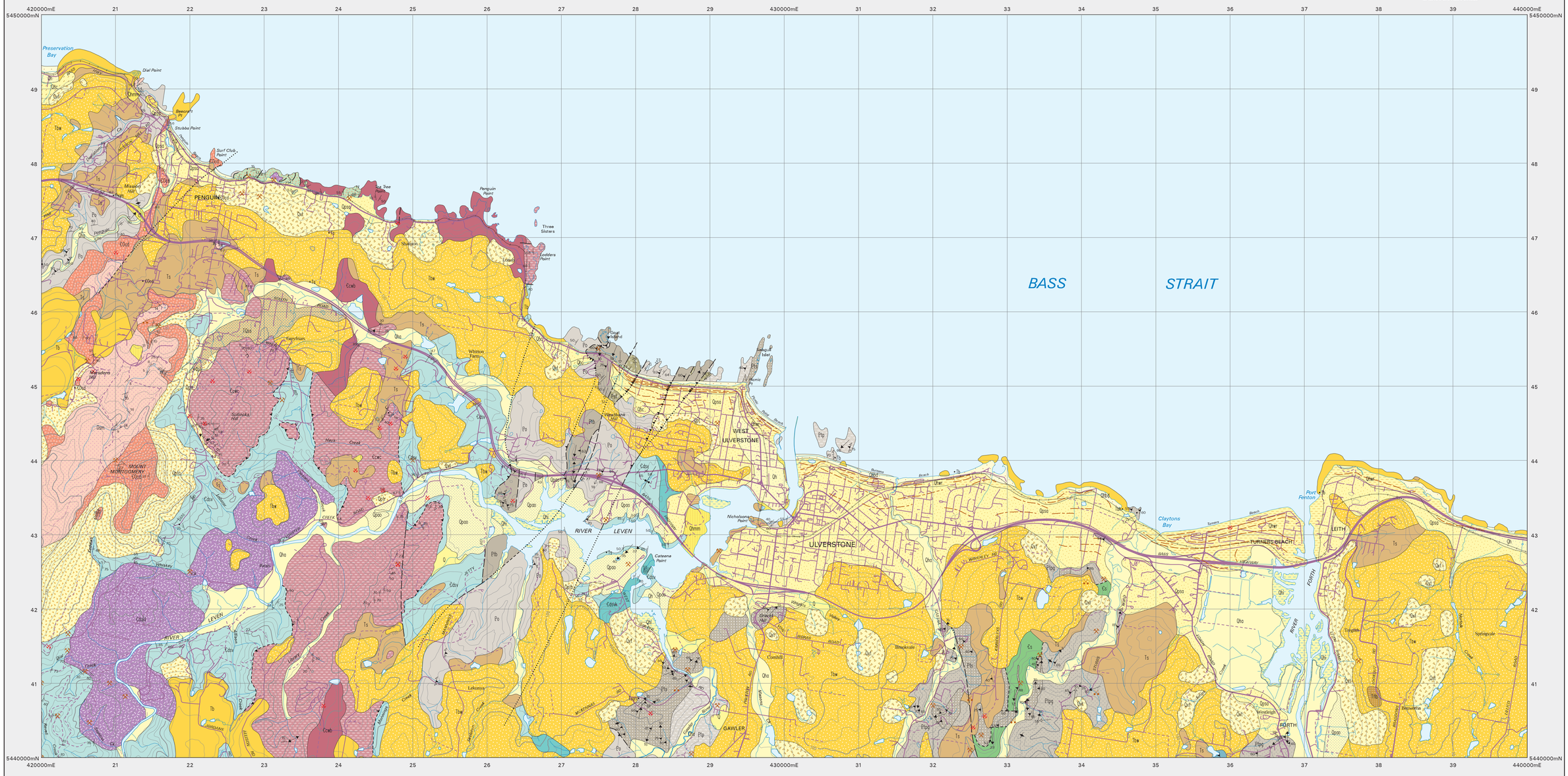
Scale: 1:25 000

0 500 1000 1500 2000 2500m

MINERAL RESOURCES TASMANIA

Tasmania

DEPARTMENT of INFRASTRUCTURE ENERGY and RESOURCES



CENOZOIC

QUATERNARY

HOLOCENE

Qhmm — Man made deposits (Qhmm); including man disturbed ground (Qhm).

Qhbd — Beach sand, sand dunes and beach gravel (Qhbd).

Qhi — Predominantly estuarine mud (Qhi).

Qhc — Colluvium (Qhc).

Qhwr — Sand of stabilised longitudinal beach ridges (Qhwr).

Qha — Stream alluvium, swamp and marsh deposits (Qha).

Qhl — Landslide deposits predominantly derived from weathered Tertiary rocks (Qhl).

PLEISTOCENE

Qpso — Older stabilised aeolian sand of coastal plain (Qpso).

Qpt — Talus (Qpt); basalt talus (Qptb); talus derived from Owen Group correlates (Qpto).

Qpao — Older alluvium of river terraces (Qpao).

TQbo — Deposits of large conglomerate boulders derived from Owen Group (TQbo).

TQss — Dominantly sand, clayey sand and sandy clay and subordinate clay and gravel of probable mixed alluvial and aeolian origin (TQss).

TERTIARY

Tfb — Laterite derived from Tertiary Basalt (Tfb).

Tbw — Predominantly deeply-weathered basalt (Tbw).

Tb — Basalt (Tb), including local occurrences of hawaiite (Tbh).

Tsqm — Terrestrial sand, gravel and minor lacustrine deposits (Ts); silicified zones (Tsqm).

Ts — Terrestrial sand, gravel and minor lacustrine deposits (Ts); silicified zones (Tsqm).

PALEOZOIC

ORDOVICIAN - LATE CAMBRIAN

Osm — Grey poorly sorted fine-grained sandstone, commonly bioturbated (correlate of Moina Sandstone) (Osm).

€Doca — Pebble–cobble siliciclastic conglomerate and coarse-grained sandstone with abundant quartzite and chert clasts (Duncan Conglomerate) (€Doca).

OWEN GROUP

PALEOZOIC

MIDDLE CAMBRIAN

€dsv — Grey to green massive to bedded wacke, pebble conglomerate and laminated siltstone, with clasts of quartzite and chert, (Undifferentiated Tyndall Group and Western Volcano–Sedimentary Sequence. Previously mapped as Cateena Group) (€dsv).

€dsvbm — Large blocks of chert, quartzite, basalt, limestone, siltstone, mudstone and jasper in a matrix of lithicwacke, mudstone and conglomerate. (Beecraft and Tea Tree Point Megabreccias) (€dsvbm).

€dsvk — Interbedded ashy volcaniclastic siltstone, greywacke and silstone, pumiceous volcaniclastic sediments and dacite–andesite lavas and intrusives (€dsvk).

MT READ VOLCANICS AND CORRELATES

EARLY CAMBRIAN

€cwb — Pillowed to massive fine–to medium–grained augite bearing tholeiitic basalt with intercalated volcaniclastic sandstone and conglomerate, mudstone and chert bearing breccia (Mutton Spilite) (€cwb).

€cwc — Pale to dark grey or black, distinctly bedded and plane laminated to massive or brecciated chert, with minor red and grey siliceous hematitic mudstone and siltstone (Barrington Chert) (€cwc).

CLEVELAND VANGUARD ASSOCIATION

PROTEROZOIC

NEO-PROTEROZOIC

Pst — Fault breccia with blocks of probable Taggari Group correlates including lithic conglomerate, sandstone, mudstone, chert, dolomite, dolomitic diamicitite and limestone, in a sheared mudstone matrix with scaly fabric (Pst).

Po — Quartzwacke turbidite sequence of sandstone, siltstone and well bedded black slaty mudstone (Burnie Formation) (Po).

?MESOPROTEROZOIC

Ptb — Dominantly schistose conglomerate (Goat Island Conglomerate and correlates) (Ptb).

Pts — Dominantly quartzite (Pts).

Ptp — Quartz–chlorite–muscovite schist (Ptp).

Ptpg — Quartz–muscovite–garnet schist (Ptpg).

ULVERSTONE-FORTH METAMORPHICS

INTRUSIVE ROCKS

PALEOZOIC

MIDDLE CAMBRIAN

€dacd — Massive plagioclase–hornblende phyric dioritic, andesitic and dacitic intrusives. U–Pb SHRIMP age of igneous zircon = 500.2 +/– 3.5 Ma at 420701mE, 544197mN. (Lobster Creek Intrusives) (€dacd).

MT READ VOLCANICS

EARLY CAMBRIAN

€s — Serpentinite (€s).

ALLOCHTHONOUS SEQUENCES

?PROTEROZOIC

?MESOPROTEROZOIC

Pta — Amphibolite (Pta).

ULVERSTONE-FORTH METAMORPHICS

Geological boundary – position accurate or approximate.

Geological boundary – inferred.

Trends of older stabilised Holocene beach ridges.

Trends of relict beach ridge related to regressive strandline of Last Intergacial Stage.

Fault – position accurate or approximate.

Fault – inferred.

Fault – concealed.

Thrust fault (teeth on upper plate) – position accurate or approximate.

Thrust fault (teeth on upper plate) – inferred

Thrust fault (teeth on upper plate) – concealed.

(white line) Limit of mapping of sub–unit within undifferentiated rock unit.

Axial surface trace of major later synform.

Strike and dip of bedding, right way up; overturned.

Strike and dip of bedding, facing unknown; vertical.

Strike and dip of compositional layering.

Strike and dip of cleavage of unspecified type and relative age; vertical.

Strike and dip of cleavage, relative local age S1.

Strike and dip of crenulation cleavage.

Strike and dip of metamorphic foliation other than cleavage – dipping; vertical.

Strike and dip of metamorphic foliation other than cleavage, relative local age S1 – dipping; vertical.

Trend and plunge of minor fold hinge line; unspecified relative local age, with dip and dip direction of axial surface.

Trend and plunge of minor fold hinge line; relative local age F1; F2.

Trend of horizontal minor fold hinge line, relative local age F2.

Strike and dip of outcrop–scale fault of unspecified relative age, type unspecified.

Trend and plunge of minor fold hinge line, unspecified relative age, with dip and dip direction of axial surface, vergence dextral.

Trend and plunge of minor fold hinge line, unspecified relative age, with dip and dip direction of axial surface, symmetrical.

Trend and plunge of minor fold hinge line, unspecified relative age, with dip and dip direction of axial surface, vergence sinistral.

Trend and plunge of crenulation lineation.

Fossil location.

Notable small outcrop.

Field station for adjacent readings on map.

Mineral deposit location – hardrock

Mineral deposit location – alluvial

Construction materials location –

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

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

Compiled by M.J. Vicary, 2004 as part of the Western Tasmanian Regional Minerals Program from the following sources (see Responsibility Diagram):

A BURNS, K.L. 1963. Geological atlas 1 mile series. Zone 7 Sheet 29 (N8115 I and IV) Devonport. Tasmania Department of Mines.

With additional information from:-

1 HERRMANN, W. 1993. Notes on a geological reconnaissance of the Dial Range - EL 9/1992. Appendix B in FitzGerald, F.G. 1993. EL 9/1992 Dial Range Annual Report June 1992 - June 1993. Unpublished Report, Pasminco Exploration. TCR 93-3447.

2 CRAWFORD, A.J. 1993. Summary and implications of petrographic work on Pasminco Dial Range EL 9/1992. Appendix C in FitzGerald, F.G. 1993. EL9/1992 Dial Annual Report June 1992 - June 1993. Unpublished Report, Pasminco Exploration. TCR 93-3447.

3 SPROULE, R.A. 1994. Stratigraphy and Geochemistry of the Dial Range Trough, NW Tasmania. BSc(hons) thesis. University of Tasmania.

B J.L. Everard, unpublished data.

C WILSON, P.A. 1982. Annual Report EL 24/1973 Dial Range. 1980 Field Season. Unpublished Report, Geopeko Limited. TCR 82-1875.

Updated by:

D M. Vicary 2004, as part of the Western Tasmanian Regional Minerals Program.

E C.R. Calver 2005. Field checking and revision of geology as part of the Northwest Landslide Hazard Project.

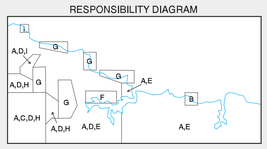
F D.B. Seymour 2005 - 2007. Field work.

G D.B. Seymour 2007. 1:25000 scale geological mapping.

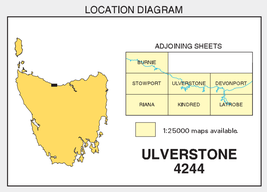
H J.L. Everard 2007. 1:25000 scale geological mapping.

I C.R. Calver 2007. 1:25000 scale geological mapping.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



REFERENCE THIS MAP AS:

VICARY,M.J.; CALVER,C.R.; EVERARD,J.L.; SEYMOUR,D.B. 2008. Digital Geological Atlas 1:25000 series, sheet 4244 Ulverstone. Mineral Resources Tasmania.

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

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