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

ULVERSTONE

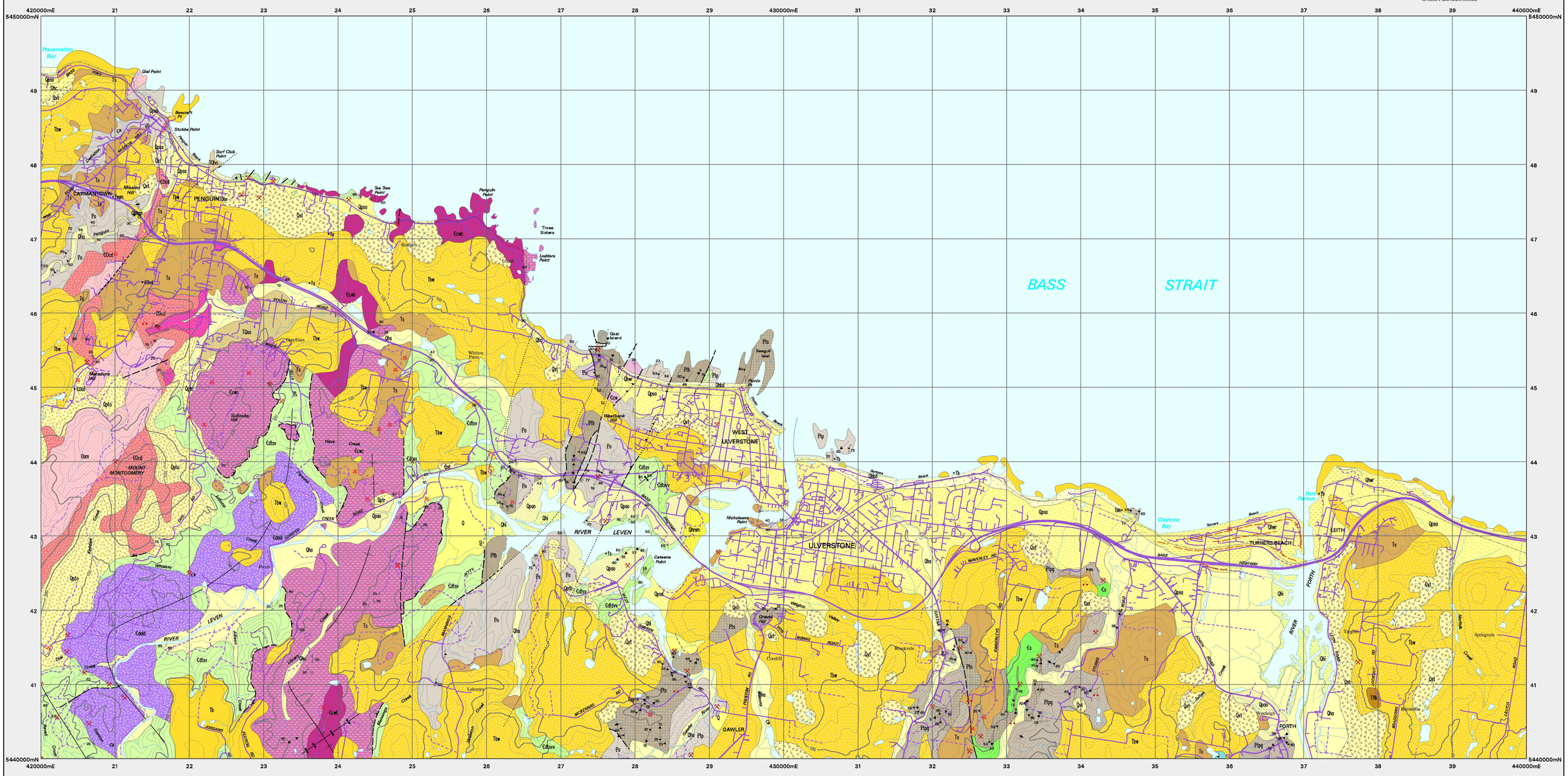
Scale: 1:25 000

0 500 1000 1500 2000 2500m

MINERAL RESOURCES TASMANIA

Tasmania

DEPARTMENT of INFRASTRUCTURE ENERGY and RESOURCES



CAINOZOIC

QUATERNARY

HOLOCENE

- **Qhmm** — Man made deposits (Qhmm).
- **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).
- **Qxt** — Landslide deposits predominantly derived from weathered Tertiary rocks (Qxt).

PLEISTOCENE

- **Qpso** — Older stabilised aeolian sand of coastal plain (Qpso).
- **Qptb** — Basalt talus (Qptb); talus derived from chert (Qptr); quartz sandstone and conglomerate talus derived from Owen Group correlates (Qpto).
- **Qpoo** — Older alluvium of river terraces (Qpoo).
- **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

- **Tflb** — Laterite derived from Tertiary Basalt (Tflb).
- **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**

PALAEOZOIC

ORDOVICIAN - LATE CAMBRIAN

OWEN GROUP

- **Osm** — Grey poorly sorted fine-grained sandstone, commonly bioturbated (correlate of Moina Sandstone) (Osm).
- **€Ocd** — Pebble-cobble siliciclastic conglomerate and coarse-grained sandstone with abundant quartzite and chert clasts (Duncan Conglomerate) (€Ocd).
- **€Ocg** — Interbedded purple mudstone and fine sandstone with minor chert bearing siliciclastic conglomerate (Gnomon Mudstone) (€Ocg).

PALAEOZOIC

MIDDLE CAMBRIAN

MT READ VOLCANICS AND CORRELATES

- **€dtsv** — 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) (€dtsv).
- **€dtsvv** — Felsic volcanic and volcaniclastic rich horizon within €dtsv (€dtsvv).
- **€dtsvbm** — 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) (€dtsvbm).

TEARLY CAMBRIAN

CLEVELAND-WARATAH ASSOCIATION

- **€cw** — Mafic volcaniclastic lithicwacke, muscovite lithicwacke, siltstone, mudstone and minor carbonate (€cw).
- **€cwb** — Pillowed to massive fine-to medium-grained augite bearing tholeiitic basalt with intercalated volcaniclastic sandstone and conglomerate, mudstone and chert bearing breccia (Motton Spilite) (€cwb).
- **€cwc** — Pale to dark grey, faintly bedded to massive or brecciated chert (Barrington Chert) (€cwc).

PROTEROZOIC

NEO-PROTEROZOIC

BURNIE FORMATION

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

MESOPROTEROZOIC

ULVERSTONE-FORTH METAMORPHICS

- **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).

INTRUSIVE ROCKS

PALAEOZOIC

MIDDLE CAMBRIAN

MT READ VOLCANICS

- **€doid** — Massive plagioclase-hornblende phyric dioritic, andesitic and dacitic intrusives. (U-Pb SHRIMP age of igneous zircon = 500.2 +/- 3.5 Ma at 420703mE, 5441978mN. (Lobster Creek Intrusives) (€doid).

EARLY CAMBRIAN

ALLOCHTHONOUS SEQUENCES

- **€s** — Serpentinite (€s).

EARLY CAMBRIAN

CLEVELAND-WARATAH ASSOCIATION

- **€cwb** — Tholeiitic basalt lava and intrusives (€cwb).

?PROTEROZOIC

?MESOPROTEROZOIC

ULVERSTONE-FORTH METAMORPHICS

- **Pta** — Amphibolite (Pta).

- Geological boundary – position accurate or approximate.
- Geological boundary – inferred.
- Trends of older stabilised Holocene beach ridges.
- Fault – position accurate or approximate.
- Fault – inferred.
- Fault – concealed.
- Thrust fault (teeth on upper plate) – position accurate or approximate.
- Axial surface trace of major early antiform.
- Axial surface trace of major early synform.
- Axial surface trace of major later synform.

- Strike and dip of bedding, right way up.
- 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

  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 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.

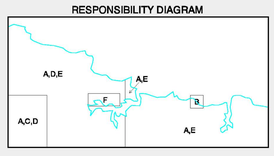
Updated by:

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

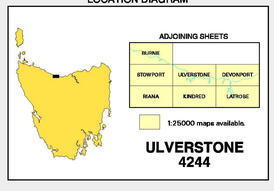
E C.R. Calver 2005. Field checking and revision of geology as part of the Northwest Landslide Hazard Project.

F D.B. Seymour 2005. Field work.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



REFERENCE THIS MAP AS:
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AGD66 - AMG Zone 55. Contour Interval: 20 metres.

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