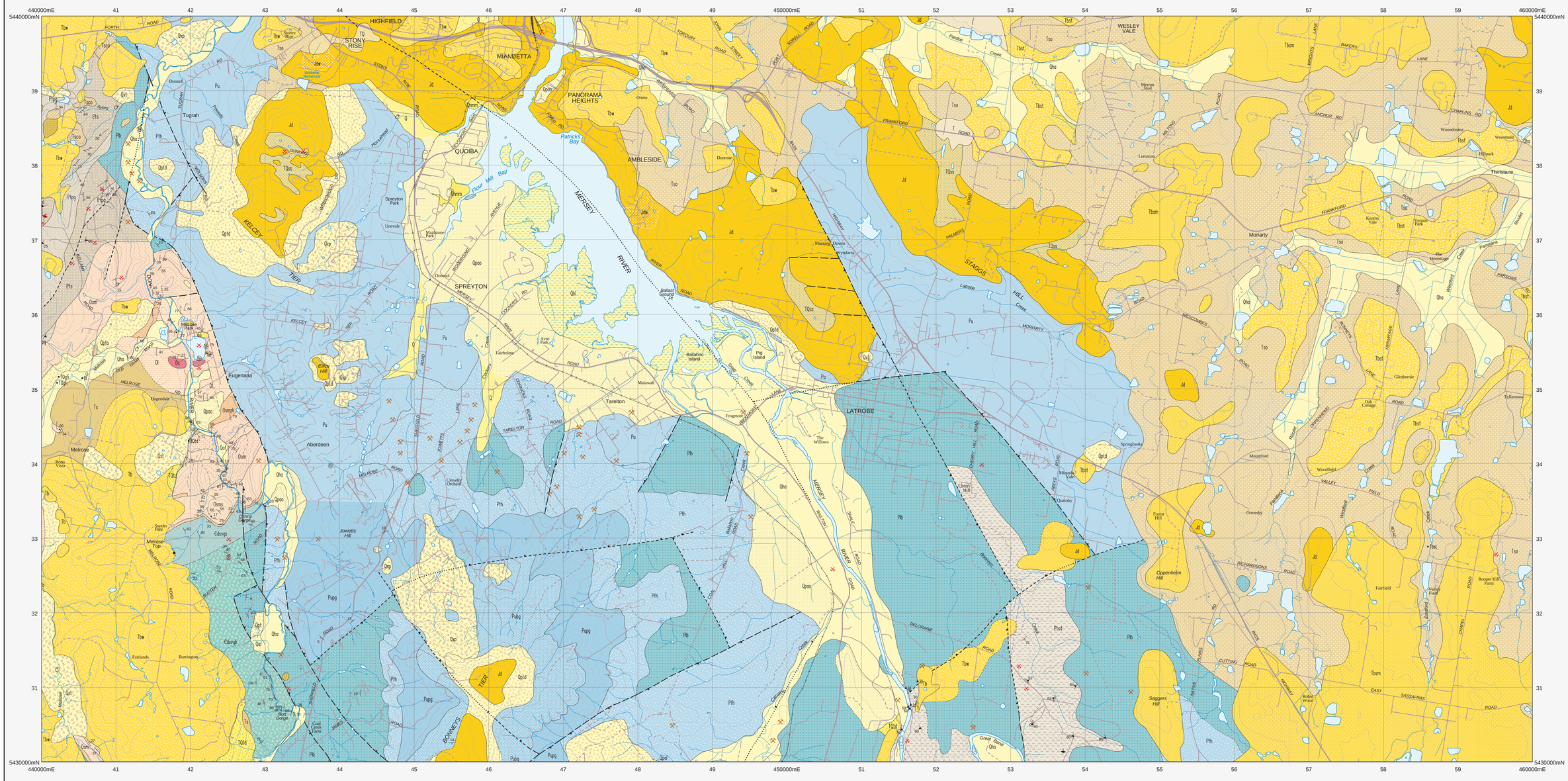
Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
LATROBE, SHEET 4443

LATROBE

Scale: 1:25 000

0 500 1000 1500 2000 2500m



Compiled by D. C. Green, B.Sc.(Hons), Ph.D., 2004 from the following sources (see responsibility diagram).

A BURNS, K.L. 1963. Geological Atlas 1:63 360 Series. Sheet 29, Devonport. Tasmanian Department of Mines.

B JENNINGS, I.B; BURNS, K.L; MAYNE, S.J. and ROBINSON, R.G. 1959. Geological Atlas 1:63 360 Series. Sheet 37, Sheffield. Tasmanian Department of Mines.

C GEE, R.D. and LEGGE, P.J. 1971. Geological Atlas 1:63 360 Series. Sheet 30, Beaconsfield. Tasmanian Department of Mines.

D GULLINE, A.B. 1973. Geological Atlas 1:63 360 Series. Sheet 38, Frankford. Tasmanian Department of Mines.

Updated by:

E M. Vicary 2004, as part of the Western Tasmania Regional Minerals Program.

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

G C.R. Calver 2007. 1:25 000 scale mapping.

H J.L. Everard 2007. 1:25 000 scale mapping.

I D.B. Seymour & J.L. Everard 2007. Limited traverses.

J J.L. Everard 2007. Limited traverses.

K W.C. Cromer. 1993, Geology and groundwater resources of the Devonport – Port Sorell – Sassafras Tertiary Basin. Geological Survey Bulletin 67.

L D.B. Seymour 2007. 1:25 000 scale mapping.

CENOZOIC

QUATERNARY

PLEISTOCENE – HOLOCENE

- **Qhmm** — Man–made deposits (Qhmm).
- **Qhi** — Predominantly estuarine mud (Qhi).
- **Qha** — Stream alluvium, swamp and marsh deposits (Qha).
- **Qaf** — Alluvial fan (Qaf).
- **Qxt** — Landslide deposits predominantly derived from weathered Tertiary rocks (Qxt); from Permian rocks (Qxp); from weathered Jurassic dolerite (Qx)).
- **Qpal** — Clay and alluvial gravel with dolerite boulders in places (Qpal).
- **Qpt** — Talus (Qpt); Talus consisting dominantly of dolerite boulders (Qptd). Basalt talus (Qptb). Quartz sandstone and conglomerate talus derived from Owen Group – Moina Sandstone correlates (Qptq).
- **Qpao** — Older alluvium of river terraces (Qpao).

Erosional surface.

TQ

- **TQss** — Dominantly sand, clayey sand and sandy clay and subordinate clay and gravel of probable mixed alluvial and aeolian origin (TQss).
- **TQgfi** — Ironstone (TQgfi).
- **TQld** — Boulders of Jurassic dolerite and minor quartzite pebbles in clay; reworked into Quaternary slope deposits in places (TQld).

PALEOGENE – NEOGENE

- **T** — Undifferentiated Paleogene – Neogene (T).
- **Ts** — Sand, gravel, silt and clay, consolidated in places (Ts).
- **Tflb** — Laterite derived from Paleogene – Neogene basalt (Tflb).
- **Tb / Tbw** — Basalt (Tb). Predominantly deeply–weathered basalt (Tbw).
- **Tb / Tbsm** — Olivine basalt, deeply weathered in most areas, dated at 25.9 +/– 0.2 Ma (Moriarty Basalt) (Tbsm).
- **Tso** — Sand, quartzite gravel and clay, including interbasalt deposits (Wesley Vale Sand) of Oligocene age (Tso).
- **Tb** — Basalt (Tb).
- **Tbst** — Non–vesicular to highly vesicular and amygdaloidal, in places deeply weathered, alkali olivine basalt, with minor volcanic sandstone and breccia, dated at 38.1 +/– 0.6 Ma (Thirlstane Basalt) (Tbst).
- **Tsco** — Sub–basalt conglomerate, quartz–stone or claystone (Tsco).

Erosional surface.

PALEOZOIC

PERMIAN

- **Pu** — Undifferentiated siltstone and pebbly siltstone with sandstone horizons (Pu).
- **Pubg** — Unfossiliferous pebbly siltstone, siltstone and sandstone (Pubg). (Correlate of Bogan Gap Group).
- **Pupg** — Pebbly sandstone, siltstone and mudstone with marine fossils (Pupg). (Correlate of Poatina Group). (Pu, Pubg, Pupg – Kelcey Tier Beds, Upper Glaciomarine Sequence).

Disconformity

CARBON–IFEROUS

- **Pfh** — Quartz sandstone and minor conglomerate, with a middle interval of mudstone, shale and coal seams (Pfh) (Mersey Coal Measures, correlate of Liffey Group; Lower Freshwater Sequence).
- **Pib** — Poorly sorted pebbly mudstone, siltstone and sandstone with marine fossils in places, with Tasmanite oil shale towards base, and basal siliciclastic conglomerate (Pib). (Spreyton Beds; Lower Glaciomarine Sequence).

PARMEENER SUPERGROUP LOWER DIVISION

DEVONIAN

EARLY MIDDLE DEVONIAN

- **Dc** — Terrestrial cavern fillings consisting of limestone breccia with ferruginous mudstone matrix, and minor lenses of flat–lying laminated sandstone and grey shale (Dc) (Eugenana Beds).

Angular unconformity.

ORDOVICIAN

- **Ol** — Massive or thickly bedded, grey, fine–grained limestone, with marine fossils in places (Ol).
- **Osmsh** — Siltstone, calcareous siltstone and mudstone, with marine fossils in places (Osmsh).
- **Osm / Osmc** — Dominantly very fine– to medium–grained, purple, pink or white quartzarenite, locally cross–bedded (Osm). Chert–bearing, granule to pebble conglomerate indicated (Osmc). Dominantly bioturbated quartz siltstone with sparse marine fossils (Osms).
- **Osms** — Granule to pebble conglomerate, purple, pink or white, with up to 15% chert clasts (Osmc). (Osmc + Osms = Osm + Osmsh = Caroline Creek Sandstone; correlate of Moina Sandstone).

GORDON GROUP

Angular unconformity.

CAMBRIAN

- **Cdsvgs** — Polymict conglomerate, with clasts of mudstone, siltstone, sandstone, basalt; and minor chert, quartzite and schist (Cdsvgs).
- **Cdsvgb** — Massive to thick–bedded, dominantly open–framework pebble conglomerate with clasts of Precambrian provenance (quartzite, schist, minor carbonate); and minor coarse–grained quartz sandstone (Cdsvgb). (Bott Conglomerate).

MOUNT READ VOLCANICS

MESOPROTEROZOIC(?)

- **Pts** — Dominantly quartzite (Pts).
- **Ptpg** — Fine– to coarse–grained, often thinly banded, pelitic, garnetiferous quartz–mica and mica–quartz schist, commonly containing phengite, biotite, almandine, albite and chlorite. Relatively high metamorphic grade (Ptpg).
- **Ptsd** — Dominantly quartz–mica schist and foliated micaceous metaquartzite (Ptsd).

FORTH METAMORPHICS

INTRUSIVE ROCKS

MESOZOIC

JURASSIC

- **Jdw / Jd** — Dolerite and related rocks (Jd). Predominantly deeply–weathered dolerite (Jdw).

Geological boundary – position accurate or approximate.
Transitional geological boundary – position approximate.
Fault – position accurate or approximate.
Fault – inferred.
Fault – concealed.
Fault – position accurate or approximate, downthrown side indicated.
Fault – inferred, downthrown side indicated.
Fault – concealed, downthrown side indicated.
(white line) Limit of mapping of sub–unit within undifferentiated rock unit.

Strike and dip of bedding, right way up.
Strike and dip of bedding, facing unknown.
Strike and dip of cleavage, relative local age S1.
Strike and dip of cleavage of unspecified type and relative age.
Strike and dip of metamorphic foliation other than cleavage; vertical.
Strike and dip of metamorphic foliation other than cleavage, parallel to compositional layering.
Trend and plunge of columnar jointing.
Trend and plunge of minor fold hinge line, unspecified relative age.
Strike of dominant joint set, vertical.
Trend and plunge of minor fold hinge line, realtive local age F2.
Fossil location.
Notable small float or lag occurrence, with rock type indicated.
Notable small outcrop, with rock type indicated.
Mineral deposit location – hardrock
Construction material/industrial mineral/gemstone location
} Data derived from Mineral Resources Tasmania DEPOSITS database. Data point position has not been verified in every case.

REFERENCE THIS MAP AS:

GREEN, D.C. and CALVER, C.R.(compilers) 2008. Digital Geological Atlas 1:25 000 Scale Series. Sheet 4443. Latrobe. Mineral Resources Tasmania.

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Map produced by the Geoscience Information Branch of Mineral Resources Tasmania using G.I.S. software.

GDA94 – MGA Zone 55. Contour Interval: 20 metres.

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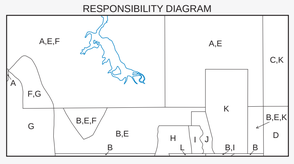
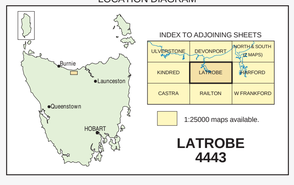
RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



LATROBE
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Plotfile for this map generated from digital data as at: 02-FEB-2012

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