MINERAL RESOURCES TASMANIA
DIGITAL GEOLOGICAL ATLAS 1:25 000 SERIES
LATROBE, SHEET 4443

LATROBE

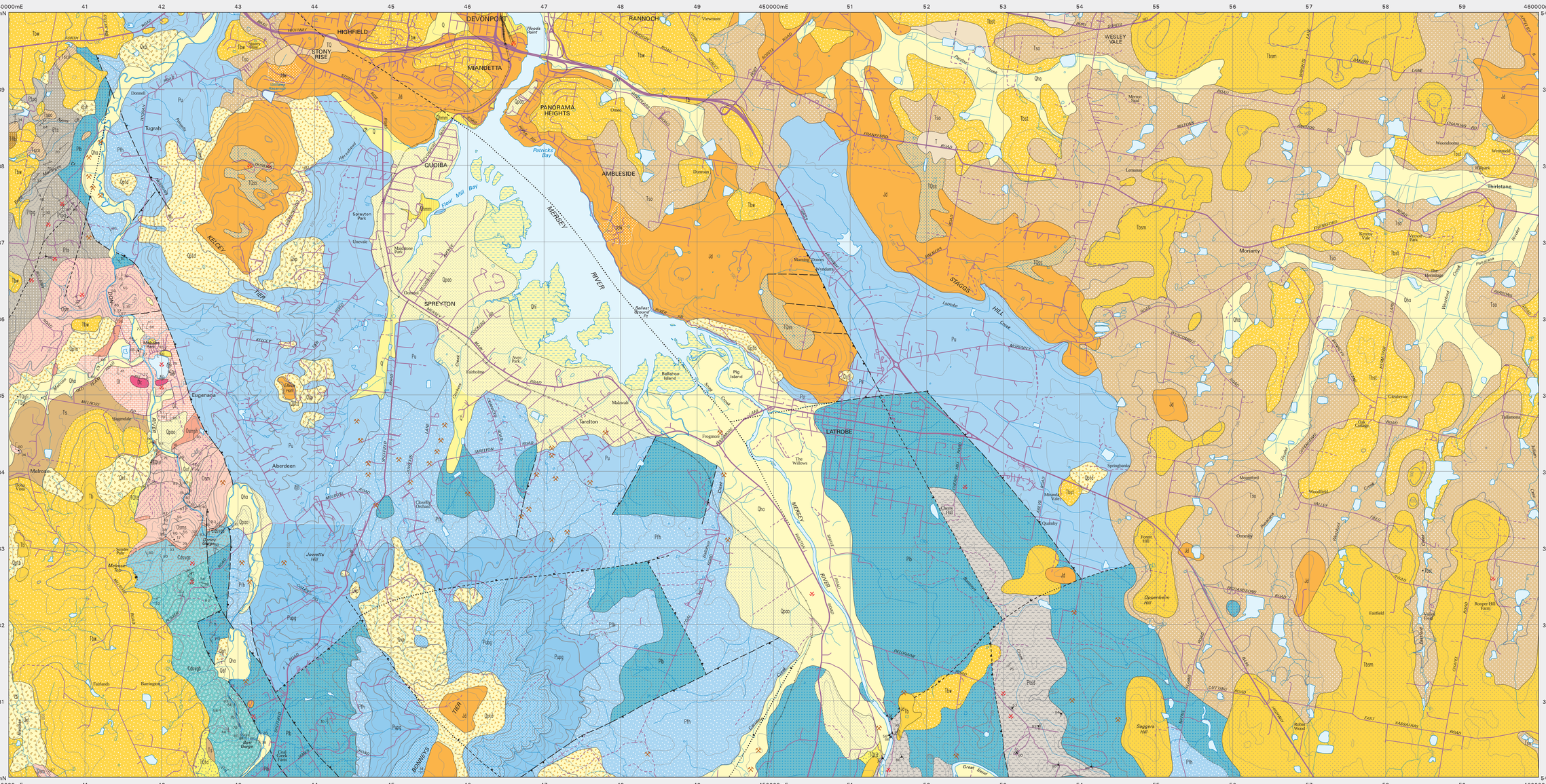
Scale: 1:25 000

0 500 1000 1500 2000 2500m

MINERAL RESOURCES TASMANIA

Tasmania

DEPARTMENT of INFRASTRUCTURE ENERGY and RESOURCES



CENOZOIC

QUATERNARY

PLEISTOCENE - HOLOCENE

Unit	Description
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 (Qxj).
Qpag	Marsh deposits and residual gravels (Qpag).
Qpsa	Older sand, gravel and clay on coastal plains (Qpsa).
Qpt	Talus (Qpt); Talus consisting dominantly of dolerite boulders (Qptd). Basalt Talus (Qptb). Quartz sandstone and conglomerate talus derived from Owen Group – Molna Sandstone correlates (Qpto).
Qpao	Older alluvium of river terraces (Qpao).

Erosional surface.

TERTIARY

Unit	Description
TQss	Dominantly sand, clayey sand and sandy clay and subordinate clay and gravel of probable mixed alluvial and aeolian origin (TQss).
TQgfi	Ironstone (TQgfi).
TQtd	Boulders of Jurassic dolerite and minor quartzite pebbles in clay; reworked into Quaternary slope deposits in places (TQtd).
T	Undifferentiated Tertiary (T).
Ts	Sand, gravel, silt and clay, consolidated in places (Ts).
Tflb	Laterite derived from Tertiary basalt (Tflb).
Tbw	Basalt (Tb). Predominantly deeply-weathered basalt (Tbw).
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

Period	Unit	Description	Group
PERMIAN	Pu	Undifferentiated siltstone and pebbly siltstone with sandstone horizons (Pu).	PARMEENER SUPERGROUP LOWER DIVISION
	Pubg	Unfossiliferous pebbly siltstone, siltstone and sandstone (Pubg). (Correlate of Rogan Cap Group).	
	Pupg	Pebbly sandstone, siltstone and mudstone with marine fossils (Pupg). (Correlate of Paatina 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). Poorly sorted pebbly mudstone, siltstone and sandstone with marine fossils in places, with Tasmanite oil shale towards base, and basal siliciclastic conglomerate (Pfb). (Spreyton Beds; Lower Glaciomarine Sequence).	
	Pfb		
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).	GORDON GROUP
	Osmsh	Siltstone, calcareous siltstone and mudstone, with marine fossils in places (Osmsh).	
	Osm	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).	
	Osmc		
	Osms		
	Osmc	Granule to pebble conglomerate, purple, pink or white, with up to 15% chert clasts (Osmc). (Osmc + Osms + Osm + Osmsh = Caroline Creek Sandstone; correlate of Molna Sandstone).	
		Angular unconformity.	
CAMBRIAN	Cdsvgs	Polymict conglomerate, with clasts of mudstone, siltstone, sandstone, basalt; and minor chert, quartzite and schist (Cdsvgs).	MOUNT READ VOLCANICS
	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).	

PROTEROZOIC

Era	Unit	Description	Group
MESOPROTEROZOIC(?)	Pts	Dominantly quartzite (Pts).	FORTH METAMORPHICS
	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).	

INTRUSIVE ROCKS

Era	Unit	Description
JURASSIC	Jdw	Dolerite and related rocks (Jd). Predominantly deeply-weathered dolerite (Jdw).
	Jd	

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.
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.
Notable small float or log occurrence, with rock type indicated.
Notable small outcrop, with rock type indicated.
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.

Compiled by D. C. Green, 2004 from the following sources (see responsibility diagram):

A BURNS, K.L. 1963. Geological Atlas 1:63360 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 1:63360 Series, sheet 37 Sheffield. Tasmanian Department of Mines.

C GEE, R.D. and LEGGE, P.J. 1971. Geological Atlas 1:63360 Series, sheet 30 Beaconsfield, Tasmanian Department of Mines.

D GULLINE, A.B. 1973. Geological Atlas 1:63360 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. 1:25000 scale mapping.

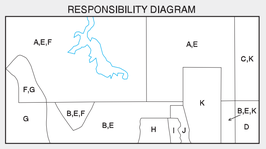
H J.L. Everard 2007 1:25000 scale mapping.

I D.B. Seymour & J.L. Everard 2007, limited traverses.

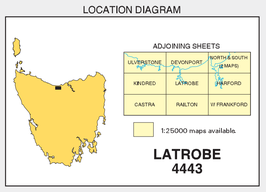
J J.L. Everard 2007, limited traverse.

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

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



REFERENCE THIS MAP AS:
GREEN, D.C. and CALVER, C.R.(compilers) 2008. Digital Geological Atlas 1:25000 Series, sheet 4443 Latrobe. Mineral Resources Tasmania.

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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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