Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

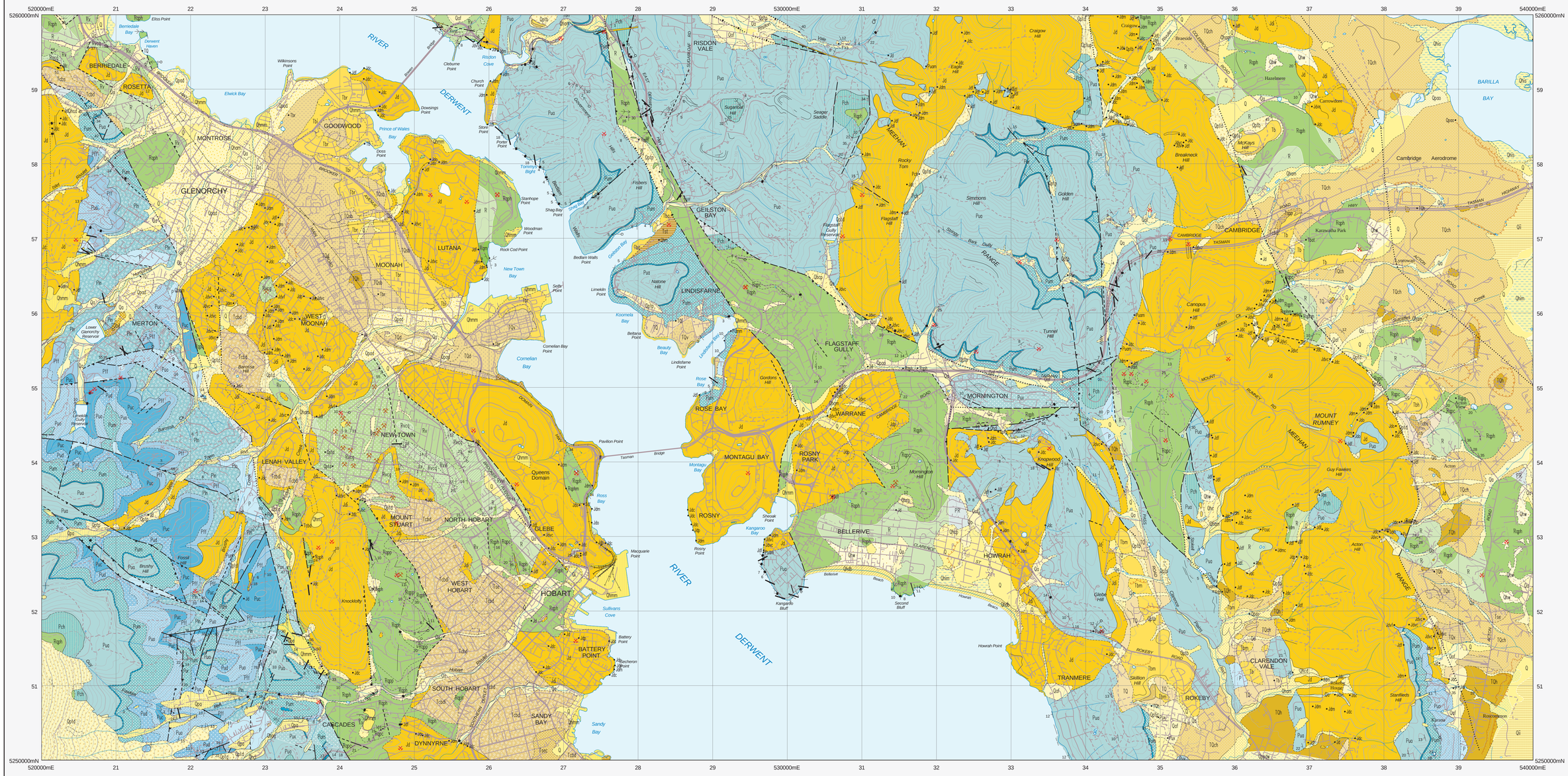
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
HOBART, SHEET 5225

HOBART

Scale: 1:25 000

0 500 1000 1500 2000 2500m

Tasmania
Explore the possibilities



CENOZOIC — QUATERNARY

Unit	Description
Qhmm	Man made deposits (Qhmm), selected mine tailings and man disturbed ground indicated (Qhm).
Qhdb	Modern shore face and associated aeolian dune sand (Qhdb).
Qhi	Paralic clay, silt, sand and minor gravel deposits (Qhi), – of modern salt marsh and associated tidal flats (Qhis), of older lagoons and swamps (Qhim).
Qi	Undifferentiated bay, estuarine, deltaic and alluvial deposits of sand, shelly sand, pebbly sand, cobble gravels, clayey sand, silt and clay (Qi).
Qhaf	Alluvial fan deposits at base of former coastal cliffs (Qhaf).
Qii	Inferred undifferentiated paralic barrier complex and marine deposits (Qii).
Qhw	Aeolian and locally derived sand deposits locally reworked by alluvial processes (Qhw), aeolian dune and sheet sand (Qhws).
Qhc	Colluvium (Qhc) – clayey gravel derived from dolerite (Qhcd), sandy, derived from Upper Parmeener rocks (Qhcp) derived predominantly from Lower Parmeener rocks (Qhcl).
Qham	Alluvial gravel sand and clay (Qa), alluvial fans (Qaf). Alluvial and marsh deposits of modern flood plains, – gravel, sand, silt and clay commonly with organic top layer (Qham), – alluvial gravel deposits (Qhaq).
Qapoo	Alluvial terrace deposits (Qapoo).
Qapad	Alluvial terrace deposits dominantly of cobbles and small boulders of dolerite and subordinate Parmeener clasts (Qpad).
Qpa	Deeply dissected alluvial fan, proximal alluvial terrace and minor talus deposits containing boulders of weathered dolerite and Parmeener derived rocks in places (Qpo).
Qptnv	Periglacial non vegetated scree deposits (Qptnv).
Qpt	Talus and remobilised talus deposits (Qpt), basalt talus (Qptb), talus predominantly of Upper Parmeener sandstone and sand (Qptq), silty talus breccia derived from Lower Parmeener rocks, moderately cemented in places, includes alluvially reworked deposits (Qptp), talus dominantly of Lower Parmeener rocks and dolerite (Qptdp), talus of dolerite and subordinate Upper Parmeener rocks (Qptup) and talus dominantly of large dolerite boulders and in places subordinate Parmeener rocks (Qptd).
Qppdw	Low gradient alluvial fan and alluvial terrace deposits of interbedded gravel and coarse sand, clasts predominantly of dolerite and Parmeener Supergroup rocks (Qppdw); terrace deposits of clay, sand and minor gravel (Qppdc).
TQsb	Undifferentiated Cenozoic deposits with possible subsurface Paleogene – Neogene basalt (TQsb).
TQbd	Boulder deposit, clasts dominantly of weathered to extremely weathered dolerite and Parmeener rock, rare basalt clasts (TQbd).
TQch	Dominantly plastic clay, silty clay and sandy clay with minor pebbly layers and subordinate gravel and well-sorted sand layers (TQch).
TQh	Undifferentiated piedmont, alluvial fan, alluvial terrace, exhumed alluvial, lag and possible beach gravel and poorly-cemented conglomerate containing pebbles and cobbles of dolerite or Parmeener derived rocks (TQh).
TQv	Supra-basalt moderately lithified conglomerate with interbedded sandstone at places, clasts of well rounded siliceous cobbles and pebbles, of Paleogene – Neogene derived silica, and rarely of dolerite (TQv).
TQd	Undifferentiated fluviatile and swamp deposits of poorly-consolidate to unconsolidated sand, clayey lable sand and silt with wood pieces and cross-bedding at places and interbedded subordinate clay and silty clay, minor fine-grained gravel; includes deposits related to probable former course of Derwent River, surficial swamp deposits and supra-basalt sand (TQd).

CENOZOIC — PALEOGENE - NEOGENE

Unit	Description
TQx	Cenozoic or older strata inferred from closely spaced uniform bedding traces visible on aerial photographs (TQx).
TQi	Silica stone and lag of silica stone (TQi).
Tf	Ferricrete (Tf).
Tb	Basalt (Tb).
Tst	Travertine spring deposits with fossil plants and freshwater fauna, associated with basalt at Geilston Bay (Tst) (includes Geilston Travertine).
Tbat	Basaltic volcanic agglomerate, tuff and associated rocks (Tbat).
Tsp	Sub-basalt or inferred sub-basalt deposits (Tsp), – very poorly-consolidated well sorted sandstone, siltstone and claystone (Tspl), poorly-sorted boulder and cobble deposits with clasts of dolerite, Parmeener rocks and possible volcanic rocks, clayey matrix (Tspv), very poorly-consolidated plastic olive, brown and buff coloured mudstone siltstone and sandstone with dispersed or bedded layers of dolerite and Parmeener clasts (Tspp).
Tcb	Poorly-sorted large boulder to pebble grade deposits (Tcb), – clasts dominantly of dolerite with traces to rarely dominant amounts of Parmeener mudstone and other rocks, clayey matrix (Tcbd), inferred dolerite boulder beds overlying older rocks or deposits at unknown depth (Tcbdi); clasts generally smaller and locally derived, dominantly of Parmeener rocks with subordinate dolerite in some areas, clayey or sandy matrix (Tcbs).
Tcbx	Deposits of very large (> 2m) dolerite boulders in clay, and derived boulders lag deposits (Tcbx).
Tse	Poorly-consolidated interbedded claystone, sandstone and pebble conglomerate (Tse), poor-consolidated claystone with some horizons with lignitic material (Tsec).
Tsl	Poorly-consolidated white siltstone, sandstone and claystone with Paleogene – Neogene fossil flora (Tsl).

Erosional surface.

MESOZOIC — TRIASSIC (UPPER PARMEENER SUPERGROUP)

Unit	Description
Rvcg	Upper Parmeener contact metamorphosed by Jurassic dolerite (Rm). Thick–to thin–bedded volcanic lithic sandstone, siltstone, mudstone and coal seams, fossil plants on some horizons (Newtown Coal Measures in part (Rvcg).
Rvcq	Interbedded cross–bedded white quartzose sandstone, quartz–rich lithic sandstone, siltstone and mudstone; upper interval with much dark grey carbonaceous mudstone, thin lenticular coal seams and fossil plants in places (Newtown Coal Measures in part) (Rvcq).
Rvvl	Interbedded yellow brown or grey carbonaceous siltstone, mudstone and thin–to thick–bedded quartz–rich lithic, arkosic sandstone, some fossil plants, common siltstone palaeosols (Rvvl).
Rvvs	Predominantly fine–grained quartz sandstone, commonly partly silicified, interbedded with mudstone and lithic sandstone at places (Rvvs).
Rvvr	Predominantly brown, buff, grey carbonaceous and green siltstone and mudstone, interbedded with quartz–rich lithic sandstone, horizons of crowded vertical burrows and siltstone paleosols (Rvvr). Rv = Rvcg + Rvcq + Rvvl + Rvvs + Rvvr
Rqm	Interbedded micaceous brown, red–purple, green and grey carbonaceous siltstone, shale, mudstone and planar bedded, ripple–laminated or cross–bedded sandstone and notable thin beds of silicified bioturbated sandstone (Rqm).
Rqp	Freshwater predominantly cross–bedded quartzose to feldspathic sandstone commonly with overturned cross–bedding and subordinate micaceous siltstone with some red–purple beds, sparse plant and vertebrate fossils (Rqp), – Knocklofty Formation (Rqph) contact metamorphosed by Jurassic dolerite (Rqphm), intervals predominantly of siltstone, shale, mudstone and sandstone indicated (Rqpc) and (Poets Road Member) (Rqpp), granule sandstone and pebbly sandstone indicated (Rqpg).
Pch	Freshwater cross–bedded arkosic to quartzose sandstone and micaceous siltstone, lower interval with some graphitic or carbonaceous sandstone, rare coalified wood, large calcareous concretions in some areas, thin beds of quartz pebble conglomerate near base in many areas; upper interval less feldspathic (correlate in part of Cygnet Coal Measures) (Pch).

PALEOZOIC — PERMIAN (LOWER PARMEENER SUPERGROUP)

Unit	Description
Puaa	Generally unfossiliferous, glaciomarine interbedded non–fissile and fissile siltstone and silty sandstone, common bioturbation, lonestones; uppermost beds of laminated to massive siltstone with some thin beds of well–sorted sandstone (Abels Bay Formation) (Pua) contact metamorphosed by Jurassic dolerite (Puam).
Pur	Cliff forming massive, bioturbated to homogeneous, moderately well–sorted feldspathic quartz sandstone with thin pebble–and cobble–rich layers (Risdon Sandstone) (Pur).
Pum	Generally poorly fossiliferous interbedded glaciomarine fine–to medium–grained sandstone and fissile to non–fissile siltstone with common lone stones and pebble rich patches, top beds richly fossiliferous, lower beds generally coarse–grained and variably fossiliferous (Malbina Formation) (Pum) contact metamorphosed by Jurassic dolerite (Pumm). Pux = Pua + Pur + Pum
Pud	Dominantly interbedded, richly fossiliferous glaciomarine siltstone and sandstone and subordinate thin beds of granule sandstone, lonestones present, thinner bedded than enclosing formations (Deep Bay Formation) (Pud).
Puc	Dominantly richly fossiliferous, interbedded glaciomarine grey bioclastic and argillaceous limestone, calcareous siltstone and rare metabentonite layers, overlying dark grey fossiliferous siltstone and calcareous siltstone and basal fossiliferous poorly–sorted pebbly sandstone (Berriedale Limestone, Nassau Siltstone and Rayner Sandstone) (Puc). Puo = Pud + Puc
Pff	Paralic siltstone and fine–grained sandstone, variably bedded – massive, laminated, flaser bedded, rippled, thin beds of cross–laminated or wavy–bedded sandstone, glaciomarine intervals and rare thin beds of pebbly granule sandstone (Faulkner Group) (Pff).
Pfr	Generally fossiliferous, fissile and non–fissile glaciomarine siltstone and sandstone with lonestones; richly fossiliferous central interval with some impure limestone; upper interval dominantly of less fossiliferous micaceous siltstone (Bundella Formation) (Pfn), contact metamorphosed by Jurassic dolerite (Pfmm).
Plo	Poorly–bedded coarsely fretting uniform grey marine siltstone with sparse lodestones and probable glendonite moulds (correlate of Woody Island Siltstone) (Plo).

Lymingtonian Stage
Bernacchian Stage
Tamarian Stage
REKUNIAN SERIES

IGNEOUS ROCKS

Unit	Description
Tb	Basalt (Tb), mugearite (Tbm), alkali basalt (Tba), alkali olivine basalt (Tbao), hawaiite (Tbh), transitional olivine basalt (Tbr), basalt inferred beneath soil or Cenozoic deposits (Tbi).
Tbn	Olivine nephelinite (Tbn).
Jd	Dolerite (Jd), with orthopyroxene (Jdo), granophyre and pegmatite indicated (Jdp), dolerite inferred beneath soil or Cenozoic deposits (Jdi). Dolerite of grainsize 0 – 0.7mm (Jdvf); 0.7 – 1.5mm (Jdf); > 1.5mm (Jdmc); 1.5 – 3mm (Jdm); > 3mm (Jdc); > 6mm (Jdvc) indicated.

CENOZOIC — QUATERNARY; CENOZOIC — PALEOGENE – NEOGENE; MESOZOIC CENOZOIC — PALEOGENE – NEOGENE; MESOZOIC — JURASSIC

- Geological boundary – position accurate or approximate.
- Geological boundary – inferred.
- Geological boundary – transitional.
- Intrusive boundary – inferred.
- Slope break.
- Scarp.
- Photo lineament.
- Fault – unspecified type, position accurate or approximate.
- Fault – unspecified type, inferred.
- Fault – unspecified type, concealed.
- Fault – position accurate or approximate, downthrown side indicated.
- Fault – inferred, downthrown side indicated.
- Fault – concealed, downthrown side indicated.
- Limit of mapping.
- (white line) Limit of mapping of sub–unit within undifferentiated rock unit.

- Strike and dip of bedding, right way up.
- Strike of vertical bedding, facing indicated by single tic.
- Horizontal bedding.
- Trend and plunge of lineation of unspecified type.
- Strike of outcrop–scale fault, type unspecified; downthrown side indicated.
- Strike and dip of outcrop–scale fault, type unspecified; thrust fault.
- Trend and plunge of slickenslides, movement sense unspecified.
- Strike and dip of dominant joint set; vertical.
- Trend of dyke or vein, rock type or mineral specified by RCODE in Point Attribute Table.
- Generalised palaeocurrent direction, showing sense of movement.
- Trend and plunge of palaeocurrent lineation, polarity down–plunge.
- Small outcrop or log occurence.
- Field station for adjacent readings on the map.
- 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.

Geology by S.M. Forsyth, B.Sc.(Hons) and M.J. Clarke, 1999 from the following sources (see responsibility diagram):

A S.M. Forsyth, 1995–1997. 1:25 000 geological mapping.

B M.J. Clarke, 1995–1997. 1:25 000 geological mapping.

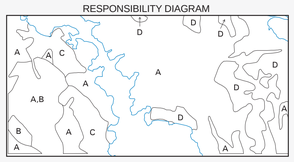
C S.M. Forsyth, 1995–1997. 1:100 000 geological mapping.

D S.M. Forsyth, 1999. Aerial photo interpretation.

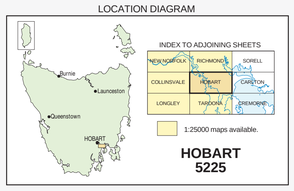
Other sources:

M.R. Banks, W.C. Cromer, R.C. Donaldson, D.E. Leaman, W.R. Moore, F.L. Sutherland.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



REFERENCE THIS MAP AS:

FORSYTH, S.M. and CLARKE, M.J. (compilers) 1999. Digital Geological Atlas 1:25 000 Scale Series. Sheet 5225 Hobart. Mineral Resources Tasmania.

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

GDA

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