

CENOZOIC	QUATERNARY
Qhmm	Undifferentiated Cenozoic sediments (TQ). Undifferentiated Quaternary sediments (Q). Selected mine tailings and man disturbed ground indicated (Qhm). Man made deposits (Qhmm).
Qh	Paralic clay, silt and minor gravel deposits (Qh); of modern salt marsh and associated tidal flats (Qht), of brackish delta marsh (Qhd), of lagoons (Qhl), predominantly coarse gravel with overlying marsh at places (Qhg), low terrace sand covering shaly sand (Qhs).
Qt	Terrace deposits 5m ASL of inferred estuarine origin, composed of sandy clay, silt, clayey sand and cross-bedded or planar laminated sand, clay or sand with charcoal at 0m ASL, and intertonguing pebbly gravel at places (Qtt).
Ql	Lag deposit (Ql); after terracene (Qm), after Palaeogene - Neogene siltified rock (Qls).
Qhw	Aeolian and locally derived sand (Qhw); aeolian dune and sheet sand commonly with calcareous root casts at estuary shores (Qhd); Holocene (Qhw); Pleistocene generally with Holocene disturbed fringe and cover deposits (Qwp).
Qhc	Colluvium (Qhc); clayey gravel derived from dolerite (Qhd), sandy, derived from Upper Palaeozoic rocks (Qhc); derived predominantly from Lower Palaeozoic rocks (Qhc).
Qhab	Swamp deposits (Qhab).
Qhij	Alluvial gravel sand and clay (Qa), alluvial fans (Qaf), Holocene alluvium (Qha), alluvial and mixed alluvial and aeolian origin (Qha), of possible estuarine origin (Qhij).
Qa	Probable Pleistocene low gradient alluvial fan and alluvial terrace deposits (Qap); clasts predominantly of dolerite (Qad); clasts predominantly of dolerite with thin (<10mm) weathering rinds (Qapr); clasts predominantly of Palaeozoic rocks, dolerite clasts with thick (>40mm) clay weathering rinds (Qapv).
Qprr	Scree deposits of angular dolerite boulders, generally lacking matrix (Qprr).
Qp	Talus and remobilized talus deposits (Qp); basalt talus (Qpb), talus predominantly of Upper Palaeozoic sandstone and sand (Qps); silty talus breccia derived from Lower Palaeozoic rocks (Qpt); talus predominantly of dolerite boulders and in places subordinate Palaeozoic rocks (Qpr).
Tow	Carbonate spring deposits (Tow).
Toss	Dominantly sand, clayey sand and sandy clay and subordinate clay and gravel of probable mixed alluvial and aeolian origin (Tos), of possible estuarine origin (Toss).
Tolp	Partly consolidated granule sand (Tol); alluvial red brown friable sandstone with lenses of coarse-grained sandstone and gravels (Tolp).
Toch	Dominantly poorly consolidated plastic clay, silty clay and sandy clay with minor pebbly layers and subordinate pebbly and cobble gravel and well-sorted sand layers (Toch).
Tod	Gravel deposits (TOD); late Cenozoic alluvial terrace deposits, of well-sorted gravel predominantly derived from Palaeozoic and Palaeogene - Neogene units, clasts commonly of basalt and in places dolerite deposits commonly overlie Palaeogene - Neogene basalt and pass up into sand and clay of alluvial/aeolian origin and inter-finger with or are overlain by tributary dolerite gravel at places (TODa); clasts of well-sorted pebbles and cobbles preserved as isolated remnants of relatively high (12 to 20m) alluvial terraces (TODb); clayey cobble deposits dominantly of dolerite (TODc); deposit of extremely weathered dolerite and Palaeozoic clasts to small boulder size and with clay matrix (TODd).
Tov	Supra-basalt moderately lithified conglomerate with inter-bedded sandstone at places, clasts of well rounded siliceous cobbles and pebbles, of Palaeogene - Neogene derived siltic, and sandy of dolerite (TOv).
Tos	Poorly-consolidated to unconsolidated sand, clayey silt, silt and subordinate clay and fine-grained gravel; includes deposits related to probable former course of Derwent River (Tos).

CENOZOIC	PALEOGENE - NEOGENE
TQbs	Undifferentiated Cenozoic sediments (TQ). Undifferentiated predominantly dolerite boulder talus and disrupted to insitu Jurassic dolerite sheet base, with overlying alluvial gravel and fine-grained swane deposits (TQbs).
Ti	Poorly-sorted clay to boulder deposit, variable proportion of clasts, predominantly Palaeozoic and occasionally dolerite derived, matrix of clay, sandy clay or sand (Ti).
Tf	Ferricrete (Tf); laterite developed on Palaeogene - Neogene deposits (Tf).
Tb	Basalt (Tb).
Tqm	* Team Silicification developed on Palaeogene - Neogene or older rocks (Tqm).
Tbat	Basaltic agglomerate, tuff and associated volcanoclastic rocks (Tbat).
Tsp	Sub-basalt very poorly-consolidated, well sorted sandstone, clayey sandstone and subordinate claystone (Tsp).
Tbc	Poorly-sorted large boulder to pebble grade deposits (Tbc), inferred dolerite boulder base or Palaeogene - Neogene weathered terraced dolerite bedrock (Tbc).
Tsd	Dominantly plastic poorly-consolidated light cream, grey or tan coloured mudstone, siltstone and sandstone with some soft friable sandstone (Tsd).
Tsr	Dominantly plastic poorly-consolidated light grey green or brown mudstone, siltstone and sandstone with some friable sandstone, may include beds with granules and pebbles, common ferruginous cemented beds and laminae, leaf fossils at places (Tsr).

MESOZOIC	PALEOGENE - NEOGENE
Jd	Dolerite (Jd), with orthopyroxene (Jdp), granophyre and pegmatite indicated (Jgp), dolerite boulder base or Cenozoic deposits (Jdb). Dolerite of granitic $\phi = 0.7mm$ (Jdv), $0.7 - 1.5mm$ (Jdf), $1.5 - 3mm$ (Jdg), $> 3mm$ (Jde), $> 6mm$ (Jde) indicated.
Jp	Metamorphosed country rock indicated by small cross overlap, unit R contact metamorphosed by Jurassic dolerite (Jp), unit Rph contact metamorphosed by Jurassic dolerite (Jpgh).

IGNEOUS ROCKS	
Tb	Basalt (Tb), basaltic (Tbb), hawthite (Tbh), tholeiite (Tbt), quartz tholeiite (Tbtq), olivine tholeiite (Tbtol).
Tbn	Olivine nephelinite (Tbn).
Jd	Dolerite (Jd), with orthopyroxene (Jdp), granophyre and pegmatite indicated (Jgp), dolerite boulder base or Cenozoic deposits (Jdb). Dolerite of granitic $\phi = 0.7mm$ (Jdv), $0.7 - 1.5mm$ (Jdf), $1.5 - 3mm$ (Jdg), $> 3mm$ (Jde), $> 6mm$ (Jde) indicated.
Jp	Metamorphosed country rock indicated by small cross overlap, unit R contact metamorphosed by Jurassic dolerite (Jp), unit Rph contact metamorphosed by Jurassic dolerite (Jpgh).

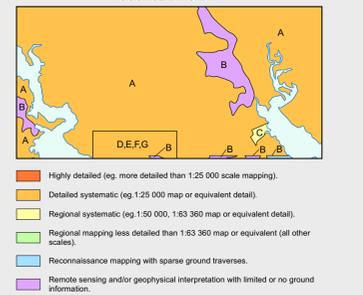
CONTACTS
Geological contact.
Geological contact - inferred.
Igneous intrusive contact.
Limit of mapping of sub-unit within undifferentiated rock unit.
Limit of detailed mapping.

FAULTS
Normal fault - inferred.
Normal fault (downthrown side indicated) - inferred.
Normal fault (downthrown side indicated) - concealed.

LINEARS
Scarp.
Slope break.
Lineament - visible on aerial photographs.
Internal intrusive boundary within igneous body.

REFERENCE THIS MAP AS:
FORSYTH, S.M. (compiler) 2002. Digital Geological Atlas 1:25 000 Scale Series, Sheet 5226 Richmond, Mineral Resources Tasmania.

BASE DATA FROM THE LIST, Copyright State of Tasmania.
Map produced by Spatial Information Services, Mineral Resources Tasmania.
Website: www.mrt.tas.gov.au
GDA94 - MGA Zone 55. Contour Interval: 20 metres.



Compiled by S.M. Forsyth, B.Sc.(Hons), 2002 from the following sources (see source diagram):
A. S.M. Forsyth, 1998-1999. New 1:25 000 geological mapping.
B. S.M. Forsyth, 2000. Aerial photo interpretation.
C. HOLZ, G.K. 1963. Principles of Soil Occurrence in the Lower Coal Valley, Southeast Tasmania. Ph.D. thesis, University of Tasmania.
D. MOORE, W.R. 1964. Geology of the Radnor Vale area. Technical Report Department of Mines, Tasmania, Volume 9, Pages: 77-78.
E. S.M. Forsyth, 1995-1997. New 1:25 000 geological mapping.
F. LEAMAN, D.E. 1972. Geological Atlas 1:50 000 Series, Sheet 82 (8325), Hobart, Tasmania Department of Mines.
G. SUTHERLAND, F.L. Cenozoic volcanic rocks. In LEAMAN, D.E. 1976. Geological Atlas 1:50 000 Series Exp. Rep. Sheet 82 (8325), Hobart, Tasmania Department of Mines.

