

UNIT	DESCRIPTION
Qhm	Undifferentiated Cenozoic sediments (TQ). Undifferentiated Quaternary sediments (Q). Mine tailings and man disturbed ground (Qhm). Selected other man made deposits including some levee banks interpreted from 1966 aerial photography (Qhm).
Qw	Aeolian deposits generally of fine-grained sand and clayey sand, includes some photo-interpreted deposits with prominent dune morphology (Qw). Photo-interpreted aeolian deposits predominantly of sheet or low hummocky form (Qw).
Qhw	Deposits of clay, silt and sand in small areas of internal drainage generally swales in dune fields (Qhw).
Qhru	Undifferentiated (photo-interpreted) river levee or dune deposits exhibiting ridge morphology or a much degraded ridge form at places grading into dune or sheet aeolian deposits (Qhru).
Qhab	Deposits of lunette lagoons and similar features (Qhab).
Qhami	Alluvial gravel, sand and clay deposits mostly of minor stream or undifferentiated parts of the alluvium of major streams (Qa). Alluvial fan deposits, generally of fine-grained gravel, sand and silt (Qaf).
Qhamo	Alluvium of low flats adjacent to current stream channels and subject to frequent minor flooding (part of Canola Surface) (Qhamo).
Qhamt	Alluvium of floodplain terraces adjacent to current stream channels including levee? deposits in some areas (part of Canola Surface) (Qhamt).
Qhamo	Alluvium related to former channel locations and commonly exhibiting multiple levee? ridges and channel furrows that have resulted from progressive channel migration (Qhamo).
Qaj	Riverine flood basin deposits generally of clay and silt over other alluvium (Qaj).
Qaa	Predominantly inferred abandoned river channel deposits and some abandoned? flood chutes (Qaa).
Qah	Inferred sand and silt deposits of natural levees or levee-like features (Qah).
Qpao	Older alluvium of minor stream terraces (Qpao).
Qh	Lag deposits of ferruginous pisoliths and ferricrete fragments (Qh).
Qaf	Lag deposits of ferruginous pisoliths and ferricrete fragments and siliceous granules or pebbles (Qaf).
Qhcd	Colluvium of clayey gravel derived from dolerite (Qhcd).
Qh	Undifferentiated patchy deposits generally with some siliceous gravel and derived from terrace gravel deposits by inferred down slope movement or other means of dispersal (Qh).
Qpb	Basalt talus (Qpb), talus dominantly of dolerite boulders and in places subordinate Permian Supergroup rocks (Qpb).

UNIT	DESCRIPTION
TQai	Undifferentiated Cenozoic sediments (TQ). Erosional/positional terrace cut in Palaeogene - Neogene strata and generally exhibiting only subdued remnants of fluvial morphology, alluvial gravel and alluvial sand extensively reworked by aeolian process present in some areas (probably mostly part of Brumby Terraces) (TQai).
TQaj	Similar to TQai but generally lacking fluvial morphology and locally higher, may include undifferentiated alluvium of minor streams and piedmont gravels derived from adjacent lateral slopes (probably mostly part of Brumby Terraces) (TQaj).
TQaf	Undifferentiated siliceous pebbly gravels, cemented gravel and sand with little or no dolerite (part of 'Brickendon soil association') (TQaf).
TQai	Late Cenozoic alluvial terrace deposits approximately 10m to 15m above local base level, of loose to poorly consolidated or cemented, gravel, sand, silt and clay, clasts predominantly pebbly to granule size and of siliceous composition with ferruginous clasts derived from mid-Palaeogene - Neogene laterite ferricrete (Brickendon Terrace in part) (TQai).
TQah	Late Cenozoic alluvial terrace deposits approximately 10m to 15m above local base level, similar to unit TQai, but clasts predominantly of siliceous composition (TQah).
TQah	Late Cenozoic ferruginous puddingstone conglomerate generally with some small quartz pebbles or granules (TQah).
TQai	Quartz gravel with red to pink colouration caused by surface ferruginous films or ferruginous quartz overgrowths (TQai).
TQai	Undifferentiated clayey silt facies of late Cenozoic terrace deposits and erosional terraces cut in Palaeogene beds (TQai).
TQai	Ferruginous cemented ferricrete breccia derived from fragmented primary Palaeogene - Neogene laterite commonly with addition of quartz granules and sand in matrix (TQai).
TQai	Ferruginous cemented sandstone (TQai).
TQai	Undifferentiated very poorly consolidated sandstone (TQai).
TQai	Ferruginous drab khaki coloured cemented siltstone or sandstone (TQai).
Ti	Undifferentiated Tertiary (T). Ferricrete (Ti).
Tfo	Laterite developed from or on Jurassic dolerite (Tfo).
Tfo	Miocene? ferruginous laterite profile commonly of burgundy-yellow-ochre coloured ferricrete masses and bright orange-brown clay with ferruginous pisoliths and younger essentially lag deposits of ferruginous pisoliths, with lower pallid zone (part of Woodstock Surface) (Tfo).
Tfo	Miocene? Quartz granule bearing ferricrete developed on Palaeogene - Neogene beds (Tfo).
Tfo	Lower part of ferruginous or aluminous laterite profile beneath upper cemented zone (Tfo).
Tfo	Laterite profile pallid zone, generally consisting of white clay with variable development of pink, red or brown ferruginous nodules or masses and occasionally limonite layers (Tfo).
Tfo	In situ laterite profile, lag and dispersed ferruginous ferricrete fragments and pisoliths, locally may include pallid part of profile or lower horizons, more broadly interpreted than unit Tfo, distribution indicated by soil mass (Woodstock soil association) (Tfo).
Tf	Bedded laminated ferricrete probably in situ replacement of siltstone, generally brown in colour and found below the pallid/ferruginous zone boundary of laterite intervals (Tf).

UNIT	DESCRIPTION
Tcsw	Undifferentiated Cenozoic sediments (TQ). Undifferentiated Tertiary (T). Sub-laterite, poorly consolidated to ferruginously cemented quartz-rich cobble, pebble, granule and sand deposits of alluvial and possible lag origin, and inferred corallites (Tcsw).
Tb	Basalt (Tb), agglomerate and tuff indicated (Tbt).
Tsa	Poorly consolidated clay, silt and clayey labile sand with rare gravel and lignite; some iron oxide-cemented layers and concretions, some leaf fossils (Tsa).
Tsf	Selected sandstone units (where differentiated) within intervals dominantly of claystone and siltstone (Tsf).
Tfba	Basaltic profile developed on pre-Palaeogene rocks and correlated with unit overlain by Palaeogene rocks in other areas (Tfba).
Pubg	Unfossiliferous pebbly siltstone, siltstone and sandstone (Bogan Gap Group) (Pubg).

UNIT	DESCRIPTION
Tb	Basalt (Tb). Inferred basalt beneath soil or Cenozoic deposits (Tb).
Jd	Dolerite (Jd), dolerite inferred beneath soil or Cenozoic deposits (Jd). Dolerite of granose 0.7-1.5mm (Jd ₁), 1.5-3mm (Jd ₂), 3-6mm (Jd ₃) and >6mm indicated (Jd _{3c}).
Jdw	Predominantly very-to extremely-weathered dolerite (Jdw).

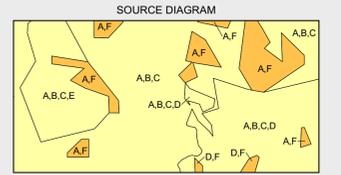
CONTACTS	FAULTS	LINEARS
Geological contact.	..... Fault - concealed.	..... Scarp.
Geological contact - inferred.	..... Fault - concealed, inferred from magnetic data.	..... Dune crest.
Igneous intrusive contact.	..... Fault - concealed, inferred from magnetic data.	..... Slope break.
Limit of mapping of sub-unit within undifferentiated rock unit.	..... Fault - concealed, inferred from magnetic data.	..... Lineament - visible on aerial photographs.
	..... Fault - concealed, inferred from magnetic data.	..... Lineament - visible in magnetic data.
	..... Fault - concealed, inferred from magnetic data.	..... Magnetic gradient or lineament (direction towards lower values indicated).
	..... Fault - concealed, inferred from magnetic data.	..... Lithological trend line, including bedding trace interpreted from aerial photographs.

UNIT	DESCRIPTION
Tcsw	Undifferentiated Cenozoic sediments (TQ). Undifferentiated Tertiary (T). Sub-laterite, poorly consolidated to ferruginously cemented quartz-rich cobble, pebble, granule and sand deposits of alluvial and possible lag origin, and inferred corallites (Tcsw).
Tb	Basalt (Tb), agglomerate and tuff indicated (Tbt).
Tsa	Poorly consolidated clay, silt and clayey labile sand with rare gravel and lignite; some iron oxide-cemented layers and concretions, some leaf fossils (Tsa).
Tsf	Selected sandstone units (where differentiated) within intervals dominantly of claystone and siltstone (Tsf).
Tfba	Basaltic profile developed on pre-Palaeogene rocks and correlated with unit overlain by Palaeogene rocks in other areas (Tfba).
Pubg	Unfossiliferous pebbly siltstone, siltstone and sandstone (Bogan Gap Group) (Pubg).

UNIT	DESCRIPTION
Tb	Basalt (Tb). Inferred basalt beneath soil or Cenozoic deposits (Tb).
Jd	Dolerite (Jd), dolerite inferred beneath soil or Cenozoic deposits (Jd). Dolerite of granose 0.7-1.5mm (Jd ₁), 1.5-3mm (Jd ₂), 3-6mm (Jd ₃) and >6mm indicated (Jd _{3c}).
Jdw	Predominantly very-to extremely-weathered dolerite (Jdw).

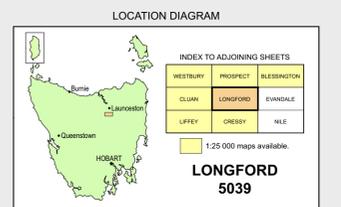
CONTACTS	FAULTS	LINEARS
Geological contact.	..... Fault - concealed.	..... Scarp.
Geological contact - inferred.	..... Fault - concealed, inferred from magnetic data.	..... Dune crest.
Igneous intrusive contact.	..... Fault - concealed, inferred from magnetic data.	..... Slope break.
Limit of mapping of sub-unit within undifferentiated rock unit.	..... Fault - concealed, inferred from magnetic data.	..... Lineament - visible on aerial photographs.
	..... Fault - concealed, inferred from magnetic data.	..... Lineament - visible in magnetic data.
	..... Fault - concealed, inferred from magnetic data.	..... Magnetic gradient or lineament (direction towards lower values indicated).
	..... Fault - concealed, inferred from magnetic data.	..... Lithological trend line, including bedding trace interpreted from aerial photographs.

- Strike and dip of bedding, right way up.
- Notable small outcrop with rock unit indicated.
- Construction material/industrial mineral/gemstone location.



- Highly detailed (eg. more detailed than 1:25 000 scale mapping).
- Detailed systematic (eg. 1:25 000 map or equivalent detail).
- Regional systematic (eg. 1:50 000, 1:63 360 map or equivalent detail).
- Regional mapping less detailed than 1:63 360 map or equivalent (all other scales).
- Reconnaissance mapping with sparse ground traverses.
- Remote sensing and/or geophysical interpretation with limited or no ground information.

Compiled by S.M. Forsyth, B.Sc. 2006 from the following sources (see source diagram):
 A. BLAKE, F. 1959. Geological Atlas 1:63 360 Series, Sheet 47 (83144), Longford, Tasmania Department of Mines.
 B. Aerial photo interpretation, S.M. Forsyth 2004.
 C. Road-side geological observations, S.M. Forsyth 2004.
 D. MATTHEWS, W.L. 1983. Geology and groundwater resources of the Longford Tertiary Basin, Geological Survey Bulletin 50.
 E. NICOLLS, K. 1958. Reconnaissance soil map of Tasmania, sheet 47 Longford, CSIRO Division of Soils.
 F. New geological mapping, S.M. Forsyth 2004.



REFERENCE THIS MAP AS:
 BLAKE, F., MATTHEWS, W.L., FORSYTH, S.M. (compilers) 2006. Digital Geological Atlas 1:25 000 Scale Series, Sheet 5039 Longford, 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
 GDSM - MGA Zone 55. Contour Interval: 20 metres.
 While every care has been taken in the preparation of this data, no warranty is given as to the correctness of the information and no liability is accepted for any statement or opinion or for any error or omission. No reader should act or fail to act on the basis of any material contained herein. Readers should consult professional advisers. As a result the Crown in Right of the State of Tasmania and its employees, contractors and agents expressly disclaim all and any liability (including all liability from or attributable to any negligent or wrongful act or omission) to any persons whatsoever in respect of anything done or omitted to be done by any such person in reliance whether in whole or in part upon any of the material in this data.
 Crown copyright reserved.