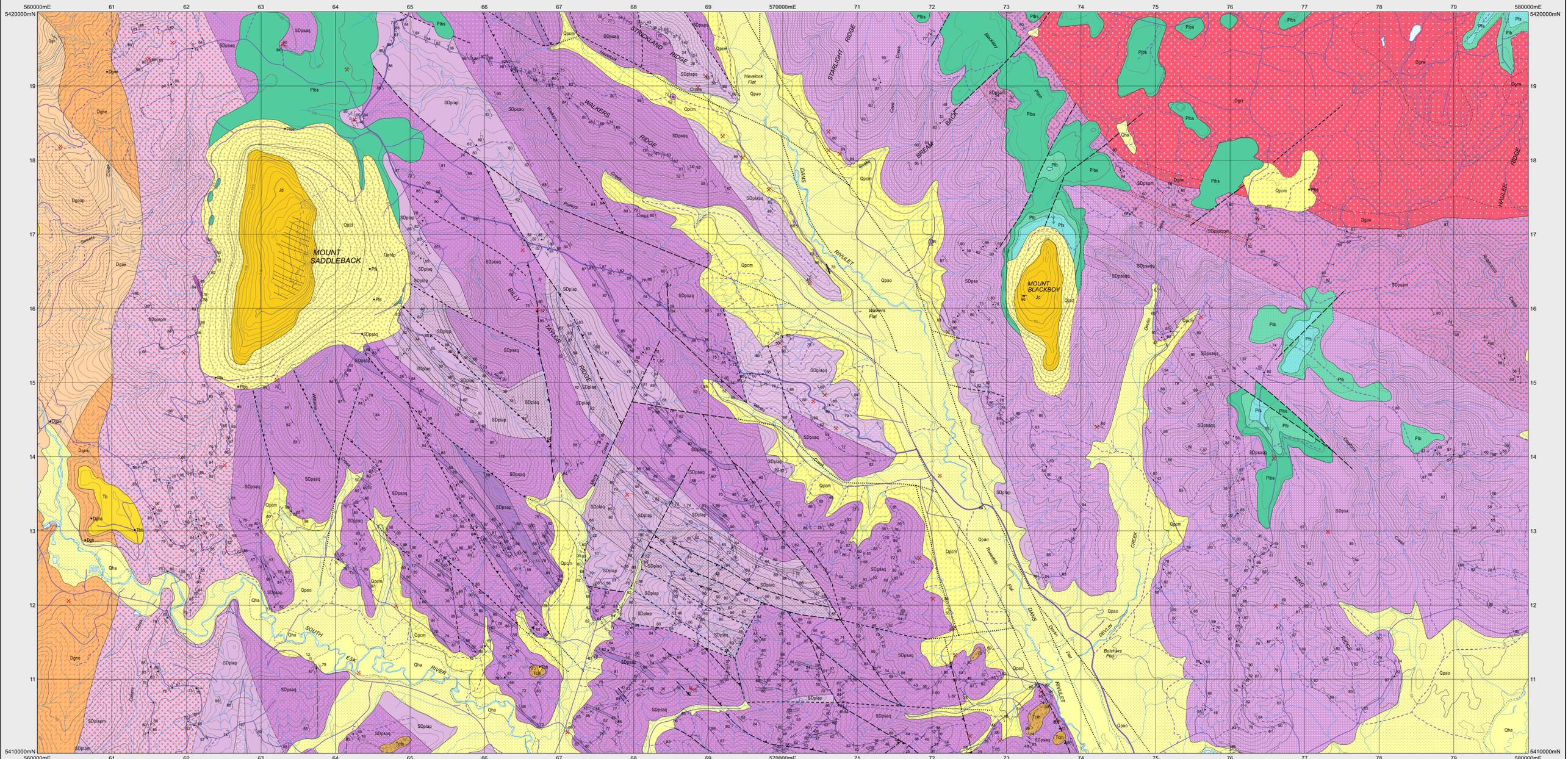


SADDLEBACK

Scale 1:25 000

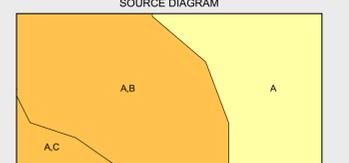


PERMIAN	PLEISTOCENE	QUATERNARY	HOLOCENE
Pf₁ Dominantly well-sorted quartz sandstone usually cross-bedded or laminated and commonly with interbedded and laminated carbonaceous shale lesser conglomerate and rare coal (Pf ₁) (Correlate of Aberfoyle Formation). Poorly sorted shaly mudstone, sandstone and minor conglomerate, marine fossils present in places (Pfb). Dominantly thick-bedded to massive, medium- to coarse-grained quartz sandstone and minor conglomerate (Pib). (Pfb, Pib: Strickland Gorge Formation)	Qpao Older alluvium of river terraces (Qpao). Qpcm Colluvium derived from Mathinna Supergroup (Qpcm).	Qp₁ Qp₂ Talus consisting dominantly of dolerite boulders (Qp ₁). Talus consisting dominantly of dolerite and subordinate Lower Permian rocks (Qp ₂).	Qha Stream alluvium, swamp and marsh deposits (Qha).

PALEOZOIC - PALEOGENE - NEOGENE	PALEOZOIC - JURASSIC	IGNEOUS ROCKS
Tb Basalt (Tb) including local occurrences of basaltite (Tbb), hawaiite (Tbh), olivine nephelinite with therozite nodules (Tbn).	Jd Dolerite (Jd).	Tb Basalt (Tb) including local occurrences of basaltite (Tbb), hawaiite (Tbh), olivine nephelinite with therozite nodules (Tbn).
Tcm Conglomerate with rounded clasts of Mathinna Supergroup and very rare weathered dolerite, often partially cemented by iron oxides (Tcm). Unconformity.	Dgae Medium- to coarse-grained, dominantly equigranular, leucocratic biotite syenogranite/monzogranite with pale pink feldspars (Dgae) (marginal phase of Tombstone Creek Granite, I-type).	Tn Olivine nephelinite with therozite nodules (Tn).
Pf₁ Dominantly well-sorted quartz sandstone usually cross-bedded or laminated and commonly with interbedded and laminated carbonaceous shale lesser conglomerate and rare coal (Pf ₁) (Correlate of Aberfoyle Formation). Poorly sorted shaly mudstone, sandstone and minor conglomerate, marine fossils present in places (Pfb). Dominantly thick-bedded to massive, medium- to coarse-grained quartz sandstone and minor conglomerate (Pib). (Pfb, Pib: Strickland Gorge Formation)	Dgao Fine- to coarse-grained, sparsely to moderately porphyritic (quartz and K-feldspar) biotite alkali feldspar granitoid/monzonite (Dgao) (central phase of Tombstone Creek Granite, I-type).	Jd Dolerite (Jd).
Pf₂ Thin-bedded siltstone with minor quartz-rich sandstone (SDp ₁); contact metamorphosed by granitic intrusion (SDp ₁); thin-bedded siltstone with interbedded quartz-rich sandstone, contact metamorphosed by granitic intrusion (SDp ₂); interbedded thin-bedded siltstone and fine-grained quartz-rich sandstone (SDp ₃); Fine- to medium-grained quartz-rich sandstone unit within SDp ₁ (SDp ₁); contact metamorphosed by granitic intrusion (SDp ₁); (SDp ₁ , SDp ₂ , SDp ₃ , SDp ₁ , SDp ₂ , SDp ₃ - possible correlates of Lome Star Siltstone).	Dgnc Coarse- to very coarse-grained equigranular, biotite & hornblende, monzogranite/granodiorite with pink to white feldspars (Dgnc) (Russell Road Granite, I-type).	Tn Olivine nephelinite with therozite nodules (Tn).
SDp₁ Dominantly medium- to fine-grained turbiditic quartz-rich sandstone with interbedded siltstone. Rare vascular plant fossils (SDp ₁); contact metamorphosed by granitic intrusion (SDp ₁); Mappable unit of quartz-rich sandstone within SDp ₁ (SDp ₁); contact metamorphosed by granitic intrusion (SDp ₁); Lower sequence of interbedded medium- to fine-grained turbiditic sandstone and siltstone (SDp ₁). Mappable siltstone horizon within SDp ₁ (SDp ₁); (SDp ₁ , SDp ₁ - possible correlates of Siding Sandstones).	Dgrw Medium-grained, equigranular to rarely porphyritic (K-feldspar), hornblende-biotite granodiorite and subordinate biotite granodiorite. Locally with a strong grain foliation. Variably but usually strongly magnetic (susceptibility typically 0.002 to 0.008 SI) (Dgrw).	Tb Basalt (Tb) including local occurrences of basaltite (Tbb), hawaiite (Tbh), olivine nephelinite with therozite nodules (Tbn).
SDp₂ Thin-bedded siltstone with minor quartz-rich sandstone (SDp ₂); contact metamorphosed by granitic intrusion (SDp ₂); thin-bedded siltstone with interbedded quartz-rich sandstone, contact metamorphosed by granitic intrusion (SDp ₂); Interbedded thin-bedded siltstone and fine-grained quartz-rich sandstone (SDp ₂); Fine- to medium-grained quartz-rich sandstone unit within SDp ₂ (SDp ₂); contact metamorphosed by granitic intrusion (SDp ₂); (SDp ₂ , SDp ₂ - possible correlates of Lome Star Siltstone).	Dgrv Medium-grained, equigranular to rarely porphyritic (K-feldspar), hornblende-biotite granodiorite and subordinate biotite granodiorite. Locally with a strong grain foliation. Weakly magnetic (susceptibility < 0.008 SI) (Dgrv). (Dgrv, Dgrv - Pyungana Granodiorite, I-type).	Jd Dolerite (Jd).
SDp₃ Thin-bedded siltstone with minor quartz-rich sandstone (SDp ₃); contact metamorphosed by granitic intrusion (SDp ₃); thin-bedded siltstone with interbedded quartz-rich sandstone, contact metamorphosed by granitic intrusion (SDp ₃); Interbedded thin-bedded siltstone and fine-grained quartz-rich sandstone (SDp ₃); Fine- to medium-grained quartz-rich sandstone unit within SDp ₃ (SDp ₃); contact metamorphosed by granitic intrusion (SDp ₃); (SDp ₃ , SDp ₃ - possible correlates of Lome Star Siltstone).	Dgms Medium-grained, equigranular to rarely porphyritic (K-feldspar), hornblende-biotite granodiorite and subordinate biotite granodiorite. Locally with a strong grain foliation. Weakly magnetic (susceptibility < 0.008 SI) (Dgms).	Tn Olivine nephelinite with therozite nodules (Tn).

CONTACTS	FAULTS	LINEARS
Geological contact. Geological contact - inferred. Transitional geological contact. Limit of mapping of sub-unit within undifferentiated rock unit.	Fault. Fault - inferred. Fault - concealed. Fault - based on interpretation of aerial photographs. Normal fault (downthrown side indicated). Thrust fault (teeth on upper plate). Thrust fault (teeth on upper plate) - inferred.	Lineament - visible on aerial photographs.
Fault. Fault - inferred. Fault - concealed. Fault - based on interpretation of aerial photographs. Normal fault (downthrown side indicated). Thrust fault (teeth on upper plate). Thrust fault (teeth on upper plate) - inferred.	Lineament - visible on aerial photographs.	
Lineament - visible on aerial photographs.		

CONTACTS	FAULTS	LINEARS
Strike and dip of bedding - right way up; overturned; facing unknown. Strike of vertical bedding, facing unknown. Strike and dip of cleavage of unspecified type and relative age; vertical. Strike and dip of kink band with sense of displacement viewed down plunge of associated kink-folds - dextral; sinistral. Strike of vertical kink band - dextral; sinistral. Strike and dip of dominant joint set. Strike and dip of outcrop-scale fault of unspecified relative age, type unspecified. Strike and dip of dyke or vein with rock or mineral type indicated, vertical. Trend and plunge of minor fold hinge line, unspecified relative age. Trend and plunge of bedding/primary cleavage intersection lineation (L-I). Trend and plunge of chevron-fold hinge line, unspecified relative age. Trend and plunge of minor fold hinge line, relative local age F ₁ , F ₂ . Generalised paleocurrent direction, showing sense of movement. Field station for adjacent readings on the map. Notable small outcrop with rock unit indicated. Mineral deposit location - hardrock. Mineral deposit location - alluvial/tailings. Construction material/industrial mineral/gemstone location.		



Compiled by M.P. McClenaghan, B.Sc.(Hons), Ph.D., 1994 from the following sources (see source diagram):
A. McCLENAGHAN, M.P.; EVERARD, J.L.; GOSCOMBE, B.D.; FINDLAY, R.H.; CALVER, C.P., 1993. Geological Atlas 1:50 000 series, sheet 40 (84155). Alberton: Department of Mines, Tasmania.
B. M.J. Vicary, 2008-2010. 1:25 000 scale geological mapping and interpretation of airborne geophysical data as part of the TasExplore Project.
C. D.C. Green, 2011. 1:25 000 scale geological mapping and interpretation of airborne geophysical and LIDAR data as part of the TasExplore Project, with additional information from Craddock, M.J., 2009 B.Sc.(Hons) thesis, University of Tasmania.

REFERENCE THIS MAP AS:
VICARY, M.J. and McCLENAGHAN, M.P. 2010. Digital Geological Atlas 1:25 000 Scale Series, Sheet 5641 Saddleback. 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
GDMS - MGA Zone 55. Contour Interval: 20 metres.

