

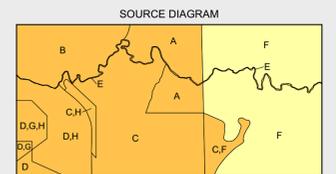
CENOZOIC	QUATERNARY	Qha	Alluvium and swamp deposits (Qha).
	PLEISTOCENE	Qm	Lag of dominantly oolitic and banded chert, with associated silt and sand (Qm).
PALEOGENE - NEOGENE	Eocene	Op1	Talus (Op1).
		Tb	Basalt (Tb). Local occurrence of alkali olivine basalt (Tba).
		Tsq	Indurated quartz sand with plant fossils (Tsq).
	Oligocene	Tsga	Interbedded siliceous gravel, quartz sand and clay (Tsga).

NEOPROTEROZOIC	TONGAR GROUP	Psr	Pale weathering, thin bedded, laminated quartz siltstone with subordinate interbedded festsite shale. Commonly silicified. (Salmon River Siltstone) (Psr).
		Psd	Shallow marine dolomite and minor limestone (Psd). Areas of silicification and/or clayey pug indicated (Psd). (Psd, Psc: Smithton Dolomite).
7-MESOPROTEROZOIC	BLACKWATER MAMUNNIA SUBGROUP	Psw	Interbedded laminated mudstone, siltstone, and lithoclasts with mafic volcanic detritus (Psw). Impure limestone indicated (Psw). Hematitic ironstone indicated (Psw). (Psw, Psw, Psw: Koppal Creek Formation).
		Psb	Massive basalt (Psb). (Spinks Creek Volcanics).
		Psc	Dominantly micrite (with clasts of basaltic and felsic volcanic rocks, dolomite, chert and mudstone-siltstone in a fine-grained non-dolomitic matrix), with interbedded laminated mudstone, siltstone and calcareous siltstone (Psc). (Crokes Hill Member).
		Psd	Dolomitic breccia, with clasts of dolomite, stromatolitic dolomite and oolitic chert in a dolomitic matrix (Psd). (Julius River Member).
		Pse	Interbedded dolomite, chert, siltstone and mudstone (Pse); interbedded massive to well laminated, stromatolitic dolomite (Psd); dark gray to black dolomitic siltstone and mudstone (Psm); dominantly interbedded, massive or banded, in places oolitic, black and white to grey chert and laminated siltstone, with minor dolomite (Psc); raggy black siliceous mudstone and siltstone, and thinly laminated chert (Psf).
		Psf	Chert breccia and conglomerate (with clasts dominantly of black gray and white chert, and subordinate orthoquartzite) interbedded with pale grey-weathering distinctly laminated medium-grained quartzarenite (Psc). (Cornwallis Forest Conglomerate and Quartzite).
		Psg	Erosional and transgressive surface; low angle unconformity at some localities.
		Psh	Interbedded, black, dark gray and green, commonly gyttic, laminated siltstone and mudstone, with rare sandstone and mud pellet conglomerate (Prc). Silicified equivalent of unit Prc (Prc). (Prc, Prc: Cowrie Siltstone).
		Psi	Thick-bedded, very fine-grained quartz sandstone and siltstone, probably turbidites, with minor interbeds of dark gray mudstone (Prc).
		Pst	Laminated to thinly bedded, chertic to siliceous siltstone to fine sandstone, containing variably disseminated porphyroblastic chertite (Pbs). Micaceous fine-grained sandstone with subordinate interbedded siltstone and graphic shale, and containing porphyroblastic chertite (Pbsa).
BALFOUR SUBGROUP	ROCKY HAYNE GROUP	Ptb	Laminated chertic mudstone to siltstone and rare sandstone containing variably disseminated porphyroblastic chertite (Ptb).
		Ptc	

NEOPROTEROZOIC	CENOZOIC	PALEOGENE - NEOGENE	Th	Basalt (Th). Local occurrence of alkali olivine basalt (Tba).
			Psb	Massive basalt (Psb). Varieties with ~ 0.6 - 0.7 wt% TiO <sub>2</sub> (Psb), 1.0 - 1.1 wt% TiO <sub>2</sub> (Psb), 1.5 - 1.6 wt% TiO <sub>2</sub> (Psb), 2.2 - 2.4 wt% TiO <sub>2</sub> (Psb), 0.8 - 1.3 wt% TiO <sub>2</sub> and alkali affinities (Psb) indicated. (Psb, Pba, etc: Spinks Creek Volcanics).
NEOPROTEROZOIC	CENOZOIC	PALEOGENE - NEOGENE	Pscb	Medium to coarse-grained or pegmatitic dolerite (Pscb). Intrusives of igneous composition (Pscb) and of alkali affinities (Pscb) indicated.

CONTACTS	Geological contact.
Geological contact - inferred.	Geological contact - inferred from magnetic data.
Geological contact - inferred from radiometric data.	Unconformable lithological contact.
Igneous intrusive contact.	Limit of mapping of sub-unit within undifferentiated rock unit.
FAULTS	Fault.
Fault - inferred.	Fault - concealed.
Thrust fault (teeth on upper plate).	Thrust fault (teeth on upper plate) - concealed.
LINEARS	Magnetic gradient or lineament (direction towards lower values indicated).

Strike and dip of bedding, facing known - right way up; overturned, vertical, facing indicated by single tic.
Strike and dip of bedding, facing unknown - dipping, vertical.
Strike and dip of cleavage, type and relative age unspecified - dipping, vertical.
Strike and dip of cleavage, relative local age S <sub>1</sub> , S <sub>2</sub> , S <sub>3</sub> .
Trend and plunge of hinge line of minor fold; with dip and dip direction of axial surface indicated; vertical axial surface.
Trend and plunge of hinge line of minor antiform, relative local age #1.
Trend and plunge of kink-fold hinge line, with dip and dip direction of axial surface, and sense of displacement viewed down-plunge: sinistral.
Trend of horizontal minor fold hinge line, unspecified relative age.
Trend and plunge of minor fold hinge line, unspecified relative age, vergence sinistral.
Strike and dip of dominant joint set.
Field station for outcrop readings on the map.
Notable small outcrop with rock unit indicated.
Notable small float or lag occurrence 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.

Geology by J.L. Everard, B.Sc.(Hons), D.B. Seymour, B.Sc.(Hons), Ph.D., D.C. Green, B.Sc.(Hons), Ph.D., M.P. McClenaghan, B.Sc.(Hons), Ph.D., and A.V. Brown, B.Sc.(Hons), Ph.D. 1998 from the following sources (see source diagram):

A. M.P. McClenaghan 1995-1996. 1:25 000 scale mapping.  
 B. D.B. Seymour 1995-1996. 1:25 000 scale mapping.  
 C. J.L. Everard 1995-1996. 1:25 000 scale mapping.  
 D. D.C. Green 1995-1996. 1:25 000 scale mapping.  
 E. J.L. Everard and C.R. Calver, 1993 Arthur River Traverse, Mineral Resources Tasmania Plans SA22A,B.  
 F. EVERARD, J.L., SEYMOUR, D.B., BROWN, A.V. 1996. Geological atlas 1:50 000 series, Sheet 27 (79-15N) Tronville, Mineral Resources Tasmania, with modifications from new sermagmatic interpretation.  
 G. J.L. Everard 2015. Interpretation of airborne radiometric data, with additional field observations by B.S. Wainwright.  
 Updated by:  
 H. G.V. Cumming 2016. Traverses along new logging roads.

**REFERENCE THIS MAP AS:**  
 EVERARD, J.L., McCLENAGHAN, M.P., BROWN, A.V., SEYMOUR, D.B., and GREEN, D.C. (compilers) 2016. Digital Geological Atlas 1:25 000 Scale Series. Sheet 3244 Sumac. 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.

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