



CEANOZOIC	QUATERNARY	UNDIFFERENTIATED QUATERNARY SEDIMENTS (Q)	Qa	Qpao	Undifferentiated Quaternary sediments (Q). Alluvial sand, gravel and clay (Qa). Some alluvial terrace deposits indicated (Qpao).
		Lag and colluvium of quartz gravel, sand and clay, dominantly derived from silicified Proterozoic and Cambrian rocks (Qss).	Qss		
		Talus (Qpt), talus consisting dominantly of Jurassic dolomite boulders (Qpdt); talus of Proterozoic orthoquartzite (Qpdt); talus of silicified Proterozoic-Cambrian rocks (Qpdt).	Qpt		
		Mostly morainal deposits (Qpmm).	Qpmm		
		Erosional surface.			
		Undifferentiated Permian-Carboniferous sediments (PR), undifferentiated Upper Permian Supergroup rocks (R). Dominantly freshwater, cross-bedded quartzose sandstone and subordinate micaceous siltstone and mudstone (correlate in part of Ross Formation) (Rp).	PR	R	
		Freshwater cross-bedded feldspathic sandstone, micaceous siltstone, carbonaceous beds and coal lenses at places (correlate of Crystal Coal Measures) (Pcc).	Pcc		
		Undifferentiated Permian-Carboniferous sediments (P). Generally unfossiliferous medium to thick-bedded marine siltstone and sandstone with lenses, some intensely bioturbated beds and rare conglomeratic siltstone layers laminated dark grey micaceous siltstone with foraminifera at top (correlate of Aboki Bay Formation) (Pab).	P	Pab	
		Well-sorted fine-to coarse-grained marine feldspathic sandstone with quartz granules and pebbles (correlate of Risdon Sandstone) (Pw).	Pw		
		Generally fossiliferous mudstone, siltstone and sandstone with limestones (correlate of Burdekin, Deep Bay and Manna Point Formations and Faulner Group) (Pm). Contact metamorphosed by Jurassic dolomite (Pm).	Pm		
		Well-sorted, fine-grained quartz sandstone (correlate of Faulner Group) (Pq).	Pq		
		Uniform, poorly bedded dark grey marine mudstone and siltstone with sparse glauconitic fossils, limestones and pyrite nodules (correlate of Moody Island Siltstone) (Pw).	Pw		
		Dark grey dominantly pebbly diamictite with sparse fragmentary marine fossils, mudstone and laminite; upper unit at Maydena Range of interbedded, pebbly to boulder grade conglomerate diamictite and sandstone with some shell fossils (correlate of Truro Tillite) (Ptx); contact metamorphosed by Jurassic dolomite (Ptx).	Ptx		
		Angular unconformity.			
		Turbiditic, quartz-rich lithic sandstone, siltstone and minor conglomerate of metamorphic, volcanic and dolomitic provenance, and mudstone (Cals).	Cals		
		Polymict, dominantly mafic and ultramafic-derived, conglomerate, lithic sandstone and slate (Calc).	Calc		
		Talc-hematite and sericite-chlorite-altered rocks of unit Calc (Calc).			
		Micaceous lithic sandstone, mudstone and chert (Ccw).	Ccw		
		Basalt (Cwb).	Cwb		
		(Cwb, Ccw: correlate of Ragged Basin Complex).			
		Inferred unconformity.			

MEIOPROTEROZOIC	EDICARAN	SKARN-ALTERED DOLOSTONE OF WELD RIVER GROUP; DIOPSIDE-CALCITE-BRUCITE-SERPENTINITE-TREMOLITE-TALC-OPAL-DOLOMITE MINERAL ASSEMBLAGES (Ewts).	Ewts	Skarn-altered dolostone of Weld River Group; diopsid-calcite-brucite-serpentinite-tremolite-talc-opal-dolomite mineral assemblages (Ewts). Cambrian rocks and Proterozoic dolostone altered to fine-to coarse-grained secondary quartzite, quartzitic breccia and opaline silica (Ewts); dominantly opaline silica (Ewts).
		Predominantly pebbly laminated dolomitic siltstone and mudstone (Pwpc).	Pwpc	
		Predominantly black dolomitic diamictite (Pwxc).	Pwxc	
		Predominantly massive, fine-grained dolostone (Pwcd). Lag of silicification products (Pwcds); bouldery lag of silicification products (Pwcds); (Pwcd: correlate of Colocsa Creek Formation).	Pwcd	
		Dolostone (Dwt). Dominantly fine-grained dolostone (Ewft); dominantly oolitic granitoid (Ewfg); variably silicified dolostone (Pwtds); bouldery lag of silicification products (Pwtds).	Dwt	
		Conglomerate, sandstone and minor mudstone (correlate of Annakananda Formation) (Ewa).	Ewa	
		Low-angle unconformity.		
		Dominantly mudstone and quartz siltstone (Ecmn).	Ecmn	
		Dominantly dolomitic mudstone and siltstone, with minor dolostone and limestone (Ecd).	Ecd	
		Dolomitic mudstone, siltstone and intraclastic conglomerate (Ecdc).	Ecdc	
		Orthoquartzite (Pqc).	Pqc	
		Slate and phyllite with minor quartzite dolostone and quartzitic conglomerate (Pqp). Local occurrence of dolostone (Pqp) and quartzitic conglomerate indicated (Pqp).	Pqp	
		Black slate and phyllite with minor quartzite and diamictite (Ehp).	Ehp	

NEO-PROTEROZOIC PALEOZOIC	WELD RIVER GROUP	MEIOZOIC	CRETACEOUS	JURASSIC	CEANOZOIC

INTRUSIVE ROCKS	ALTERED ROCKS
• Ksa Aplite at 47650mE, 523600mN (Ksa).	• Calcit Talc-hematite and sericite-chlorite-altered rocks of unit Calc (Calc).
Jd Dolomite (Jd). Dolomite of grain size 0-1.5 mm (Jdf); 1.5-3 mm (Jdm); and >3 mm (Jdo) indicated.	Pwts, Ewts Cambrian rocks and Proterozoic dolostone (Weld River Group) altered to fine-to coarse-grained secondary quartzite, quartzitic breccia and opaline silica (Ewts); dominantly opaline silica (Ewts).
	Pwts Skarn-altered dolostone of Weld River Group; diopsid-calcite-brucite-serpentinite-tremolite-talc-opal-dolomite mineral assemblages. Alteration probably Mesozoic in age (Ewts).

CONTACTS	FAULTS	LINEARS
— Geological contact.	— Fault.	— Moraine ridge crest.
- - - Geological contact - inferred.	- - - Fault - inferred.	— Subsurface geological boundary projected to surface.
- . - Transitional geological contact.	- . - Fault - concealed.	— Lineament - visible on aerial photographs.
— Limit of mapping of sub-unit within undifferentiated rock unit.	— Normal fault (downthrown side indicated).	— Magnetic gradient or lineament (direction towards lower values indicated).
— Limit of detailed mapping.	— Normal fault (downthrown side indicated) - inferred.	

### SOURCE DIAGRAM

Compiled by C.R. Calver, B.Sc (Hons), Ph.D., 1997 from the following sources (see source diagram):

- A C.R. Calver, 1989-1990, 1:25 000 scale mapping.
- B C.R. Calver, 1995-1998, 1:25 000 scale mapping.
- C C.R. Calver, arpho interpretation.
- D C.R. Calver and J.L. Everard, personal observations.
- E C.R. Calver with acknowledgement to Carthew, S.J., Hobbs, S., Bellars, P.G. (1993), 1:250K-2005.
- F VICARY, M.J. 2005. Additional map compilation and review of existing maps in western Tasmania. Tasmanian Geological Survey Record 2005/5. Mineral Resources Tasmania.

### REFERENCE THIS MAP AS:

CALVER, C.R. (Compiler) 1997. Digital Geological Atlas 1:25 000 Scale Series. Sheet 4623 Weld. 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.

### LOCATION DIAGRAM

INDEX TO ADJOINING SHEETS

ANNE	RENSA	LONNILLE
SCOTTS	WELD	GLEN HUGH
RAZORBACK	PICTON	SEVESTON

1:25 000 maps available.

**WELD 4623**