Department of State Growth
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
WELD, SHEET 4623

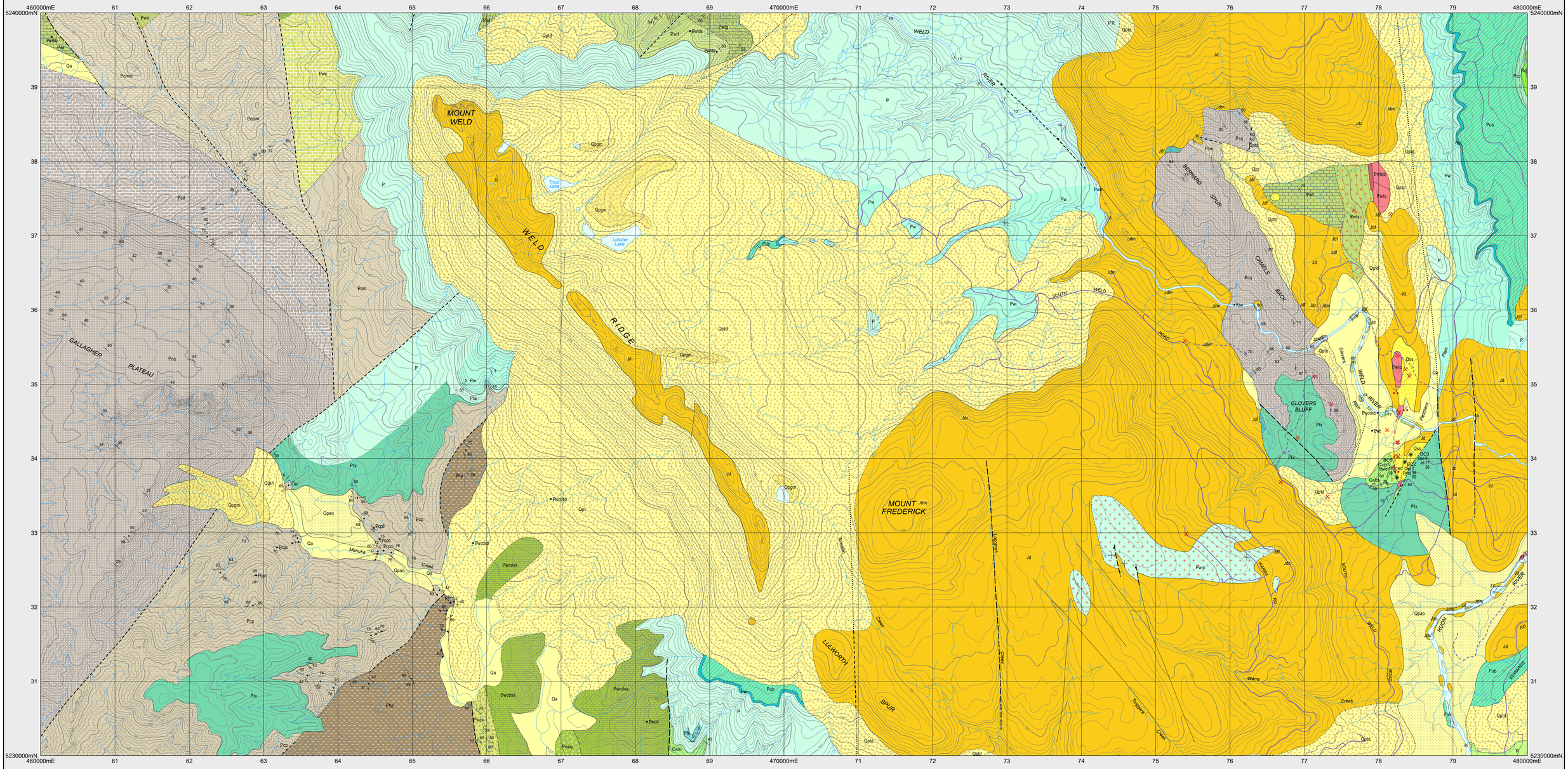
WELD

Scale 1:25 000

0 500 1000 1500 2000 2500m

INDUSTRY TOURISM RESOURCES

Tasmanian Government



CENOZOIC

QUATERNARY

- **Qa, Qpao** — *Undifferentiated Quaternary sediments (Q). Alluvial sand, gravel and clay (Qa). Some alluvial terrace deposits indicated (Qpao).*
- **Qss** — *Lag and colluvium of quartz gravel, sand and clay, dominantly derived from silicified Proterozoic and Cambrian rocks (Qss).*
- **Qpt** — *Talus (Qpt); talus consisting dominantly of Jurassic dolerite boulders (Qptd); talus of Proterozoic orthoquartzite (Qptn); talus of silicified Proterozoic-Cambrian rocks (Qptz).*
- **Qpgm** — *Mostly morainal deposits (Qpgm).*

Erosional surface.

MESOZOIC

TRIASSIC

- **Rqp** — *Undifferentiated Permo-Carboniferous sediments (PR); undifferentiated Upper Parmeener Supergroup rocks (R). Dominantly freshwater; cross-bedded quartzose sandstone and subordinate micaceous siltstone and mudstone (correlate in part of Ross Formation) (Rqp).*
- **Rcc** — *Freshwater cross-bedded feldspathic sandstone, micaceous siltstone, carbonaceous beds and coal lenses at places (correlate of Cygnet Coal Measures) (Rcc).*

PERMIAN

- **Pub** — *Undifferentiated Permo-Carboniferous sediments (P). Generally unfossiliferous medium to thick-bedded marine siltstone and sandstone with lonestones, some intensely bioturbated beds and rare conglomeratic siltstone layers; laminated dark grey micaceous siltstone with foraminifera at top (correlate of Abels Bay Formation) (Pub).*
- **Pui** — *Well-sorted, fine-to coarse-grained marine feldspathic sandstone with quartz granules and pebbles (correlate of Risdon Sandstone) (Pui).*
- **Pw, Pwm** — *Generally fossiliferous mudstone, siltstone and sandstone with lonestones (correlate of Bundella, Deep Bay and Minnie Point Formations and Faulkner Group) (Pw); contact metamorphosed by Jurassic dolerite (Pwm). Well-sorted, fine-grained quartz sandstone (correlate of Faulkner Group) (Pfk).*
- **Plw** — *Uniform, poorly bedded dark grey marine mudstone and siltstone with sparse glendonites, fossils, lonestones and pyrite nodules (correlate of Woody Island Siltstone) (Plw).*

CARBONIFEROUS ?

PENNSYLVANIAN ?

- **Ptx, Ptxm** — *Dark grey dominantly pebbly diamictite with sparse fragmentary marine fossils, mudstone and laminite; upper unit at Maydena Range of interbedded, pebble to boulder grade conglomerate, diamictite and sandstone with some shell fossils (correlate of Truro Tillite) (Ptx); contact metamorphosed by Jurassic dolerite (Ptxm).*

Angular unconformity.

PALEOZOIC

CAMBRIAN

TERRENEUVIAN - CAMBRIAN SERIES 2 ?

- **Cals** — *Turbiditic, quartz-rich lithic sandstone, siltstone and minor conglomerate of metamorphic, volcanic and dolomitic provenance, and mudstone (Cals).*
- **Calc, Calct** — *Polymict, dominantly mafic and ultramafic-derived, conglomerate, lithic sandstone and shale (Calc). Talc-hematite and sericite-chlorite-altered rocks of unit Calc (Calct).*
- **Ccwl** — *Micaceous lithic sandstone, mudstone and chert (Ccwl).*
- **Ccwb** — *Basalt (Ccwb). (Ccwb, Ccwl: correlate of Ragged Basin Complex).*

RAGGED BASIN COMPLEX — CLEVELAND - WARATAH ASSOCIATION

Inferred unconformity.

NEOPROTEROZOIC

CRYOGENIAN - EDIACARAN

- **Pwtq, Pwtqo** — *Skarn-altered dolostone of Weld River Group: diopside-calcite-brucite-serpentinite-tremolite-talc-opal-dolomite mineral assemblages (Pwts). Cambrian rocks and Proterozoic dolostone altered to fine-to coarse-grained secondary quartzite, quartzitic breccia and opaline silica (Pwtq); dominantly opaline silica (Pwtqo).*
- **Pwcg** — *Predominantly pebbly laminated dolomitic siltstone and mudstone (Pwcg).*
- **Pwc, Pwcx** — *Predominantly black dolomitic diamictite (Pwcx).*
- **Pwcd** — *Predominantly massive, fine-grained dolostone (Pwcd). Lag of silicification products (Pwcdss); bouldery lag of silicification products (Pwcdsb). (Pwc: correlate of Colcase Creek Formation).*
- **Pwt, Pwtg, Pwtf** — *Dolostone (Pwt). Dominantly fine-grained dolostone (Pwtf); dominantly oolitic grainstone (Pwtg), variably silicified dolostone (Pwtds), bouldery lag of silicification products (Pwtsb).*
- **Pwa** — *Conglomerate, sandstone and minor mudstone (correlate of Annakananda Formation) (Pwa).*

Low-angle unconformity.

MESOPROTEROZOIC - NEOPROTEROZOIC

- **Pcmm** — *Dominantly mudstone and quartz siltstone (Pcmm).*
- **Pcd, Pcdc** — *Dominantly dolomitic mudstone and siltstone, with minor dolostone and limestone (Pcd). Dolomitic mudstone, siltstone and intraclastic conglomerate (Pcdc).*
- **Pcq** — *Orthoquartzite (Pcq).*
- **Pcp** — *Slate and phyllite with minor quartzite dolostone and quartzitic conglomerate (Pcp). Local ocurrences of dolostone (Pcpd) and quartzitic conglomerate indicated (Pcpc).*
- **Php** — *Black slate and phyllite with minor quartzwacke and diamictite (Php).*

UPPER PARMENER SUPERGROUP

LOWER PARMENER SUPERGROUP

- Lymingtonian Stage
- Bernacchian Stage
- Tamarian Stage
- Hellyerian Stage

REKINIAN SERIES

WELD RIVER GROUP

MESOZOIC

JURASSIC

- **Jd** — *Dolerite (Jd). Dolerite of grainsize 0-1.5 mm (Jdf); 1.5-3 mm (Jdm); and >3 mm (Jdc) indicated.*

CRETACEOUS(?)

NEOPROTEROZOIC PALEOZOIC

CAMBRIAN

- **Pwtq, Pwtqo** — *Cambrian rocks and Proterozoic dolostone (Weld River Group) altered to fine-to coarse-grained secondary quartzite, quartzitic breccia and opaline silica (Pwtq); dominantly opaline silica (Pwtqo).*
- **Pwts** — *Skarn-altered dolostone of Weld River Group: diopside-calcite-brucite-serpentinite-tremolite-talc-opal-dolomite mineral assemblages. Alteration probably Mesozoic in age (Pwts).*

CYROGENIAN - EDIACARAN

INTRUSIVE ROCKS

- **Ksa** — *Aplite at 476050mE, 5236060mN (Ksa).*

ALTERED ROCKS

- **Calct** — *Talc-hematite and sericite-chlorite-altered rocks of unit Calc (Calct).*

CONTACTS

- *Geological contact.*
- *Geological contact - inferred.*
- *Transitional geological contact.*
- *Limit of mapping of sub-unit within undifferentiated rock unit.*
- *Limit of detailed mapping.*

FAULTS

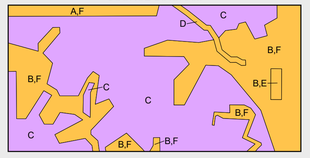
- *Fault.*
- *Fault - inferred.*
- *Fault - concealed.*
- *Normal fault (downthrown side indicated).*
- *Normal fault (downthrown side indicated) - inferred.*

LINEARS

- *Moraine ridge crest.*
- *Subsurface geological boundary projected to surface.*
- *Lineament - visible on aerial photographs.*
- *Magnetic gradient or lineament (direction towards lower values indicated).*

- *Strike and dip of bedding - right way up; overturned; facing unknown.*
- *Strike of vertical bedding, facing indicated by single tic; facing unknown.*
- *Horizontal bedding*
- *Strike and dip of cleavage of unspecified type and relative age; vertical.*
- *Strike and dip of cleavage relative local age S_1.*
- *Strike and dip of cleavage - relative local age S_2; vertical.*
- *Strike and dip of crenulation cleavage.*
- *Borehole location with name, depth of rock units encountered, and final depth.*
- *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.*

SOURCE DIAGRAM



- 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 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, airphoto interpretation.

D C.R. Calver and J.L. Everard; personal observations.

E C.R. Calver with acknowledgement to Carthew, S.J., Poltock,R., Bellairs,P.G. (1988) : TCR88-2855

F VICARY, M.J. 2005. Additional map compilation and review of existing maps in western Tasmania. Tasmanian Geological Survey Record 2005/05. 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.

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	NEVADA	LONNAVALE
SCOTTS	WELD	GLEN HUON
RAZORBACK	PICTON	GEEVESTON

1:25 000 maps available.

WELD 4623

Map generated: 10-DEC-2025

WARNING: INKS ARE LIGHT SENSITIVE.