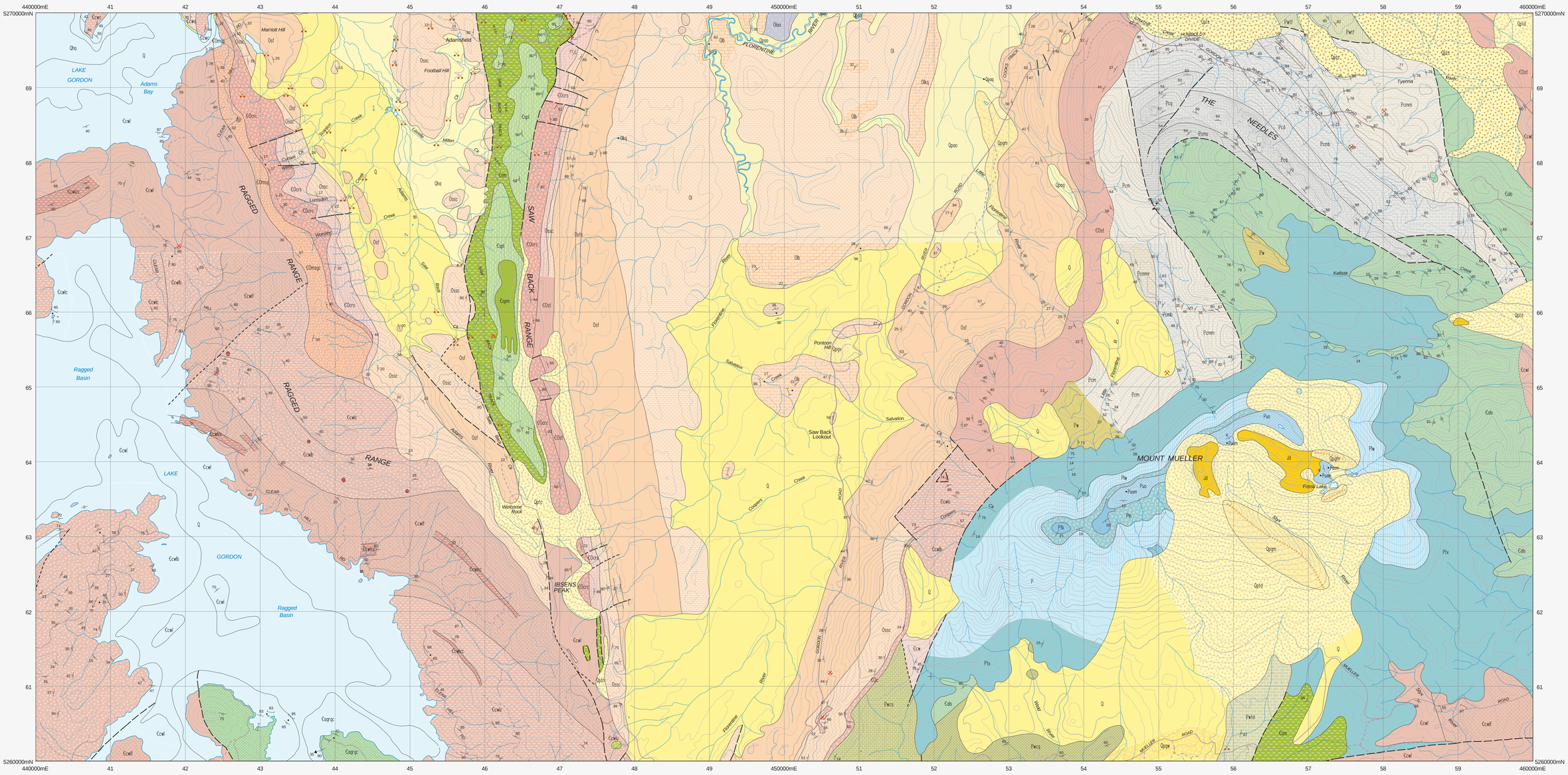
Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
ADAMSFIELD, SHEET 4426

ADAMSFIELD

Scale: 1:25 000

0 500 1000 1500 2000 2500m



CENOZOIC

QUATERNARY

Qha — *Stream alluvium, swamp and marsh deposits (Qha).*

Qpt — *Talus consisting dominantly of dolerite boulders (Qptd); Proterozoic orthoquartzite (Qptn); siliceous conglomerate (Qptc); quartz sandstone (Qpts).*

Qpao, Qpaq — *Older alluvium of dominantly well-sorted dolerite, quartzite, conglomerate and quartzite cobbles and boulders (Qpao). Dominantly quartzite cobbles (Qpaq).*

Qpgg — *Pleistocene glacial and glaciogene deposits (Qpgg). Weathered till (Qpgw).*

Qpgw, Qpgm — *Morainal and associated deposits (Qpgm).*

Qpgv — *Steeply-inclined, fluviolacustrine deposits of interbedded gravel, sand and clay (Qpgv).*

Low angle unconformity.

CARBONIFEROUS(?)–PERMIAN

Puo — *Pebbly fossiliferous marine sandstone, siltstone and mudstone (Undifferentiated Upper Glaciomarine Sequence) (Puo). Locally thermally metamorphosed by Jurassic dolerite (Puom).*

Pfk — *Freshwater or paralic, cross-bedded to laminated feldspathic sandstone and micaceous carbonaceous siltstone with fossil plant pieces (correlate in part of Faulkner Group) (Pfk).*

Pm — *Sparsely to richly fossiliferous marine siltstone, mudstone, sandstone and impure limestone with lonestones (correlate of Bundella Formation) (Pm).*

Plw — *Uniform, poorly dark grey marine mudstone and siltstone with sparse glendonites, fossils, lonestones and pyrite nodules (correlate of Woody Island Siltstone) (Plw).*

Ptx — *Dark grey, dominantly pebbly diamictite with sparse fragmentary marine fossils, mudstone and laminite; upper unit of interbedded, pebble to boulder grade conglomerate, diamictite and sandstone with some shell fossils (correlate of Truro Tillite) (Ptx).*

Angular unconformity.

LOWER PARMEENER SUPERGROUP

PALEOZOIC

SILURIAN

Olaa — *Interbedded sandstone and mudstone (Arndell Sandstone) (Olaa).*

Olb — *Dolomitic, micritic limestone (Benjamin Limestone) (Olb).*

ORDOVICIAN

Olc — *Oncolitic calcarenite (Cashions Creek Limestone) (Olc).*

Olk — *Micritic limestone, usually with chert nodules (Karmberg Limestone) (Olk).*

Olkq — *Limestone with chert layers, indicated by Quaternary log of chert fragments (Olkq).*

Osf — *Siltstone and calcareous shale (Osf); quartz sandstone horizons (Osfs).*

Osfs

Ossc — *Quartz sandstone and chert–clast conglomerate (Tim Shea Sandstone) (€Ost). Upper marine shallow–water quartz sandstone with abundant worm casts, minor basal conglomerate against older basement (Ossc).*

CAMBRIAN

FURONGIAN

€Ost — *Undifferentiated cobble conglomerate (€Oc). Interbedded cross–bedded quartz sandstone, pebbly sandstone and siliceous well–sorted pebble conglomerate (€Ocrs).*

€Ocrs

€Ocrc — *Terrestrial shallow–water thickly–bedded siliceous–cobble conglomerate (€Ocrc)*

€Oc

€Omsgc — *Interbedded pebble–cobble conglomerate, sandstone and fossiliferous siltstone (€Omsgc). Lower marine shallow–water quartz sandstone with worm casts; minor basal conglomerate (€Omsg). (€Omsg and €Omsgc = Great Dome Sandstone).*

€Omsg

€Oclq — *Siliceous turbiditic quartzwacke, calcareous and micaceous sandstone and siltstone, with minor conglomerate, limestone and quartzarenite; Late Cambrian (Idamean) fossils present (Singing Creek Formation and correlates) (€Oclq).*

Angular unconformity.

REEDS FORMATION — FLORENTINE VALLEY FORMATION — DOVES CREEK FORMATION — MERRITE CREEK FORMATION — GORDON GROUP

ERIBOON GROUP — CORRELATE OF OWEN GROUP

CAMBRIAN

CAMBRIAN SERIES 3

€qgrqc — *Quartzwacke, lithicwacke with predominantly metasedimentary and minor chert grains, and interbedded grey–green mudstone and fossilerous siltstone with subordinate pebble conglomerate (€qgrqc).*

€als — *Quartz–rich sandstone and minor conglomerate of metamorphic, volcanic and dolomitic provenance, and mudstone (€als).*

CAMBRIAN SERIES 2 — TERRENEUVIAN – CAMBRIAN SERIES 2

€cw — *Interbedded chert, lithic sandstone, siltstone and pyritic mudstone (€cwa).*

€cwiv — *Micaceous lithic sandstone of metamorphic and volcanic provenance, mudstone, red mudstone and minor chert (€cwi); Scattered ultramafic outcrops within unit €cwi (€cwiv).*

€cwlf — *Feldspathic wacke with common, very–coarse grains of muscovite and grains of garnet and biotite, interlayered with grey–green mudstone and minor feldspathic wacke, red mudstone, chert and fine–grained, basic igneous rock (€cwlf).*

€cwlc — *Feldspathic wacke with common chert interlayers (€cwlc). Some chert layers indicated (€cwlcc).*

€cwlcc

€cwlb — *Predominantly interlayered red mudstone, chert, basaltic tuff and basalt. Small dolerite bodies present (€cwlb).*

€cwc — *Dominantly banded chert (€cwc).*

€cwo — *Possible olistolith of white quartz arenite and chert bearing pebbly quartz arenite (€cwo).*

Angular unconformity.

RAGGED BASIN COMPLEX — CORRELATE OF CLEVELAND–WARATAH ASSOCIATION

NEOPROTEROZOIC

CRYOGENIAN – EDIACARAN

Pw — *Massive, fine–grained dolostone with diamictite, labile sandstone, mudstone and chert (Pwcs); where interlayered with quartz sandstone (Pwcq).*

Pwcs

Pwcq

Pwtd — *Dominantly massive, fine–grained dolostone (Pwtd).*

Pwtg — *Dominantly bedded oolitic dolograinstone (Pwtg).*

Pwtf — *Dominantly fine–grained dolostone (Pwtf).*

Low angle unconformity.

WELD RIVER GROUP

MESOPROTEROZOIC

Pcm — *Dominantly mudstone and quartz siltstone (Pcmm). Massive red mudstone (Pcmmr).*

Pcmmr

Pcmm

Pcmq — *Orthoquartzite, as thin (>30m) impersistent units in dominantly mudstone sequence (Pcmq).*

Pcd — *Dominantly dolomitic mudstone and siltstone, with minor dolostone and limestone (Pcd).*

Pcmb — *Black micaceous shale and siltstone with occasional dolostone beds (Pcmb).*

Pcq — *Orthoquartzite (including Needles Quartzite and correlates) (Pcq).*

Pcms — *Interbedded quartz siltstone and red and green mudstone (Pcms).*

CLARK GROUP

IGNEOUS ROCKS

MESOZOIC — JURASSIC

Jd — *Dolerite (Jd).*

PALEOZOIC — CAMBRIAN — TERRENEUVIAN – CAMBRIAN SERIES 2

€spm — *Massive orthopyroxenite (€spm).*

€sdo — *Serpentinised dunite with interlayered orthopyroxene–bearing dunite (€sdo). (€spm + €spo: probable egivalents of LDH, layered dunite and harzburgite succession, Western Tasmania).*

€spl — *Dominantly layered orthopyroxenite, olivine orthopyroxenite and dunite (€spl; probable equivalent of LPD, layered pyroxenite and dunite succession, Western Tasmania).*

€sm — *Massive serpentinite (€sm).*

€smo — *Serpentinite with amphibole (€smo).*

ADAMSFIELD ULTRAMAFIC COMPLEX

Geological boundary – position accurate or approximate.
Geological boundary – inferred.
Fault – position accurate or approximate.
Fault – inferred.
Fault – concealed.
Morainal ridge crest.
(white line) Limit of mapping of sub–unit within undifferentiated rock unit.

Strike and dip of bedding, right way up; overturned.
Strike and dip of bedding, facing unknown – dipping; vertical.
Horizontal bedding.
Strike and dip of primary igneous banding or platy alignment.
Strike and dip of cleavage, type and relative age unspecified – dipping; vertical.
Strike of vertical cleavage, relative local age S1.
Strike and dip of cleavage, relative local age S2.
Trend and plunge of minor fold hinge line, unspecified relative age; with dip and dip direction of axial surface.
Trend and plunge of minor fold hinge line, relative local age F2 with dip and dip direction of axial surface.
Glacial striae, showing sense of movement.
Macrofossil locality.
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

Data derived from Mineral Resources Tasmania DEPOSITS database. Data point position has not been verified in every case.

Compiled by M.P. McClenaghan, B.Sc.(Hons), Ph.D., 2004 from the following sources (see responsibility diagram):

A TURNER, N.J., CALVER, C.R., McCLENAGHAN, M.P. McCLENAGHAN, J., BROWN, A.V., LENNOX, P.G. 1985. Geological Atlas 1:50 000 Series. Sheet 80 (8112S), Peddler.

B BROWN, A.V., McCLENAGHAN, M.P., TURNER, N.J., BAILLIE, P.W., McCLENAGHAN, J., LENNOX, P.G., WILLIAMS, P.R. 1982. Geological Atlas 1:50 000 Series. Sheet 73 (8112N), Huntley.

C Unpublished geological survey mapping C.R. Calver 1996.

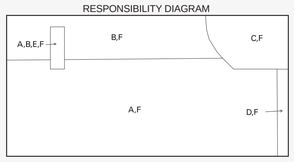
D Unpublished geological survey mapping C.R. Calver 1996.

E Airphoto interpretation by M. Vicary 2004.

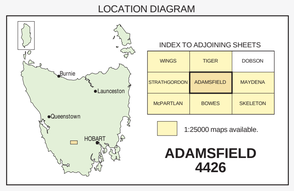
Updated by:

F M. Vicary, 2004 as part of the Western Tasmanian Regional Minerals Program.

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



REFERENCE THIS MAP AS:

McCLENAGHAN, M.P. (compiler) 2004. Digital Geological Atlas 1:25 000 Scale Series. Sheet 4426. Adamsfield. Mineral Resources Tasmania.

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Map produced by the Geoscience Information Branch of Mineral Resources Tasmania using G.I.S. software.

GDA94 – MGA Zone 55. Contour Interval: 20 metres.

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