CENTRAL ARTHUR PROJECT - MAP 2

SCALE 1:50000

0 1 2 3 4 5

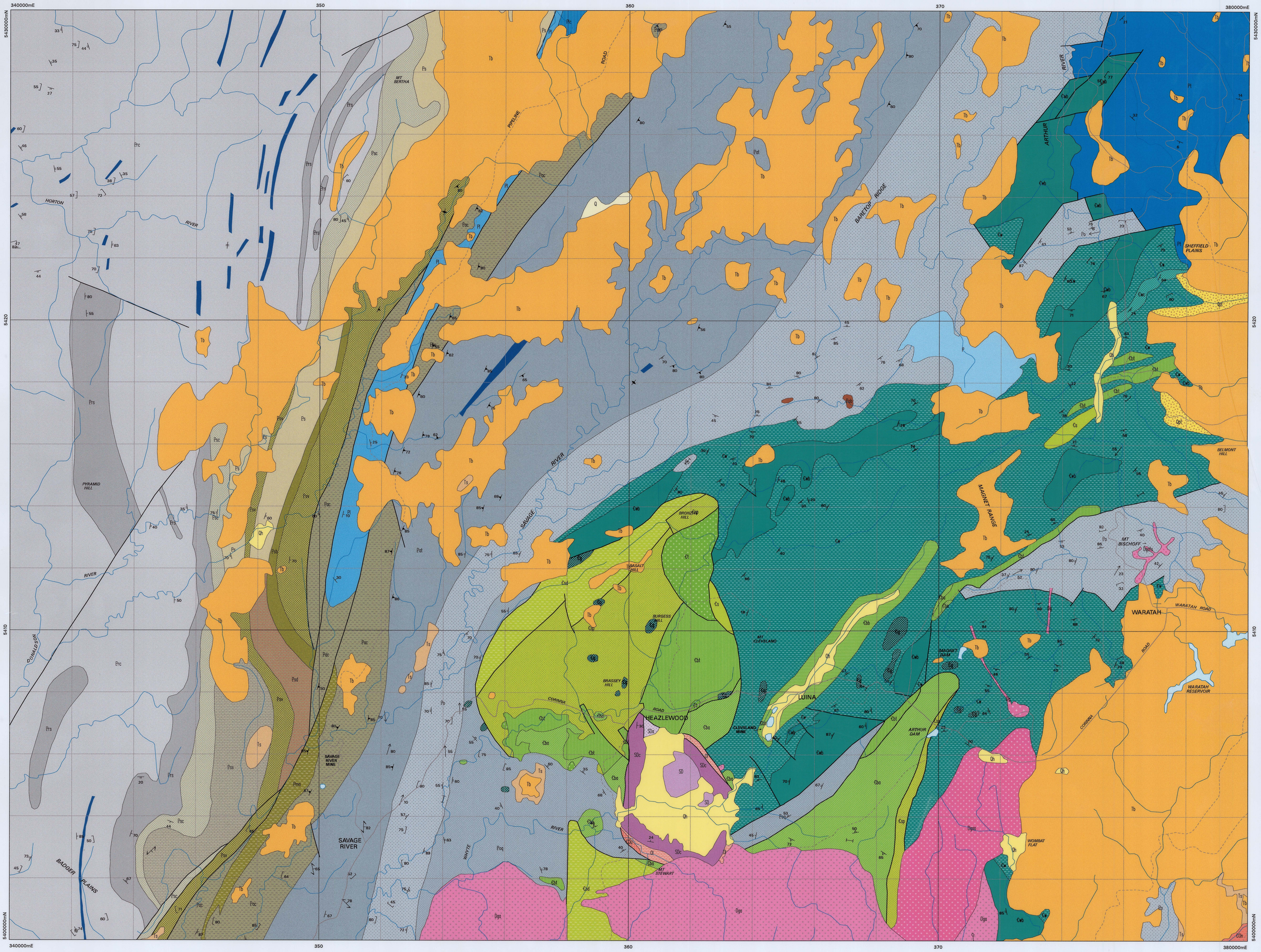
Kilometres

Grid: Australian Map Grid, Zone 55.

MINERAL RESOURCES TASMANIA

Tasmania

TASMANIAN GEOLOGICAL SURVEY



HOLOCENE	Qh	Sand, gravel, and mud of alluvial, lacustrine and littoral origin (Qh).
PLEISTOCENE	Qpt	Talus, vegetated and active (Qpt).
		Erosional surface
TERTIARY	Ts, Tb	Dominantly non-marine sequences of sand, gravel, silt and clay (Ts); basalt and related igneous and pyroclastic rocks (Tb).
		Erosional surface.
PERMIAN-LATE CARBONIFEROUS (LOWER PARMEENER SUPERGROUP)	P, Pl, Pt	Freshwater and paralic sandstone and mudstone with some coal measures (Plc). Lower glaciomarine sequences of mudstone, pebbly mudstone, pebbly sandstone, minor limestone and Tasmanite oil shale (Pl). Basal tillite (Pt).
		Angular unconformity.
SILURIAN	SD, SDo	Siltstone, shale and minor quartz sandstone (SDo).
ORDOVICIAN	SD, SDc, O, €Do	Shallow marine quartz sandstone (SDc) (Crotty Quartzite and correlates). (SD: Eldon Group and correlates). Dominantly shallow marine limestone with minor siltstone and sandstone. (O: Gordon Group). Undifferentiated or poorly constrained dominantly quartz sandstone sequences with rare fossils (€Do: includes Moina sandstone, Caroline Creek Sandstone).
LATE CAMBRIAN	€On	Marine sandstone–siltstone–conglomerate sequences including, tubidite fan deposits, commonly with Late Cambrian fossils; includes upper Dundas Group and correlates, Newton Creek Sandstone and correlates (€On).
		Angular unconformity.
EARLY CAMBRIAN	€s, €t, €bb	Layered peridotite, serpentinite and associated rocks (€s); tonalite and associated rocks (€t); low–Ti tholeiitic and boninitic lavas (€bb). Structurally emplaced.
	€wc, €wb	Sequences of turbiditic mafic volcaniclastics, red mudstone and chert. Some basalts (€wb) and chert (€wc) indicated. (€w: 'Cleveland–Waratah association' and correlates).

PROTEROZOIC – NEOPROTEROZOIC (TOWARI GROUP, AHRBERG GROUP AND CORRELATES)	Psd	Shallow marine dolomite and minor limestone (Psd: Smithton Dolomite and correlates).
	Es, Pdc, Pab	Turbiditic mudstone, siltstone, lithic-wacke and diamictite with mafic volcanic detritus (Pes) (some tholeiitic basalt indicated (Pab), (Pdc, Psb): Adamunah Subgroup, Bernafai Volcanics and correlates).
	Pss, Poc	Shallow marine dolomite, chert, shale and diamictite (Pss: Black River Dolomite, Savage Dolomite and correlates). Basal siliceous conglomerate and sandstone (Poc: Frost Conglomerate and Quartzite, Donaldson Formation and correlates).
		Angular unconformity.
	Prc	Dominantly dark, laminated, commonly pyritic siltstone and mudstone (Prc: Cywrie Siltstone and similar sequences).
?	Prs	Unassigned quartzite sequences (no stratigraphic position implied) (Prs). (Rocky Cape Group).

ARTHUR METAMORPHIC COMPLEX

(In part metamorphic equivalents of Prp, Po and Es).

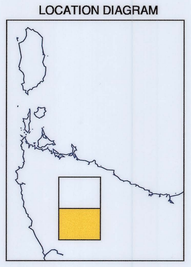
Poc, Pmc	Chloritic schist, with minor phyllite, dolomite and magnesite (Poc); amphibolite (Pmc).
Pot	Quartz mica schist, quartzite, phyllite and rare dolomite (Pot) (Keith Schist and correlates).
Pop	Phyllite with minor pelitic schist, foliated quartzite and dolomite, and rare conglomerate (Pop).
Po, Poq, Pab	Quartzwacke turbidite successions (Po), with some basalt (Pab); quartzwacke of high–grade metamorphic provenance (Poq) (Burnie and Oonah Formations and correlates).

IGNEOUS ROCKS

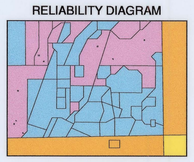
TERTIARY	Tb	Basalt and related igneous and pyroclastic rocks (Tb).
LOWER CARBONIFEROUS DEVONIAN	Dgafs	Dominantly S–type alkali–feldspar granite (Dgafs).
	Dg, Dgo	Undifferentiated I–type alkali feldspar granite/granite/adamellite (Dgo).
	Dgao	Dominantly I–type granite/adamellite (Dgao).
CAMBRIAN	€g	Gabbroic rocks (€g).
	€bo	Boninitic lavas (€bo).
	€bb, €bt	Low–Ti tholeiitic lavas (€bt).
	€t	Tonalite and associated rocks (€t).
	€sd, €s, €sp	Layered peridotite, serpentinite and associated rocks (€s); dominantly serpentinised layered dunite and harzburgite (€sd); dominantly layered pyroxenite and dunite (€sp).
PROTEROZOIC	Pd	Felsic and mafic dykes (Pd).
	Pmo	Amphibolite (Pmo).

- Strike and dip of bedding: right way up; overturned; facing unknown; vertical with facing unknown.
- Strike and dip of cleavage: dipping; vertical.
- Strike and dip of crenulation cleavage: dipping.
- Direction and plunge of minor fold hinge line, unspecified age.
- Strike and dip of igneous mineral foliation: dipping, trend of foliation trace on horizontal surface.
- Strike and dip of schistosity or metamorphic foliation: dipping, vertical.
- Geological boundary.
- Fault.

LOCATION DIAGRAM



RELIABILITY DIAGRAM



- Published systematic Geological Survey mapping (1:25000 scale).
- Published systematic Geological Survey mapping (1:50000 scale).
- Unpublished compilation Geological Survey mapping (1:10000 - 1:50000 scale).
- Published systematic Geological Survey mapping (1:63360 scale) after 1965.
- Published systematic Geological Survey mapping (1:63360 scale) before 1965.
- Mapping (1:50000 or more detailed scale) from various non-governmental sources and reconnaissance scale mapping.
- Geophysical and/or air photo interpretation with limited ground information.

Digital data compiled from published and unpublished geological mapping and interpretation of helicopter borne magnetics and radiometric data by J.L. Everard and R.G. Richardson.
Data is based on 1:250,000 Geological and Topographical data.

Digital base information from Land Information Services, Department of Primary Industries, Water and Environment.

Map produced April 1999 by Data Management Group using G.I.S. software.
Data correct as at November 1998.

WARNING INKS ARE LIGHT SENSITIVE

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