

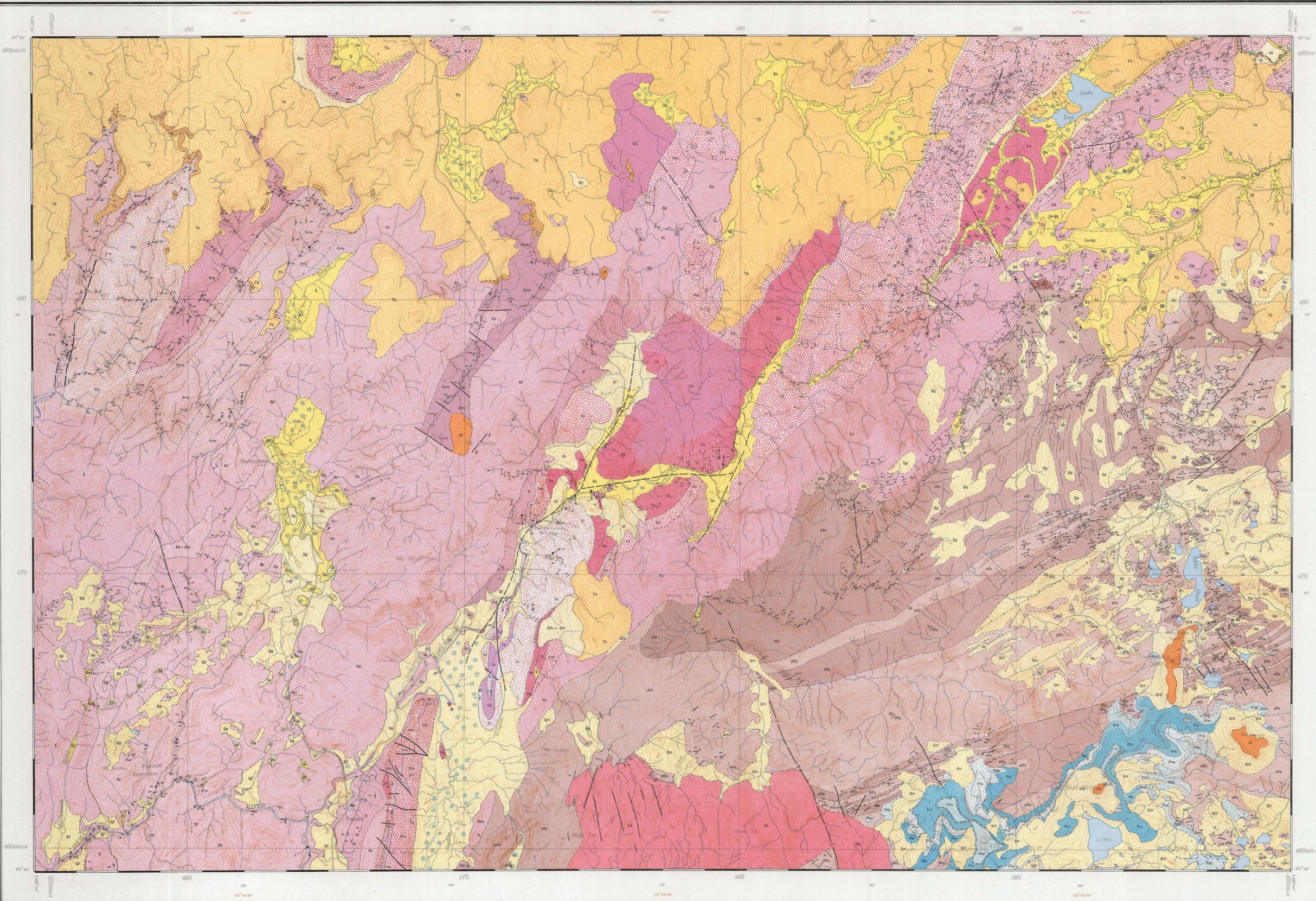
MACKINTOSH

Geological Survey of Tasmania
Department of Mines—Hobart

GEOLOGICAL ATLAS 1 MILE SERIES
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REFERENCE

Quaternary

- Qa Alluvium and swamp deposits
- Qt River terrace sediments
- Qtb Talus deposits of basalt (Qtb), dolerite (Qtd), sandstone (Qts), porphyry (Qtp)
- Qm Moraine
- Qf Fluvioglacial deposits
- Qg includes periglacial deposits

Tertiary

- Ts Siliceous conglomerate, grit, occasional fossiliferous sandstone and clay
- Unconformity

Permian

- Pf Sandstone and shale (= Fernree Group)
- Pm Mt. Inglis Sandstone
- Pw Waterfall Valley Siltstone
- Pb Benson Peak Sandstone
- Pc Cradle Cirque Siltstone
- Ph Lake Holmes Coal Measures
- Pi Lake Willi Pebbly Siltstone
- Pj Barn Bluff Conglomerate
- Pk Bluff River Pebbly Siltstone
- Unconformity

Silurian

- Sac Siltstone (? = Austral Creek Siltstone)
- Sk Quartzite (= Keel Quartzite)
- Sa Fossiliferous shale (= Amber Slate)
- Sc Quartzite (= Crotty Quartzite)

Ordovician

- Og Gordon Limestone
- Oo Correlate of Owen Conglomerate; sequences of predominantly quartz sandstone (Oos) or Siliceous conglomerate (Ooc) indicated
- Oc Conglomerate, including pebbles of Cambrian porphyries
- Os Undifferentiated Ordovician - Silurian siltstone and sandstone
- Unconformity

Cambrian

- Em Mudstone and slate with sandstone (s)
- Emc Mudstone, quartzite and greywacke sequence with conglomerate (c) horizons and thicker mudstone (m) layers indicated
- Emh Greywacke and mudstone sequence of the Hatfield River
- Emg Greywacke conglomerate - sandstone and mudstone sequence
- Eml Limestone conglomerate
- Emm Mudstone and greywacke sequence of the Coldstream River with bedded limestone localities indicated (l)
- Eu Undifferentiated igneous and sedimentary rocks
- Unconformity

Precambrian

- pe Shales, siliceous sandstone - siltstone
- pa Quartzite and platy quartzite with subordinate pelitic layers
- pp Pelitic sequence of phyllite and micaceous schist with subordinate quartzite

Igneous Rocks

- Tb TERTIARY Basalt
- Jd JURASSIC Dolerite
- Dg DEVONIAN Granite
- Cp CAMBRIAN Predominantly quartz and quartz feldspar porphyries. Occasionally with flow banding (Cpf); sedimentary inclusions (Cps); porphyry inclusions (Cpi)

Geological boundaries and structures

- Geological boundary—observed
- - - Geological boundary—position approximate
- Geological boundary—position inferred
- - - Geological boundary—position inferred and concealed
- - - Geological boundary—airphoto interpretation
- Airphoto linear
- Strike and dip of beds—right way up, overturned
- Vertical and horizontal bedding
- Strike and dip of beds—facing unknown
- Strike and dip of bedding in igneous rocks; vertical banding
- Dip slope
- Lineation
- Strike and dip of dyke
- Minor fold direction and plunge (note kink bands omitted)
- Fault exposed (downthrown side indicated)
- Fault—position approximate (downthrown side indicated)
- Fault—position inferred (downthrown side indicated) and concealed
- Shatter zone
- Strike and dip of cleavage; vertical cleavage
- Strike and dip of joint; vertical joint
- Landlip
- Monoclinial locality
- Plant fossil locality
- Mine or prospect
- Minor mineralisation (p-pyrite; g-galena; h-hematite)

Schistose structures in Lower Paleozoic rocks of N.E. quadrant

- Strike and dip of earlier, and probably earlier schistosity and cleavage; vertical schistosity and cleavage
- Strike and dip of later, and probably later schistosity and cleavage; vertical schistosity and cleavage

Structures in Precambrian rocks:

- S₁: Strike and dip of platy parting, possibly bedding, in quartzitic layers and lithological banding in pelitic rocks; vertical S₁
- S₂: Strike and dip of strain slip cleavage in quartzitic layers and transposition surface in pelitic rocks believed equivalent; vertical S₂
- S₃: Strike and dip of closely spaced planes in quartzitic layers and schistosity in pelitic rocks believed equivalent; vertical S₃
- S₄: Strike and dip of undifferentiated surfaces; vertical surfaces
- L₁: Direction and plunge of early lineation in quartzitic layers, and intersection of S₁, S₂ in pelitic rocks, with axial plane dip indicated where known
- L₂: Direction and plunge of intersection S₂ and S₃
- L₃: Direction and plunge of strong quartz mineral lineation in quartzitic rocks; Creulation lineation on S₁ in pelitic rocks, with axial plane dip indicated where known
- L₄: Creulation lineation on S₁ in pelitic rocks with axial plane dip indicated where known
- Direction and plunge of undifferentiated lineations
- Direction and plunge of earliest minor folds associated with an omitted crenulation
- Direction and plunge of later minor folds associated with L₁
- Direction and plunge of later minor folds associated with L₂
- Direction and plunge of later minor folds associated with L₃

CONTROL: 2nd and 3rd Order Triangulation based on Lochanastrom Astronomical Station Lat. 41° 38' 32.88" S Long. 147° 17' 49.75" E.

DETAIL: Aerial Photography 1956

PROJECTION: Transverse Mercator

LEVEL DATUM: Mean Sea Level Hobart

NOMENCLATURE: Approved by the Nomenclature Board of Tasmania

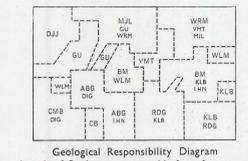
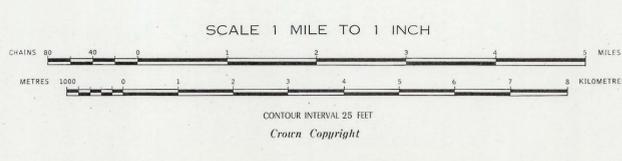
GRID CONVERGENCE: Based on Longitude 146° 00' E. To obtain True Bearing use correction as shown in boxes to margin of map.

Topographic Symbols:

- Triangulation Stations: 2nd and 3rd Order (triangle), 4th Order (circle)
- Swamp or Marsh (wavy lines)
- Quarry (circle with 'Q')
- Gravel Pit (circle with 'G')
- Contours (dashed lines)
- Depression Contours (dashed lines with 'd')
- Roads (solid line with double dashes)
- Vehicular Track (solid line with single dashes)
- Foot or Pack Track (dashed line)
- Railway (line with cross-ticks)

INDEX TO ADJOINING SHEETS

MAGNET	ST. VALENTINES	SHEFFIELD
CORINNA	MACKINTOSH	MIDDLESEX
ZELMAN	MURCHISON	DUCANE



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Base map adapted from 40 chain to 1 inch sheets produced by the Lands and Surveys Department, Hobart.

Geological Map production by the Drawing Office, Department of Mines, Hobart.

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