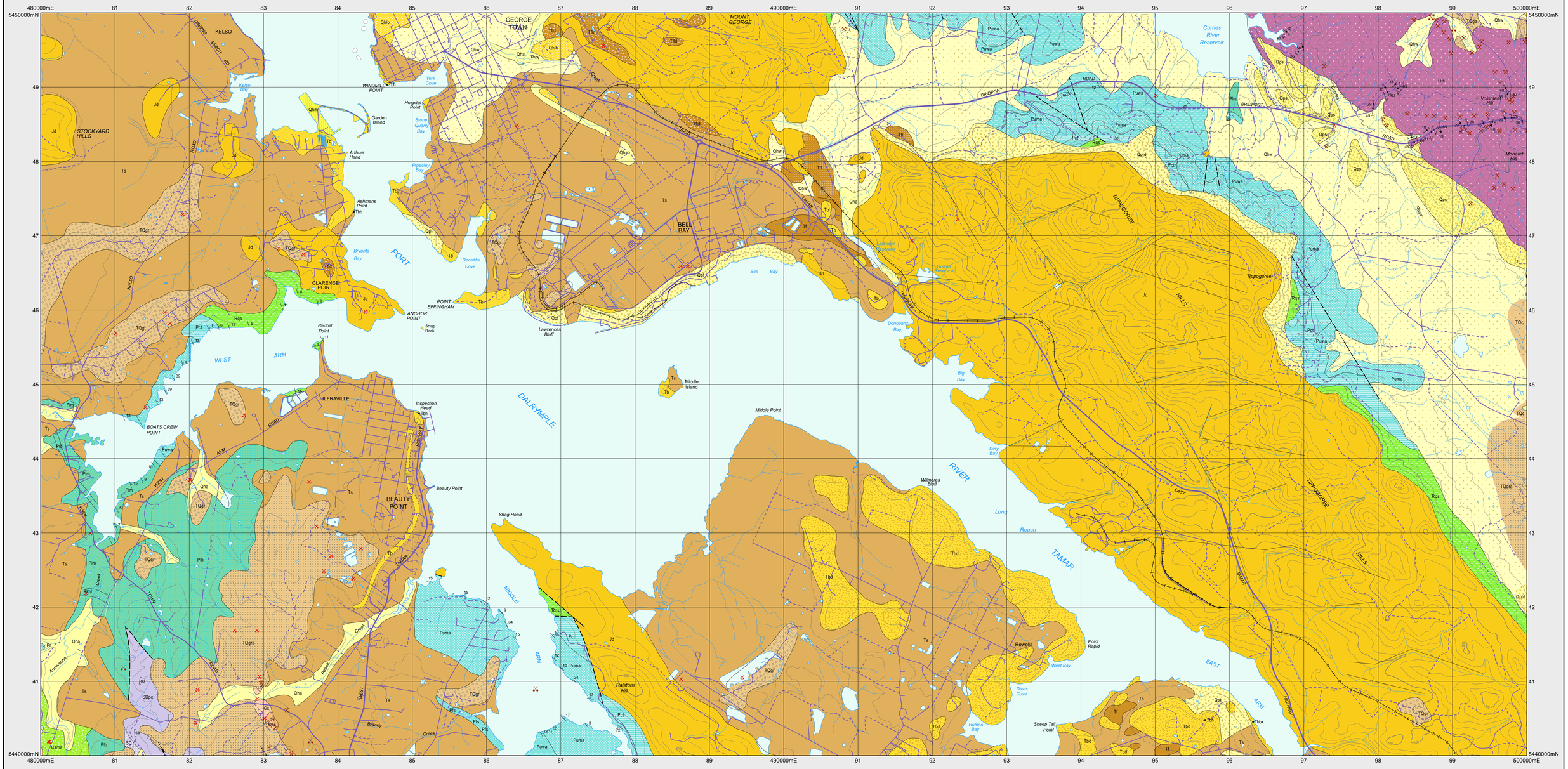
**Department of State Growth**
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
BELL BAY, SHEET 4844

# BELL BAY

Scale 1:25 000

0 500 1000 1500 2000 2500m




## CENOZOIC

### QUATERNARY – HOLOCENE

- **Qhm** — *Man disturbed ground (Qhm).*
- **Qha** — *Stream alluvium, swamp and marsh deposits (Qha).*
- **Qhw** — *Windblown sand and locally derived sand (Qhw).*
- **Qhlb** — *Basalt derived lag deposit (Qhlb).*
- **Qps** — *Silt with rounded clasts of granite, schist, quartzite, conglomerate, derived from Permian strata (Qps).*
- **Qpt** — *Talus (Qpt), dolerite talus (Qptd).*
- **TQc** — *Silt and clay with occasional pebbles (TQc).*
- **TQgr** — *Rounded gravel, mainly vein quartz (TQgr).*
- **TQga** — *Angular gravel, mainly vein quartz (TQga).*
- **TQgra** — *Rounded and angular gravel, mainly vein quartz (TQgra).*

### ? PALEOGENE – NEOGENE

- **Tfl** — *Ferricrete lag (Tfl).*
- **Ts** — *Conglomerate, gravel, sand, silt, mud and clay (Ts).*
  - **Tb** — *Basalt (Tb); hawaiite (Tbh) indicated.*
  - **Tbd** — *Basanitic dolerite (Tbd); hawaiite (Tbh); basanitic dolerite with lherzolite nodules (Tbbx) indicated.*
  - **Tf** — *Ferricrete (Tf).*
- **Tfld** — *Laterite derived from Jurassic Dolerite (Tfld).*
- **Tfi** — *Pisolitic ironstone (Tfi).*

~~~~~~~~~~~~ *Unconformity.*

## MESOZOIC ?

### TRIASSIC ?

- **Rqs** — *Cross-bedded quartz sandstone, feldspathic sandstone and shale (Rqs).*

### PERMIAN

UPPER PARMEENER SUPERGROUP

- **Pct** — *Carbonaceous sandstone and shale (Clog Tom Sandstone) (Pct).*
- **Puma** — *Wormcast siltstone and sandstone (Middle Arm Group) (Puma).*
- **Puwa** — *Fossiliferous sandstone, siltstone and limestone (West Arm Group) (Puwa).*

LOWER PARMEENER SUPERGROUP

- **Pfs** — *Dominantly well sorted quartz sandstone usually cross-bedded or laminated and commonly with interbedded and laminated carbonaceous shale, lesser conglomerate and rare coal (Liffey Sandstone) (Pfs).*
- **Plm** — *Poorly sorted pebbly mudstone, sandstone and minor conglomerate marine fossils present in places (Pfb). Mudstone, pebbly siltstone and sandstone (Mossey Creek Group) (Plm). Clastic limestone beds (Plml).*
  - **Plml**
  - **Pfb** — *Angular boulder bed (tillite ?) (Pfb)*
  - **Pt** — *Basal tillite (Pt).*

~~~~~~~~~~~~ *Unconformity.*

## PALEOZOIC

### DEVONIAN – LOWER DEVONIAN

PANAMA GROUP

- **SDpc** — *Quartzwacke turbidite sequence of interbedded sandstone, siltstone and mudstone (Corn Hill Formation) (SDpc).*

### ORDOVICIAN

TIPPOGOREE GROUP; MATHINNA SUPERGROUP

- **Ots** — *Thick bedded, turbiditic, graded fine- to very fine-grained quartz-rich sandstone with stripy penetrative cleavage, and minor interbedded slaty pelite (Stony Head Sandstone) (Ots).*

### SILURIAN

ELDON GROUP

- **SD** — *Quartz sandstone, laminated siltstone and shale (Johnston Creek Formation) (SD).*

### ORDOVICIAN

OWEN GROUP; HUAMINNA SUPERGROUP

- **Os**
  - **Oshe** — *Quartz sandstone with chert (Undifferentiated Eaglehawk Gully and Salisbury Hill Formations) (Os). Tabular-bedded commonly hematitic quartz sandstone, carbonate -bearing sandstone and less common siltstone (Oshe).*
  - **Oss** — *Quartz-pebble conglomerate to gritty sandstone with thickly - to thinly-bedded quartz sandstone (Oss).*

## IGNEOUS ROCKS

### CENOZOIC – PALEOGENE – NEOGENE

- **Tb** — *Basalt (Tb); hawaiite (Tbh) indicated.*
- **Tbd** — *Basanitic dolerite (Tbd); hawaiite (Tbh); basanitic dolerite with lherzolite nodules (Tbbx) indicated.*

### PALEOZOIC – MESOZOIC – JURASSIC

- **Jd** — *Dolerite (Jd).*

### PALEOZOIC – CAMBRIAN

- **Ꞓsma** — *Serpentinite with amphibole (Ꞓsma).*

### CONTACTS

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

### FAULTS

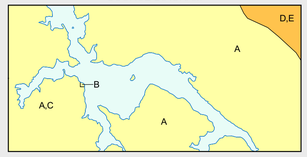
- *Fault.*
- *Fault - concealed.*
- *Normal fault (downthrown side indicated) - inferred.*
- *Normal fault (downthrown side indicated) - concealed.*
- *Thrust fault (teeth on upper plate) - concealed.*

### LINEARS

- *Lineament - visible on aerial photographs.*

- *Strike and dip of bedding - right way up; overturned; facing unknown.*
- *Strike and dip of cleavage of unspecified type and relative age; vertical.*
- *Strike and dip of penetrative cleavage; crenulation cleavage.*
- *Trend and plunge of minor fold hinge line, relative local age $F_3$; with dip and dip direction of axial surface.*
- *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 M.P. McClenaghan, B.Sc.(Hons), Ph.D., 1996 from the following sources (see source diagram):

A GEE, R.D., LEGGE, P.J. 1971. Geological Atlas 1:63 360 Series. Sheet 30 (8215N), Beaconsfield. Tasmania Department of Mines.

Updated by:

B M. Latinovic, S.M. Forsyth, 2003. Reconnaissance geology mapping. Mineral Resources Tasmania.

C Vicary, M. 2005. Additional map compilation and review of existing maps in western Tasmania. Mineral Resources Tasmania UR2005/05.

D D.B. Seymour, 2008-09. Structural re-mapping and stratigraphic revision as part of the TasExplore Project, Mineral Resources Tasmania.

E SEYMOUR, D.B.; WOOLWARD, I.R.; McCLENAGHAN, M.P.; BOTTRILL, R.S. 2011. Stratigraphic revision and re-mapping of the Mathinna Supergroup between the River Tamar and the Scottsdale Batholith, northeast Tasmania. 1:25 000 Scale Digital Geological Map Series. Explanatory Report 4.

**REFERENCE THIS MAP AS:**

McCLENAGHAN, M.P., REED, A.R., LATINOVIC, M., FORSYTH, S.M., VICARY, M. and SEYMOUR, D.B. (compilers) 2009. Digital Geological Atlas 1:25 000 Scale Series. Sheet 4844 Bell Bay. 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.

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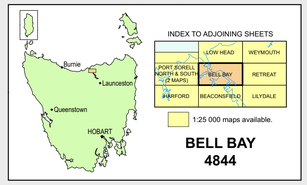
## LOCATION DIAGRAM




Map generated: 21-SEP-2023

**WARNING:** INKS ARE LIGHT SENSITIVE.