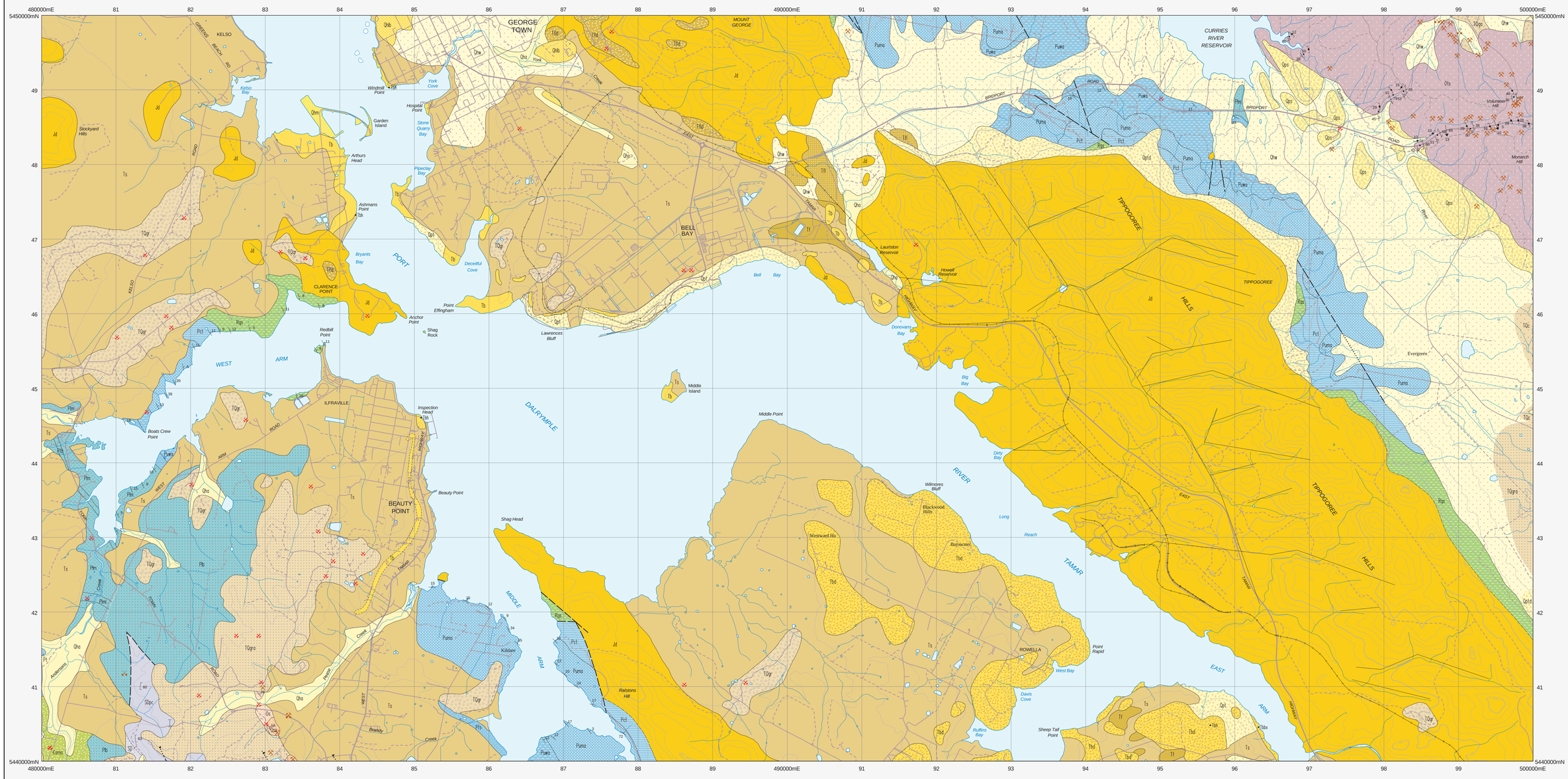
Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

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).
- **Qhb** — Basalt derived lag deposit (Qhb).
- **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).
- **TQgrd** — Rounded and angular gravel, mainly vein quartz (TQgrd).

PALEOGENE – NEOGENE

- **Tf** — 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).
- **Plml** — Mudstone, pebbly siltstone and sandstone (Massey Creek Group) (Plm).
- **Plm** — Clastic limestone beds (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 strigy 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 — WUAWINNA SUPERGROUP

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

MESOZOIC — JURASSIC

- **Jd** — Dolerite (Jd).

PALEOZOIC — CAMBRIAN

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

Geological boundary – position approximate.
Geological boundary – inferred.
Transitional geological boundary – position approximate.
Unconformable boundary – position accurate or approximate.
Intrusive boundary – position accurate or approximate.
Airphoto lineament.
Fault – position approximate.
Fault – position concealed.
Normal fault (downthrown side indicated) – inferred.
Normal fault (downthrown side indicated) – concealed.
Thrust fault (teeth on upper plate) – concealed.
(white line) Limit of mapping of sub-unit within undifferentiated unit.

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 F2; with dip and dip direction of axial surface.
Trend and plunge of crenulation lineation.
Field station for adjacent readings on the map.
Mineral deposit location – hardrock
Mineral deposit location – alluvial/tailings
Construction material/industrial mineral/gemstone location
(Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position ha not been verified in every case.)

Compiled by M.P. McClenaghan, B.Sc.(Hons), Ph.D., 1996 from the following sources (see responsibility 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 A.R. Reed, 1998–2000. New Mapping.

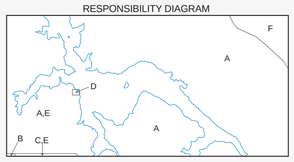
C A.R. Reed, G. MacDonald, P.B. Hills, 2001. New Mapping.

D M. Latinovic, S.M. Forsyth, 2003. Reconaissance geology mapping, Mineral Resources Tasmania.

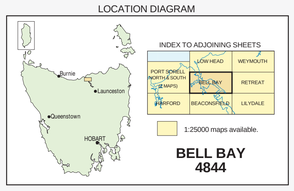
E M. Vicary, 2004 as part of the Western Tasmania Regional Minerals Program.

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

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



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

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

While every care has been taken in the preparation of this data, no warranty is given as to the correctness of the information and no liability is accepted for any statement or opinion or for any error or omission. No reader should act or fail to act on the basis of any material contained herein. Readers should consult professional advisers. As a result the Crown in Right of the State of Tasmania and its employees, contractors and agents expressly disclaim all and any liability (including all liability from or attributable to any negligent or wrongful act or omission) to any persons whatsoever in respect of anything done or omitted to be done by any such person in reliance whether in whole or in part upon any of the material in this data. Crown copyright reserved.

Plotfile for this map generated from digital data as at: 25-JUL-2011

WARNING: INKS ARE LIGHT SENSITIVE