

Geology of Queensland

Queensland Geology — 2012

Department of Natural Resources and Mines
Geological Survey of Queensland

QUATERNARY		
Qa	Alluvial and lacustrine deposits	Qa
Qc	Estuarine, deltaic and other coastal deposits	Qc
Qd	Dune sand	Qd
NEOGENE		
TO	TOBERR BASALT GROUP (part), MULLA BASALT GROUP (part), Atherton Basalt, Chudleigh Basalt, Mohor River Basalt, McLean Basalt, Pinedale Basalt, Surgenon Basalt, Wollstone Basalt, unnamed basalt flow	TO
TQ	Unnamed colluvial and residual deposits	TQ
TU	Alluvial and lacustrine deposits (including Winton beds, Ararat beds)	TU
TL	Fallick beds, Lilyvale beds, Wyaiba beds, Yam Creek beds	TL
PALEOGENE-NEOGENE		
TE	Mainly unnamed sedimentary rocks; includes Edkins Formation, Wicoma beds	TE
TO	Edin Formation, Austral Downs Limestone, Mount Coley Sandstone, Horse Creek Limestone, Muller Formation, Noran Limestone, Pomona beds, Poodoona Formation, unnamed sedimentary units	TO
TD	Durkot; mainly laterite, some siltstone	TD
PALEOGENE		
TV	Chudron Basalt, Gin Gin Basalt, Main Range Volcanics, Minerva Hills Volcanics, Mount Runome Basalt, Peak Range Volcanics, Windy Point Volcanics, unnamed basalt and subvolcanic dykes (dikes and some plugs)	TV
TL	LAMINGTON GROUP	TL
T	ONLY GROUP ADOPTED GROUP Petrie Formation, Beaudesert beds, Bivona Formation, Bulimba Formation, Casuarina beds, Duranga Formation, Emerald Formation, Emerald Formation, Fairview Gravel, Florville Formation, Glenelg Formation, Louisa Formation, Lowmead Formation, Marion Formation, Measa Sandstone, Nappin beds, Oakeley Sandstone, Old Cook beds, Red Mountain Formation, Rossmore beds, Southern Cross Formation, Springvale Formation, Sutor Formation, Tatura beds, Water Park Creek beds, unnamed units	T
CRETACEOUS		
Ka	Alton Downs Basalt, unnamed basalt	Ka
Kb	Mount Satter Volcanics, Mount Cooper Trachyte	Kb
Kc	Proserpine Volcanics, Whitsunday Volcanics, unnamed volcanic units	Kc
Kd	ROLLING DOWNS GROUP (unranked)	Kd
Ke	Winton Formation	Ke
Kf	Macksville Formation	Kf
Kg	Normanton Formation	Kg
Kh	Allaru Mudstone	Kh
Ki	Trochilid Formation	Ki

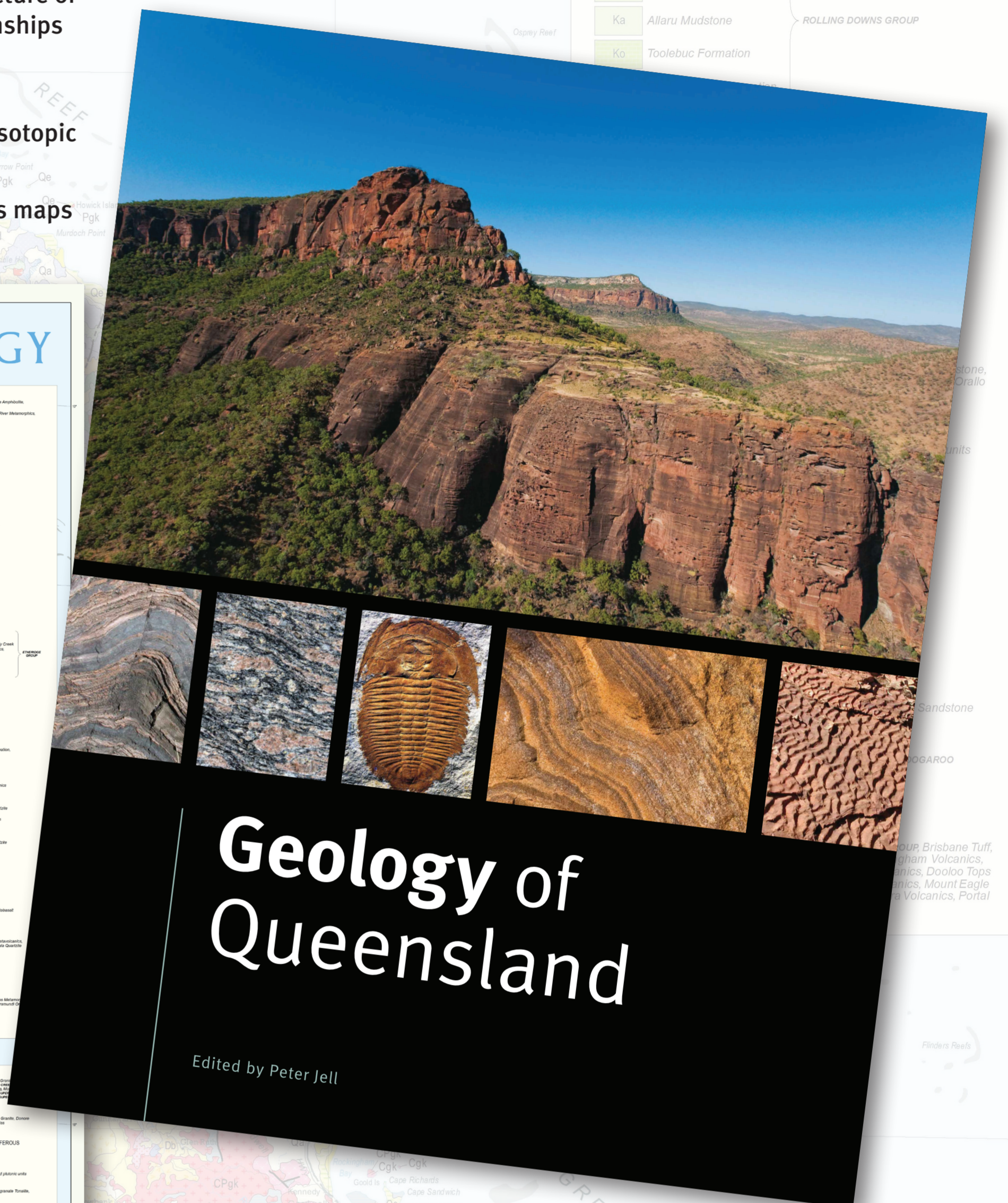
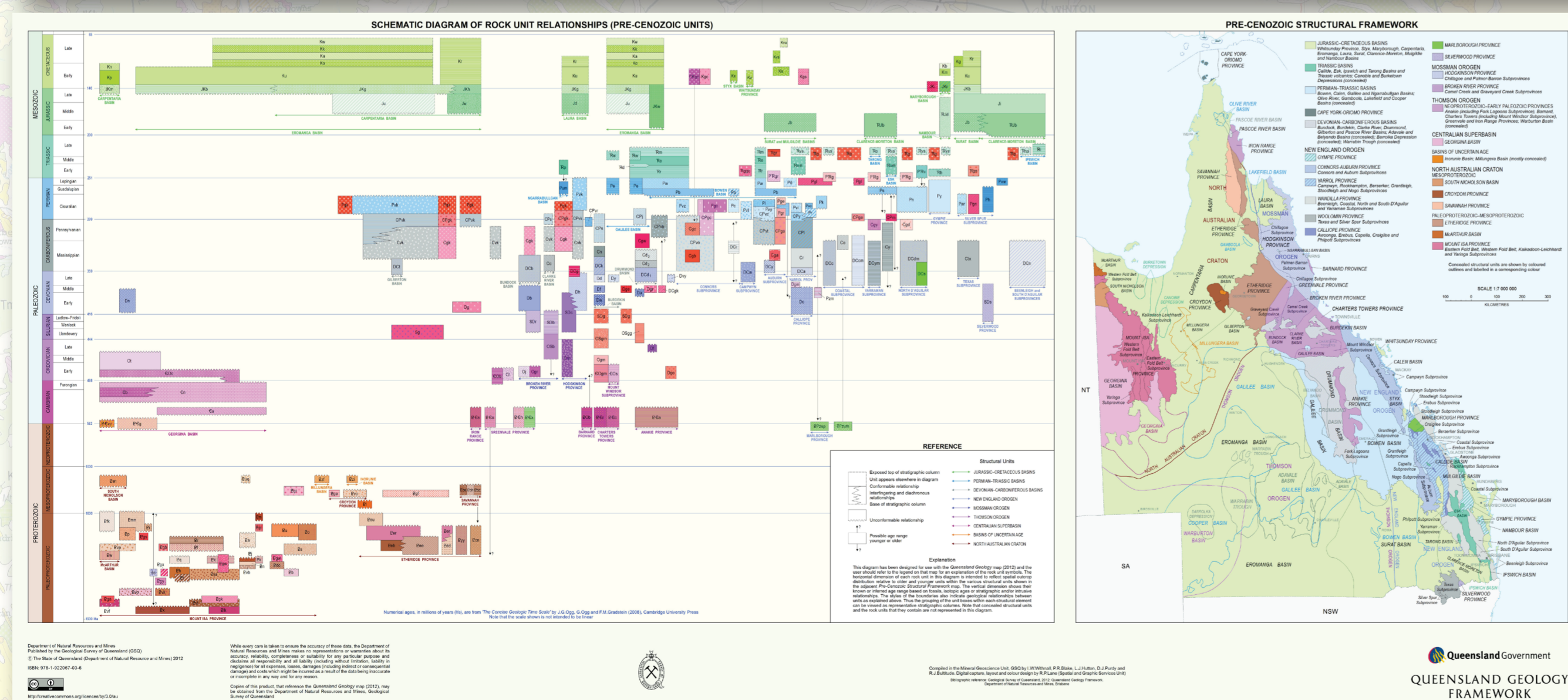
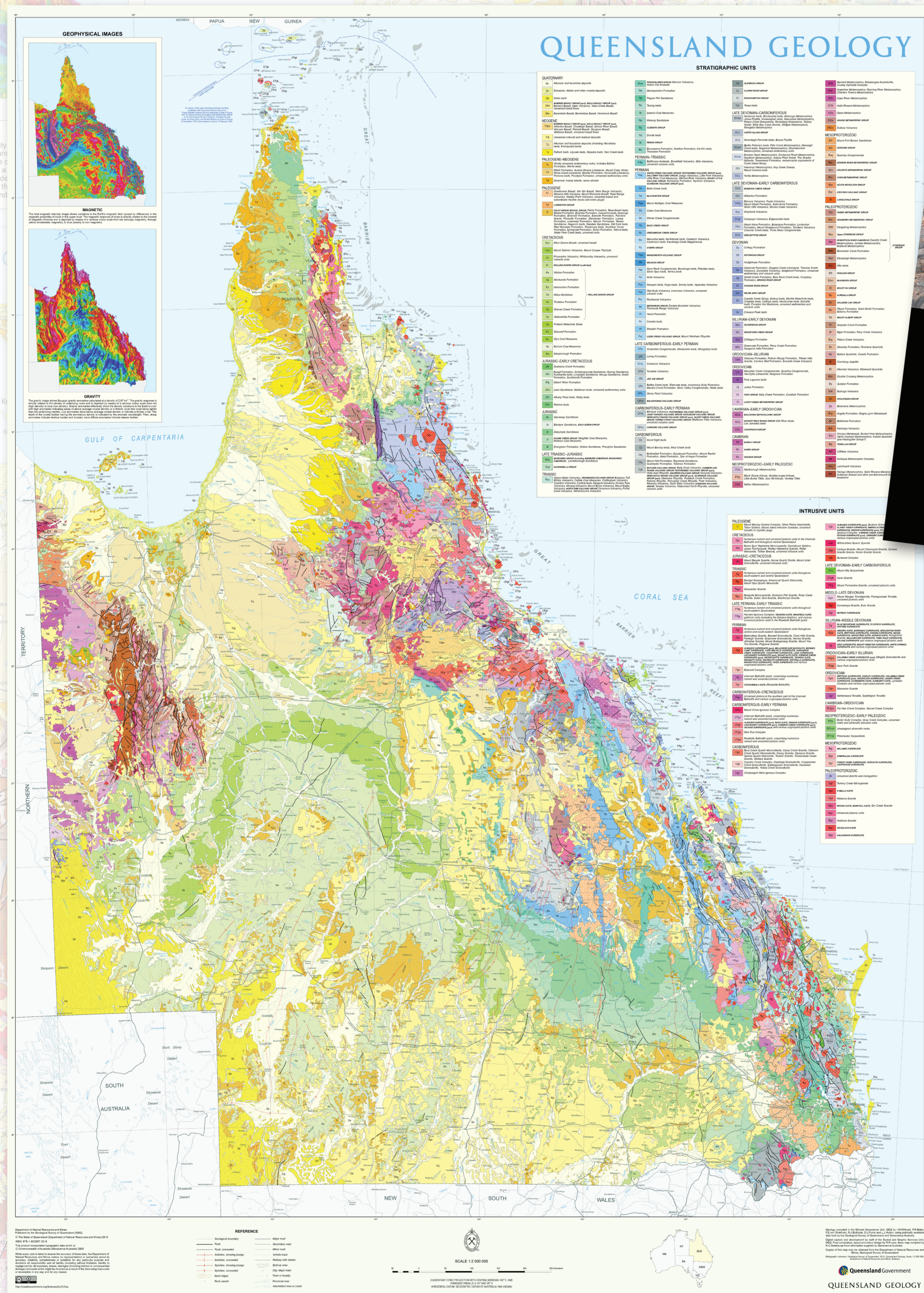
In 2009, with the completion of second-pass mapping of most of the 'hard-rock' areas of Queensland and the third-pass work in north-west Queensland well-advanced, GSQ undertook to produce a revised geological map of Queensland that would be released in time for the 34th International Geological Congress in Brisbane in August 2012.

Compilation was aided by the production of a 1:1 000 000-scale digital map for Australia by Geoscience Australia in 2005, but it needed significant updating in some areas and generalisation for display as a hard-copy map at 1:2 000 000 scale.

Approximately 2000 rock units were grouped into 250 map units and the line work was generalised and re-digitised. In addition to the geology, the structural elements map was completely revised to reflect a newer understanding of the gross architecture of Queensland's geology and also to show subsurface elements. Finally a schematic reference was designed to show relationships of the rock units in time and space.

At this scale, the improvements in the new map over the 1975 map are much more subtle than between that map and its predecessors, but are still significant. Many result from a better temporal framework that comes from major advances in isotopic dating, and have been encapsulated in the schematic reference.

The map was completed and printed in July 2012. In addition to the hard-copy map, the geological and structural elements maps are also available in GIS format, both on DVD and on-line through GSQ's Interactive Resources and Tenure Map System.



In parallel with production of the map, GSQ published a new book to provide a modern, comprehensive description and detailed analysis of Queensland's geology. Edited by Dr Peter Jell, the 970-page book's contributors included geoscientists from the GSQ, Geoscience Australia, various Australian universities, museums, and industry. It was printed in March, 2013.