



KARIN

“The Karoo Research Initiative”

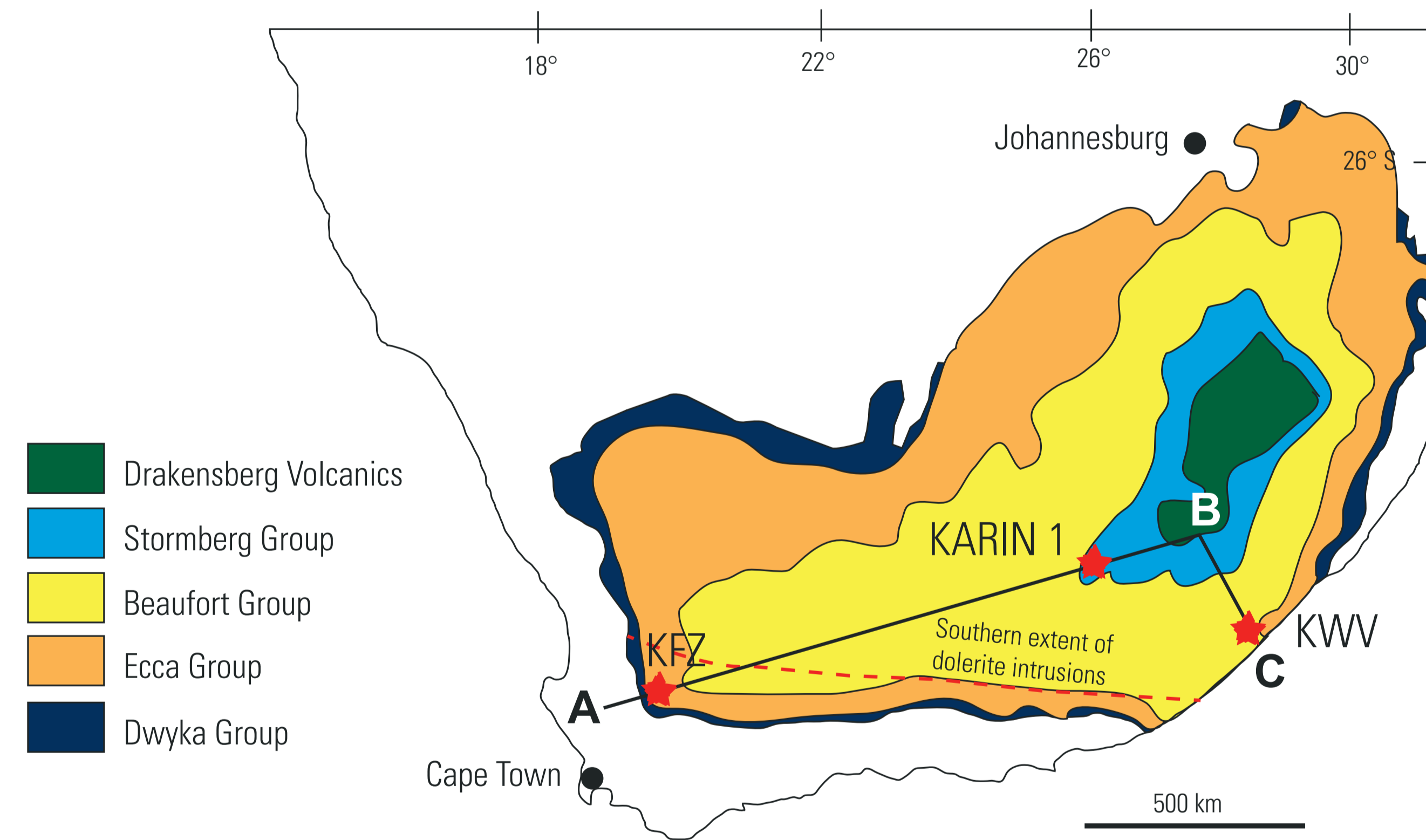
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Borehole KVV

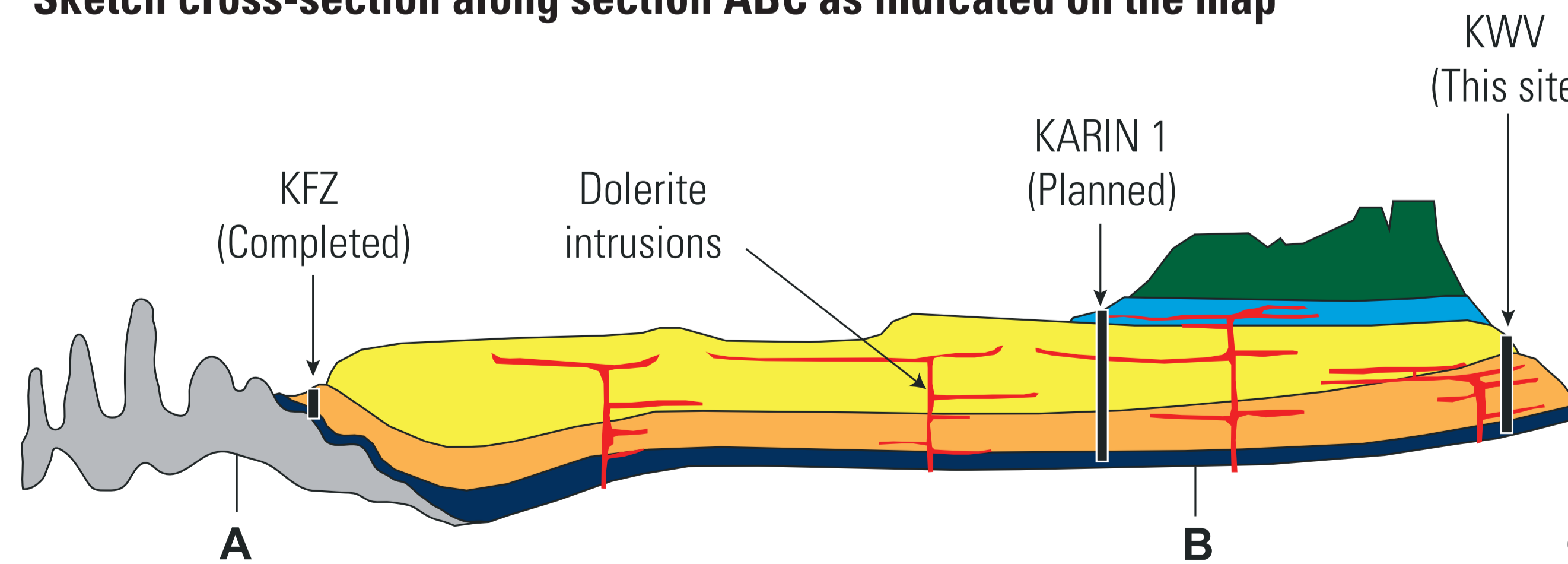
The Karoo Research Initiative (KARIN) is an academic contribution to South Africa's academic research by Geoscientists from six of South Africa's leading universities, Keele University (UK) and the Council for Geoscience. KARIN is incorporated under CIMERA (<http://www.cimera.co.za>) and aims to explore the southern Karoo Basin through the extraction of two deep drill cores, and a possible third borehole that is planned for the future. The first of these boreholes near Ceres in the Western Cape (Borehole KFZ) has been successfully completed in August 2015.

The Karoo refers to the sedimentary successions that were deposited on the ancient supercontinent of Gondwanaland some 300 to 170 million years ago in the area now represented by the southern part of the African continent. These Karoo-aged basins contain all of the important coal deposits of southern Africa as well as thick successions of black carbon-bearing shales.

Simplified geological map of the Karoo Supergroup



Sketch cross-section along section ABC as indicated on the map



Drillcore will allow for reconstructing the depositional history of the basin, determining the physical and petrochemical character of the rock succession, and unravelling the deep structure of the basin and dolerite intrusions. Specific objectives of the KARIN project include:

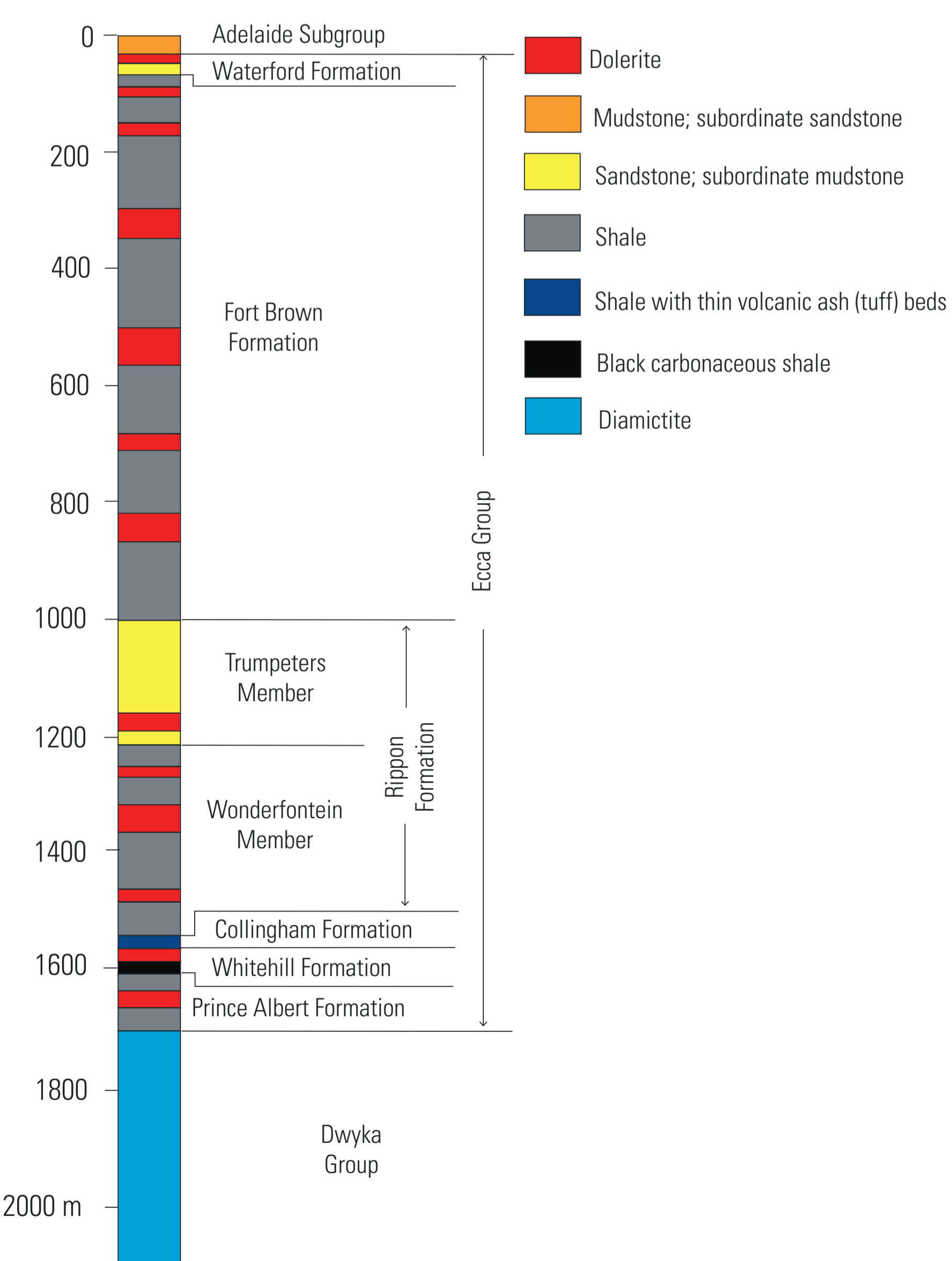
- Understanding stratigraphy of The Karoo rocks, especially in the Eastern Cape Province
- Studying of microfossils and total organic carbon content
- Paleomagnetic (magneto-) stratigraphy
- Studying the Permian-Triassic extinction event
- Understanding the dolerite structure and method of emplacement
- Understanding the extrusion of the Drakensberg basalts
- Monitoring of deep ground water

KARIN also aims to equip South African postgraduate students with the necessary high-level skills to pursue research, and ultimately careers, in relevant fields. Such capacity-building represents a fundamental shift to expand the expertise of South African graduates beyond the traditional national strengths, be these in the Karoo Basin or elsewhere. As the leading trainer of geoscientists on the continent, South Africa's universities are ideally suited to assist in the development of graduates working regionally and across the continent.

Some first drill core of Adelaide Subgroup sandstone retrieved from KVV site



Borehole KVV (Willowvale) expected intersection of geological units



For more information visit <http://www.cimera.co.za> or contact CIMERA at 011 559 4728