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GEOLOGICAL MAPPING OF BURGERSDORP AND KATBERG FORMATIONS,
WHITTLESEA AREA, SOUTH AFRICA.

¹OTUNOLA B.O., ²GUNTER C.J.

¹ Department of Geology, University of Fort Hare, Alice 5700, South Africa. Email: omobeat15@gmail.com

²Department of Geology, University of Fort Hare

This study investigated the outcrop of Burgersdorp and Katberg Formations (upper Beaufort Group) exposed in Whittlesea area. The Burgersdorp Formation is composed of argillaceous sediments that is presumed to overly the Katberg Formation which is composed of arenaceous sediments.

Desktop mapping and several field visits were employed in the study to confirm the geological outlay of the two formations. Also air photos and topographic maps were used to identify, characterize and locate lithologies.

The results of this study revealed that indeed these two formations overly each other in the sense that there are shale laminations of the Burgersdorp Formation in between massive beds of sandstones of Katberg Formation. The formations were also characterized by inter-bedding which might have been caused by fluctuations in deposition energy of the fluvio-lacustrine depositional environment of the two Formations. We observed that the Burgersdorp Formation was made up of mainly shale and mudstone, while the Katberg Formation was composed mainly of sandstone.

The Beaufort Group is well known and important geologically because of the presence of the Permo-Triassic sequence known all over the world as a geological fossil marker, which have helped to determine the present eightfold biostratigraphic subdivision in the Karoo Super group.

Further studies of this Beaufort Group are necessary and on-going to know the extent of inter-bedding in the Beaufort Group and its geological implications.

