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**MINERALOGY AND GEOCHEMISTRY OF DOLOMITIC MARBLE USED IN
LIME MANUFACTURE IN KANDY AND MATALE DISTRICTS**

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Some mineralogical and geochemical aspects of dolomitic marble, used in the lime industry in Kandy and Matale districts, were examined. The studies showed that they were predominantly dolomitic in composition with rare occurrences of calcite. Olivine was the most common impurity observed at all locations, except at Digana, where diopside was present in appreciable quantities. Grossular garnet, phlogophite, apatite, spinel and pyrite were the common accessories. In the soil profiles, the dominant clay mineral is kaolinite, which indicates an advanced stage of weathering.

Calcium and magnesium carbonate contents of samples from the same quarry showed significant variations. The highest CaCO_3 percentage and lowest acid insolubilities were recorded from the rock samples from Digana. The marble rock of Ampitiya and Nahiniwala, Kandy has similar ratios of calcium and magnesium carbonates and the values are close to the ideal dolomite ratio. But the percentage of impurities is very high at Ampitiya, whereas at Nehiniwala it is quite low. Dolomitic marble of Matale, Aluwihare too is close to the ideal dolomite composition and the impurities are fairly low.

Specific gravity of samples from Matale, Aluwihare indicated that the denser varieties contain a higher amount of impurities. The less dense rock consisted entirely of dolomite. All the same kiln owners used the denser but low quality variety in the industry for economic reasons. In general this study shows that the marble from Digana and Aluwihare formed entirely of dolomite and containing very minute amounts of accessory silicate minerals, are considered to be of better industrial quality.