

## **Industrial Assessment of the Exposed Rocks on Peris Anticline Kurdistan Region of Iraq for Cement Industry**

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**Abstract :** The Peris Mountain is one of the main mountains in the Iraqi Kurdistan Region, it forms one of the long anticlines trending almost East - West. The exposed formations on the top of the mountain are Bekhme, and Shiranish, with carbonate rocks of different types and thicknesses. We selected the site for sampling to be relevant for a quarry taking into consideration the thickness of the exposed rocks, no overburden, favorable quarrying faces, hardness of the rocks, bedding nature, good extension of the outcrops, and a favorable place for construction of a cement plant. We sampled the exposed rocks on the top of the mountain where a road crosses the mountain, and a total of 15 samples were collected. The distance between sampling intervals was 5 m, and each sample was collected to represent the sampling interval. The samples were subjected to X-ray fluorescence spectroscopy (XRF) to indicate the main oxides percentages in each sample. The acquired results showed the studied rocks can be used in the cement industry.

**Keywords :** limestone, quarry, CaO, MgO, overburden

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