

New Geochemical Method Quantity Estimation Magnetite Deposits

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We have worked out the method of quantity geochemical prognosis magnetite deposits through a single ore cross section.

The main advantage of the method over all existing methods is that it can value ore deposits through a single drill hole probe.

Theoretical basis of quantity geochemical prognosis method is the principle of likeness geometrical and geochemical of genetic-single-tape subjects of various sizes by Solovov.We were the first who have developed this method with reference to magnetite deposits.After studying of approximately 20 Ural's iron deposits on the basis of characteristic uniformity of axial zoning,we first got geochemical zoning of magnetite deposits of Ural.On the basis of our geochemical zoning we have also first calculated stable contrasting geochemical ratios.These ratios allow us to determine erosion level zoning,unknown and often single ore layer in standard metrics.On the basis of erosion level zoning,we can give a precise quantity geochemical prognosis.

Both geochemical zoning and ratios were worked out for magnetite deposits for the first time in history.

We have taken single ore probes of 14 Ural magnetite deposits.In 12 cases our results coincided with those calculated through lots of prospecting drill hole probe.

In conclusion, we would like to emphasize the main advantage of the above –mentioned method:it can evaluate magnetite deposits through a single drill hole probe.This method has 2 licenses.

Theoretical basis of quantity geochemical prognosis method and practical results are presented in the report.