

## **Gravity and Magnetic Survey, Modeling and Interpretation in the Blötberget Iron-Oxide Mining Area of Central Sweden**

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**Abstract :** Blötberget mining area in central Sweden, part of the Bergslagen mineral district, is well known for its various type of mineralization particularly iron-oxide deposits since the 1600. To shed lights on the knowledge of the host rock structures, depth extent and tonnage of the mineral deposits and support deep mineral exploration potential in the study area, new ground gravity and existing aeromagnetic data (from the Geological Survey of Sweden) were used for interpretations and modelling. A major boundary separating a gravity low from a gravity high in the southern part of the study area is noticeable and likely representing a fault boundary separating two different lithological units. Gravity data and modeling offers a possible new target area in the southeast of the known mineralization while suggesting an excess high-density region down to 800 m depth.

**Keywords :** gravity, magnetics, ore deposit, geophysics

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