# Part II Details

### Chapter 1

## 1. Outline of Survey

### 1-1 Fundamental concept

The airborne magnetic anomalies and electromagnetic anomalies that were brought by the Phase I may not mean the mineralization zones with pyrrhotite. And it is generally difficult to plan drilling surveys (points, depths and directions) only according to the results of such airborne surveys even if they may be caused by any mineralization, because the precisions of airborne surveys are limited.

Therefore it is necessary to compose several kinds of geophysical surveys, analyze the data, and extract high potential places, in order to reduce the cost of drilling exploration.

And, it can be expected to know the existence and character of mineralization directly by some drilling survey, and also to know the causes of geophysical anomalies.

### 1-2 The order of surveys

Electric prospecting IP method is carried out in areas with airborne magnetic anomalies of Phase I. High potential areas are extracted. And electromagnetic prospecting TEM method is carried out there in order to plan the drilling survey, with comprehension and composition of other kinds of data. The drilling points should be with the highest potential points or the most effective points to know the geological structure deeply related with mineralization.

The flowchart of these surveys is as follows.

Extraction of anomalies of airborne magnetic and electromagnetic surveys

↓ Examination

Planning of Electric prospecting IP method

1

If any area is not expected to have high potential on the way of the measurement of IP, the prospecting is stopped there and survey points may be transferred into high potential areas.

Examination of IP anomalies (intensity, shape, place)

Extraction of promised areas

↓

# Electromagnetic prospecting TEM method Comprehension of three-dimensional resistivity structure Examination of the possibilities of the situation of mineralization Planning of drilling survey (position, depth and direction) Drilling survey recovering rock cores to clarify the geological situation The drilling length may be changed according to the situation Stop to drill Comprehensive examination

Judgment about necessity of the next exploration around there

- 34 -