

BASIC COURSE ON RESISTIVITY SOUNDING AND IMAGING

Introduction

Example results from different applications

Resistivity as material parameter

Measurement principle

Brief history

Fields of application

Basic theory

VES with the ABEM Terrameter System

Introduction to the Terrameter System

Principle of Vertical Electrical Sounding (VES)

Interpretation – inversion of VES data

Resolution and principles of equivalence and suppression

Electrode arrays

Sources of error

Data quality assessment

Field exercise – VES with Terrameter SAS 1000 and S/W cable set

Data processing/inversion/interpretation exercise

Imaging with the ABEM Terrameter – Lund Imaging System

Introduction to the Terrameter – Lund Imaging System

Principle of 2D imaging – Continuous Vertical Electrical Sounding (CVES)

Interpretation - inversion of 2D imaging data

Resolution and principles of equivalence and suppression

Electrode arrays for imaging

Sources of error with reference to imaging

Data quality assessment

Field exercise – 2D imaging with Terrameter SAS 4000 - ES10-64C – Lund Imaging System

2D imaging data processing/inversion/interpretation exercise

Quasi 3D imaging (3D visualisation of 2D data sets)

Principle of 3D imaging surveys

Principle of borehole surveys

Induced polarisation

Time-lapse surveys

Equipment and software

Terrameter SAS 1000 / SAS 4000

Electrode Selector ES 10-64C / ES 10-64Ce

LUND cable system

Erigraph, Res2dinv

Duration

2 days