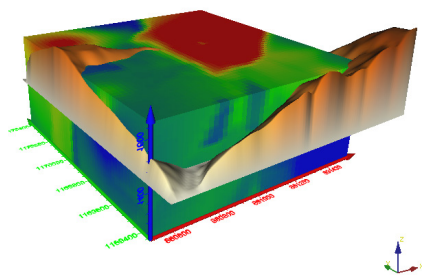


CASE – Mapping of water areas with high salt concentration

The target was to measure resistivity values indicating the presence of salt deposits or areas containing water with high salt concentration, and could serve as indicator for the geological characterization of the area. The location in a mountainous area of Colombia, made the use of conventional methods such as VES inapplicable.

SOLUTION

TEM (Transient Electromagnetics) can be effectively used in areas with irregular relief. The ABEM WalkTEM data quality is also well suited for high accuracy detection of areas with a high concentration of salt deposits.



RESULTS

The results of the survey were consistent with previously recorded knowledge of the sites' geology, concluding the presence of salt deposits as well as water with high salt concentration. The data was further analyzed and visualized in a 3D model showing the location and dispersion of salt deposits.

“There are major benefits of using the WalkTEM on such surveys and its flexibility and speed allowed us to perform measurements at up to 10 sites a day in mountain terrain”.

*Diego Alejandro González Botero,
Geologist, Tropical Ingeniería y Consultoría*

USER

Tropical Ingeniería provides professional services in consulting, engineering and auditing, to customers within mining, oil, and infrastructure.

CONFIGURATION

Sensor: ABEM WalkTEM, 40x40 m transmitter loop, RC-5 and RC-200

Software: ViewTEM

