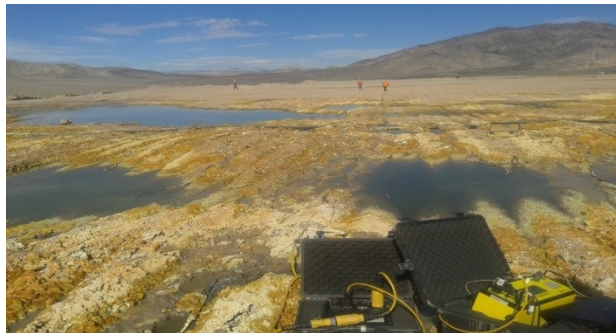


# Irrigation Monitoring at Heap Leach Copper Mine

Study was to determine the impervious areas and improve the irrigation of Heap Leach in a copper mining site. AGI SuperSting WiFi R8 RES/IP instrument with 56 electrodes and 2 meters electrode spacing are used with dipole-dipole array. EarthImager 2D and Time Lapse module of EarthImager 2D was used for data processing and inverse modeling. The impervious zones are successfully mapped showing high resistivity values associated with a poor irrigation of Heap Leach in this zones. Two drilling were made at 36 and 72 meters over the survey line in order to improve the irrigation of Heap Leach and increase the production of concentrate of copper. A second measurement was made 50 days later to confirm the drilling results showing how the resistivity values decrease in the impervious zones mapped before. The Percent Difference of Resistivity Section show how percentage of resistivity decrease in this impervious zones as result of the drilling made, improving the irrigation of Heap Leach in order to increase the production of concentrate of copper. The Percent Difference of Resistivity Section present another important result showing how the percentage of the resistivity increase at the bottom of the section associated with a poor irrigation of Heap Leach in this zones at that moment.

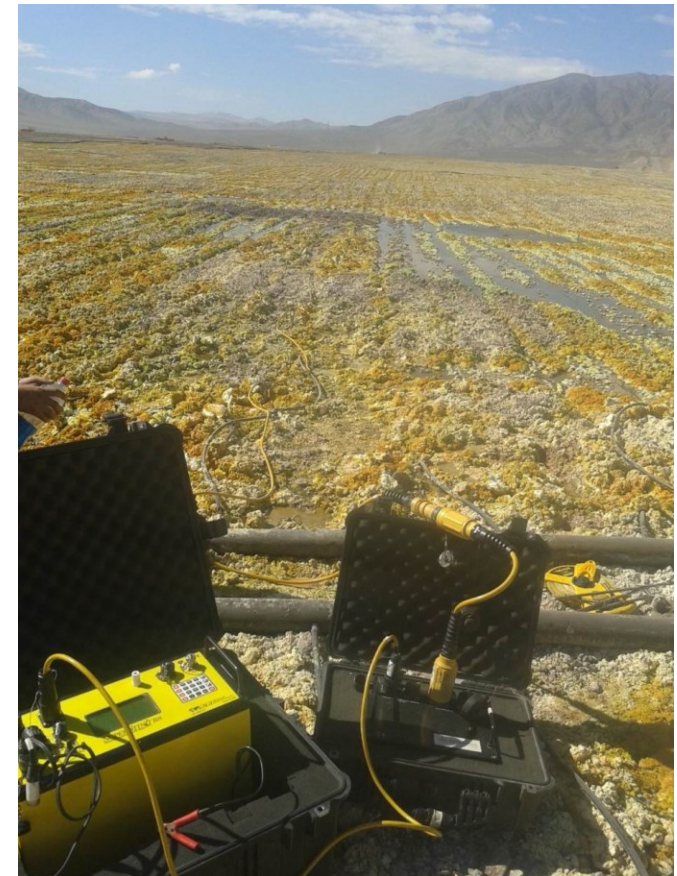
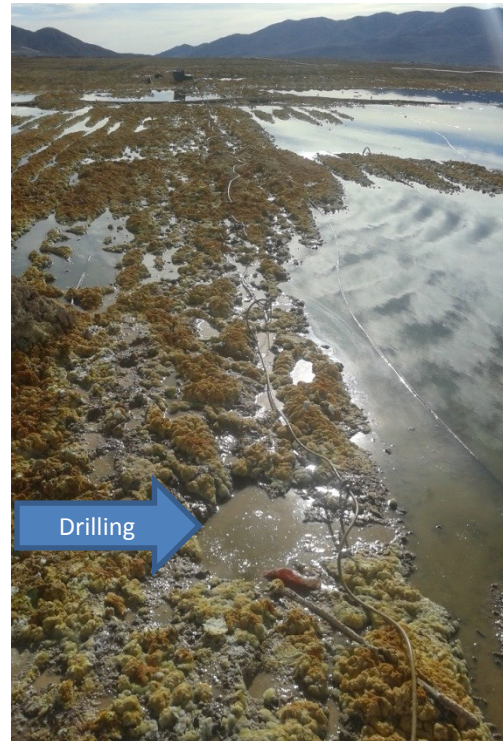


**Objective:** Determine the impervious areas to improve the irrigation of Heap Leach in a copper mining in order to increase the production of concentrate of copper .

**Survey site:** Chile.

**Instrument:** SuperSting WiFi R8/IP/SP, 56 electrodes at 2 m. spacing, using dipole-dipole array.

**Software:** EarthImager 2D and Time Lapse module of EarthImager 2D.



# Difference Resistivity Inversion for Irrigation Monitoring at Heap Leach Copper Mine

