Zelandez employed advanced geophysical technologies, expert data processing and interpretation from the latest methodologies in aquifer characterization. Applying the impressive detail of our Porosity and Permeability Insights to the client’s existing exploration model, enabled the client to considerably advance the delimiting of their aquifer units and in turn refine the size of their lithium reserve.

The exploration wells were situated in almost 100% pure halite rock, creating tough hyper-saline conditions for the equipment. The Salar de Atacama provides a harsh working environment with freezing temperatures and high altitude in one of the driest places on the planet.

Results
The crew and wireline setup worked extremely well despite the environmental challenges.

The state-of-the-art logging technology was successfully deployed and checked against pre-existing physical borehole samples and traditional permeability tests. Unparalleled 8cm vertical resolution porosity and permeability values were generated in real time, interpreted, and delivered to the client within 24 hours.

This information enabled the client to considerably delimit their aquifer units and provide certainty to their future production expansion plans. The client was so impressed with the initial 37-well PorPerSight campaign that they are planning a second campaign.