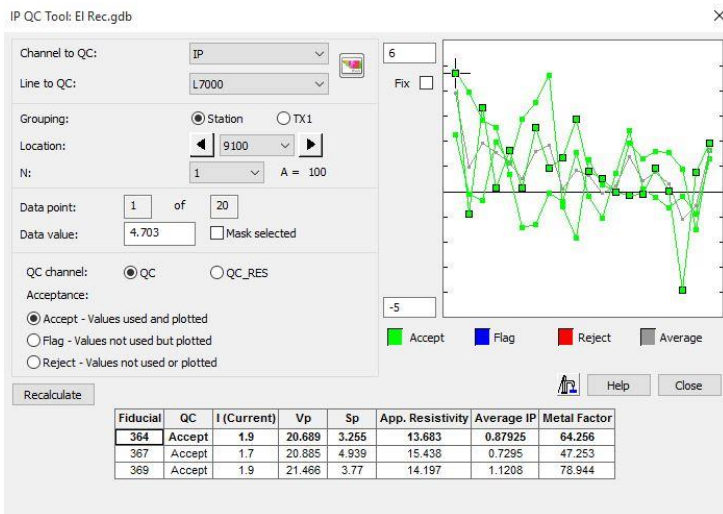




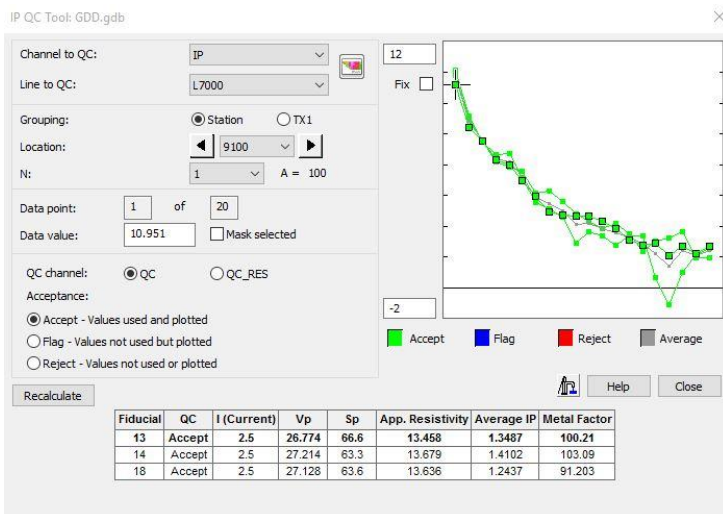
## Case Study – Caliche in Mexico

Géophysique TMC was mandated to carry out several induced polarization surveys in southern Chihuahua, Mexico. The configuration used was: pole-dipole,  $a = 100\text{m}$ ,  $n = 1$  to 6. The field crew used a Walcer 10kW transmitter and an Iris EIRec Pro 10 channels receiver.

On one project, located 30 km northeast of Hidalgo de Parral, the field crew encountered a problem with caliche, a limestone layer at the surface. Despite the high transmitter power, current hardly penetrated the first meters at the surface and the signal was very weak at depth.



Besides, an example of a result obtained by the EIRec Pro with a chargeability reading on the L7000 line, station 9100,  $n = 1$ . For the operator, it was impossible to have constant readings repeating at the same station. The quality of the data being compromised, Géophysique TMC had to intervene to improve the situation.



Despite having used a large amount of water at each station to optimize contacts, readings were hardly better. Géophysique TMC finally decided to use a GDD 32 channels receiver. Therefore, on the same line, at the same station, shown beside is a great improvement of the readings with the receiver. This instrument has allowed Géophysique TMC to deliver the customer a high quality final product.

Consequently, it is important to adapt and have on hand the necessary tools in order to compensate for any eventuality. Even if the field crew is doing everything it can to improve the conditions of readings, it is essential to have cutting edge technology equipment in order to always deliver high quality surveys.