

CASE HISTORY

Application: **Mineral Exploration**

Technology: **Logging inclined exploration boreholes**

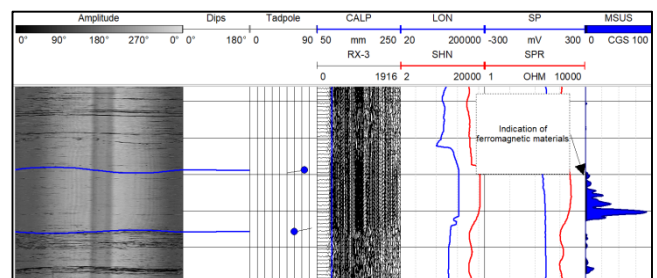
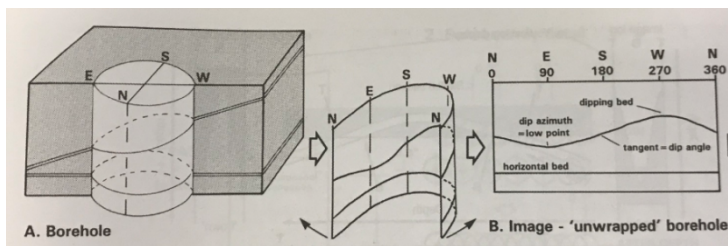
Location: **Curraghinalt N. Ireland**

Over a two-year period 27 exploratory boreholes were drilled with the objective of locating new gold veins and expanding the mine. The proposed mine at the Curraghinalt gold deposit will open a new chapter of economic development for Northern Ireland and County Tyrone. It will be the region's first modern, underground gold mine – designed, built and operated using the latest technology.

Robertson Geo was able to run a comprehensive suite of probes in inclined holes up to 625m in depth. These included: High Resolution Acoustic Televiwer, Full Waveform Sonic, Resistivity and Magnetic Susceptibility probes. The combined probes provided vital information on fault orientation/dip direction and the depth of ore deposits.



The Acoustic Televiwer provides a continuous, orientated, high-resolution unwrapped image of the borehole wall (Image B), offering many advantages to geologists and geotechnical engineers. The data provides information about geology, structure, fractures, stress orientation and acts as a template for orientating cores and providing depth control where core recovery is incomplete. For delineating known faults (a key phase in mine development) the Acoustic Televiwer was invaluable and further previously unknown faults were subsequently discovered.



End value to client:

Robertson Geo's extensive experience in wireline logging provided the client with an efficient service in the field and a quick turnaround for the required data. This was all the more important in areas of poor core recovery where wireline technology was able to fill in the gaps, allowing better informed decisions.

The Magnetic Susceptibility probe was able to identify ferromagnetic materials, giving critical data needed to identify the exact depth of minerals within the formation.