

DRILLING SERVICES

1

ADMINISTRATIVE PROCEDURES

- You contact the Mineral and Drilling Department (Mangasoavina) for your request ;
- We ask you the following information: location of the site (Google Map if available),
- consultation of the reports of studies already carried out (geophysical study...), access to the site ;
- We draw up a preliminary estimate based on the information received ;
- We make a visit of the site ;
- We draw up the final estimate ;
- The responsible department sends the file to the Mineral and Drilling Director and, subsequently, to the General Management ;
- The Administrative and Financial Department prepares the invoice for the drilling services ;
- You pay a deposit on the drilling services fees ;
- At the end of the drilling services, we draw up a report and an acceptance report ;
- You pay the rest of the drilling services fees.

2

THE EXECUTION OF DRILLING WORKS

- We carry out geophysical (at your request), geological, hydrogeological, socio-economic and environmental studies;
- We carry out the installation of the equipment:
 - Support, stability and safety of the work ;
 - Isolation of the different aquifers by casing, tubing, strainers.... ;
 - Cementing of the inter-annular space between the casing and the drilled ground ;
 - Protection of the resources from pollution coming from the surface and from the risks of mixing with other aquifers.
- We ensure the development of the drilling :
 - Cleaning: elimination of foreign bodies in the work (mud, cuttings...) by air-lift (injection of pressurized air), by pressurized by air-lift (air injection under pressure), by jet under pressure ;
 - Repair of damage caused by drilling operations to the aquifer formation (clogging) ;
 - Increasing the permeability of the formation (removal of fine particles and enlargement of cracks), i.e. increasing the productivity or flow rate of the borehole ;
 - Pumping tests;
 - Water quality (water test results);
 - Final geological section with indication of the level(s) of the water table(s) encountered;
 - Protection of the work ;
 - Pump installation ;
 - Withdrawal from the site.