

Grenoble - Geothermal doublet for cooling shops and apartment buildings



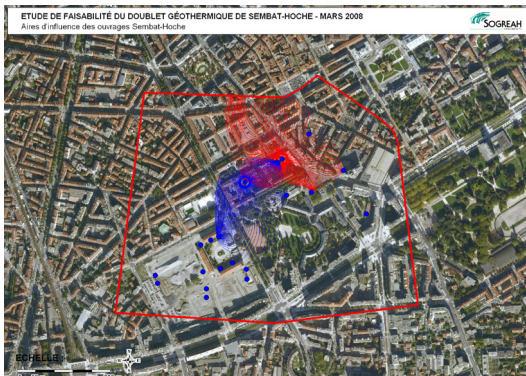
Country
France

Client
Accelia

Date
2008

Sogreah's services

- ▶ Hydrogeological feasibility study
- ▶ Technical specifications for the pumping and reinjection wells



Context

As part of work to build new apartment blocks and refurbish shops, Accelia wished to install a cooling system using water from the aquifer. It therefore commissioned Sogreah to carry out a hydrogeological feasibility study. The geology at the study site is extremely variable. To the east, the aquifer is captive owing to the presence of clay, while to the west it becomes unconfined.

Because of this hydrogeological complexity, specific pumping and reinjection structures are required.

Aims

- Feasibility study for an aquifer water pumping-reinjection system, including determination of the feasible maximum discharge.
- Drilling of exploratory boreholes with pumping tests and water analyses.

- Modelling of the hydrodynamic and thermal impact of the geothermal doublet in order to determine the discharge exploitable for energy purposes (60 m³/h).
- File required by French water legislation.
- Technical specifications for the pumping and reinjection wells and cost estimates for the structures.

GNB/CCO/ebd/0508