

CASE STUDY

Geothermal Plant, Lodi (Italy)

Client:	Lodi District Council
Location:	Lodi, Italy
Product:	BoreSaver Ultra C Pro
Project Description:	A geothermal plant servicing an air conditioning system contaminated with iron related bacteria .
Keywords:	BoreSaver Ultra C Pro, geothermal, iron related bacteria, iron oxide, recharge well



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The recharge well for a geothermal system was severely contaminated with iron related bacteria, causing flooding in adjacent areas and forcing the system to be switched off.

The geothermal plant was used to service an air conditioning system for the District Council offices in Lodi, with an overall thermal power of 0.6MW, achieved by one heat pump with heat exchangers, a 42m deep abstraction well, a 29m deep recharge well and 100m of pipework.

A video inspection of the system showed that both wells were completely clogged with iron bacteria and iron oxide residues. The slots in the screens in the recharge well were completely sealed, preventing the discharge of purged water into the ground.

BoreSaver Ultra C Pro was used to treat the system and a post-treatment inspection revealed the screen slots were virtually clear of contamination and the system was returned to full operational use without subsequent borehole clogging. An ongoing maintenance programme has been introduced to maintain the system.

