

# Bespoke solutions keep customers in control

One of the most important parts of borehole and well management is having the ability to monitor a site ensuring optimum capacity is achieved around the clock

*Geoquip Water Solutions' on-site custom-built borehole performance monitoring control panels can be accessed and checked remotely*

**E**xternal elements such as the build-up of iron residue, contamination from iron-related bacteria, variable demand or seasonal issues, can all cause performance fluctuations for boreholes and water wells. The impact those issues can have on a borehole include reduced energy efficiency and pumping capacity, which could potentially lead to the eventual failure of equipment.

Geoquip Water Solutions' managing director, Mike Deed, says remote monitoring with custom-designed control panels and a corresponding web-based user platform can go a long way to solving such problems. "All too often, a borehole or well will be installed with little or no thought to ongoing maintenance, and it is only when the equipment stops working that a problem is discovered," he notes.

"By putting correct telemetry and monitoring systems in place, users can gain full remote access, enabling them to re-programme components as required and benefit from early-warning alerts, which allows action to be taken before a situation deteriorates."

Geoquip provides monitoring services via bespoke control panels for a diverse range of applications; including landfill, water abstraction and construction dewatering projects.

The units, which are fully-flexible and built to a modular design, can either be installed at the start of a project or retrofitted and are suitable for use in any sector. As well as being used for day-to-day monitoring, the Geoquip units also provide an opportunity for users to gather data for issues such as forward planning and



setting KPIs for projects. To ensure maximum benefits are achieved, before designing the custom-built panel and dashboards, the company's experts talk to customers to determine the information they need.

Once the control panel is finalised and installed, data is collected either via the cloud or the cellular network, using a remote management platform and an eWON communication gateway.

## INTERPRETING DATA

With its detailed knowledge and experience, the Geoquip team can interpret and interrogate the data, which will typically include viewing parameters such as flows, water levels, pump status or running hours online. From there, Geoquip can produce trend graphs, temperature meters, ready-made gauges and other visual signposts to help customers see where attention is required and how projects are progressing. This enables them to predict where problems may occur and recommend the necessary remedial action before it is too late.

When problems do occur, Geoquip can provide remedial and rehabilitation services and solutions to get the equipment

back up-and-running as soon as possible. And, because the platform architecture allows many different levels of access, Geoquip customers can also view the dashboards first-hand, ensuring they understand the decisions that need to be made.

Having full remote access enables the quick and effective re-programming of the components in the management system, providing solutions to problems before they become major issues.

One such example is within the rail industry, where Geoquip's installation of bespoke control panels enables remote monitoring of plant used for the servicing of effluent and clean water tanks on trains. With strict performance targets to meet, the amount of time spent emptying full tanks and re-tanking them as trains arrive at the end of their journey is critical.

Thanks to the remote telemetry installed, potential problems can be identified in advance, enabling maintenance programmes to be put in place quickly and targets still met.

## CLEANING SOLUTIONS

Although Geoquip advocates that prevention is always better than cure, it knows that water supply systems can become



contaminated with iron bacteria, iron oxide, manganese oxide and calcium carbonate deposits.

Designed to tackle these problems, Geoquip's BoreSaver range provides efficient borehole cleaning and well rehabilitation treatments.

Unlike other borehole cleaning products, BoreSaver products allow equipment to remain in situ in the borehole or well, while the treatment works to completely remove the deposits that have built up and caused blockages in wells, pipes, pumps and other related equipment. This reduces the impact on production time and cost and, importantly, the treatments are safe, easy-to-use and biodegradable.

With a range of NSF-approved treatments for different situations; these include the BoreSaver Ultra C which will completely remove iron and manganese oxide deposits in just 24 hours; the Ultra C PRO for more severe cases or iron oxide, manganese oxide and iron bacteria contamination; and the MultiKleen general all-purpose cleaning treatment, which completely removes deposits and slime from boreholes, wells, pumps and equipment. ♥

*Keeping borehole clean is an important part of routine maintenance designed to protect pumping equipment*

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