

## Chlorine Monitoring

## Global Mining Company Automates Water Safety

### The Need

A leading global mining company maintains water treatment plant stores of raw water on one of their Australian mine sites. The water undergoes several treatments including chlorine disinfection and is then reticulated throughout the mine site for human consumption.

The water must be monitored and tested regularly to ensure safe levels of chlorine in order to meet health and safety requirements for staff and the wider community.

Previously, an external water testing laboratory would send personnel to site to sample the water, the sample would be sent to a testing facility, and a report would be generated.

A more streamlined solution was sought to save time, reduce costs, and eliminate the risk of human error, while providing access to higher frequency data.

### The Solution

The Captis Multi solution was chosen, incorporating a low power residual chlorine and pH sensor provided by our sensor partner, Verge Solutions. With a specially designed flow cell, the chosen sensor provided a seamless inline connection to existing plumbing, allowing for easy installation.

Requiring a tailored solution, the Captis Multi was fitted with a solar panel, a charge controller, and a small battery, all to ensure uninterrupted sample logging.

Chlorine levels in the water were sampled every 15 minutes and transmitted to our device management platform, once per day. Additionally, a threshold alarm was set in to trigger if a chlorine threshold was met, notifying key stakeholders immediately.

By utilising a proven and reliable technology, the customer was able to significantly reduce manual testing, resulting in huge cost savings for the business, while also increasing efficiencies and ensuring better chlorine safety levels for both their staff and the wider community.



**INCREASED CHLORINE  
SAFETY LEVELS**



**SIGNIFICANT  
COST SAVINGS**



**MAJOR REDUCTION  
IN TRUCK ROLLS**

# Solution & Application



## Captis Multi

Connected with a chlorine and pH sensor, the Captis Multi is easily integrated with existing infrastructure



## Solar Panel

The Solar Panel allows for frequent monitoring at an unpowered site without compromising device longevity and battery life

## Remote Access

The NB-IoT cellular technology enabled data to be transmitted from remote locations easily and reliably



## Rugged Hardware

The IP68 rated enclosure can withstand extreme conditions, including water submersion, high temperatures and dust exposure



## Multi Sensor Interface

Chosen for its multi sensor interface that can connect to a low power residual chlorine and pH sensor simultaneously



## Data Logging with Captis Cloud

Data logged in a central hub with chlorine levels sampled every 15 minutes, and pre-determined threshold alarms set