

Prominent Australian Beef Cattle Producer Saves on Livestock Water Supply

"We couldn't risk relying on 3G or 4G due to the unreliable network coverage on some of the tank sites. Radio comms didn't work for us either. For as little as 50c a day per site, SatVUE has allowed us to focus on other tasks around the property - rather than several-hour round trips to manually check water levels on a regular basis".

Brendan Huff
Manager Livestock
CattleCorp



When it comes to high quality meat products, Australian company CattleCorp* is one of the largest, vertically integrated 'paddock to plate' supply chain organisations in the world.

One of the many challenges that comes with maintaining such a large livestock operation is the effective management of water stock (levels), and overall quality of water, for any owner's valuable livestock.

Whether it be through evaporation due to harsh environmental conditions, or equipment issues such as a pump failure, broken pipeline, or leaking water tanks, essential water reserves can go dry and livestock can perish rapidly.

Yet with potentially millions of livestock scattered across hectares of remote, dry country, it is a costly and time-consuming exercise to conduct manual inspections of water tanks, turkey nests or pumps across multiple sites.

Large site, significant challenges

It was for this reason that CattleCorp began investigations into how remote monitoring technologies could automate the reporting process, ultimately assisting in managing their livestock tank water levels in a more cost effective manner.

Their search began logically - looking at technology solutions that utilised 3G / 4G communications. However, it soon became apparent that several of the sites where livestock water reserves were located had unreliable network coverage - in some cases, none at all.

Long-range wireless RF (radio) communications was also considered but it was determined that signal strength would be an issue due to the undulating environment as well as the need to, (as with the 3G / 4G solution) purchase multiple hardware components for each and every one of the monitoring sites.

It was these challenges that lead CattleCorp to consider satellite-based telemetry technology.



**This client has asked for names to be changed for privacy reasons*

Technology that delivers - remotely!

Pacific Data Systems had recently developed SatVUE, a compact, rugged device which collects and transmits data via the Inmarsat global satellite network.

PDS had initially developed their SatVUE technology for use within the mining industry, but due to the device's ability to integrate with a wide range of sensors / transmitters, they had since expanded their focus to also assist with monitoring applications within the agricultural livestock sector.

Trials yield immediate results

Up until this point, CattleCorp had been deploying personnel to regularly conduct manual level measurements of their livestock water tanks - a costly exercise due to the number of tanks and their remote locations.

They purchased a number of SatVUE units and set about conducting trials to automate the monitoring process.

In just a short period of time post-installation, the SatVUE system automatically alerted CattleCorp operators that there was a drastic reduction in water level at one of the tank sites. This suggested that there was a leak from the tank, and as such they deployed personnel to visit the site.

Investigations confirmed that there was indeed a leak and, although the leak was repaired, within the next 24 hours another alert was issued - which was later revealed to be another leak from the same tank.

CattleCorp also added a rain gauge and flow meter to round out their requirements to manage their water supply.

Planning ahead

As a result of these trials, CattleCorp have already allocated a portion of next financial year's budget on purchasing more SatVUE units, with the intention of deploying this technology across several more of their properties.

At a cost of just 50c per monitoring site, per day for data transmission it makes for a very cost-effective solution, and frees-up personnel to focus on other tasks around the property.



Tank Level Monitoring with added rain gauge



Also suitable for level monitoring of turkey's nests

Have other applications? Due to its flexible sensor integration the SatVUE solution is ideal for monitoring

Water - ground, surface, waste, irrigation, bores, tanks, turkey's nests, pipelines, channels, streams or dams for levels, quality, evaporation, flow & pressure; seawater for quality, currents & tides

Air - for dust, gases, temperature, humidity, pressure, solar radiation, wind speed & direction

Soil - for moisture & contaminants

Oil, gas, & other fluids - in pipelines and tanks for levels and pumps for status & control & more!



Monitor Multiple Sites via a single Remote Web Portal



Sales Enquiries

+617 3361 2000
www.satvue.com.au
info@satvue.com.au