



Waterco Case Study

Moura CSG Case Study

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*explains Ben Kele,
Principal of Midell Water*

Waterco filter technology facilitating CSG sustainability and affordability in QLD

The environmental challenges associated with coal seam gas (CSG) are well documented, but a project based in Moura, Central Queensland, is demonstrating how the latest water filtration technology can be used to generate vital sustainability.

With water used to bring CSG to the surface contaminated with various hydrocarbons and chemical salts, this particular operation (run by Brisbane-based CSG producer WestSide) is relying on an ingenious technology combination to render the water safe.

“CSG water has a number of challenges,” explains Ben Kele, Principal of Midell Water,

the company charged with providing sustainable solutions for the project.

“Two key areas that need to be addressed are salinity and sodicity - salinity being a measure of all salts in the water, and sodicity being the measure of sodium salts in the water. The treatment chain we put together actually combines two technologies. One is standard reverse osmosis, which gets rid of all salts. The other is an ion exchange filter, which acts to reduce sodium.”

With the ion exchange process requiring the very latest in filtration technology, the decision was taken to use Waterco filters.



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The use of such cutting-edge technology at Moura, located 186 kilometres west of Gladstone, is fitting. Boasting the oldest CSG industry in Australia, it’s the place where the viability of the underground energy source was first proven. With its association with the natural resource dating back to the 1970s, it’s known as Australia’s Cradle of Coal Seam Gas. Kele says the use of Waterco filter technology not only enables the project’s environmental mission to be achieved, but also facilitates a high degree of operational affordability.

“When compared to the use of only reverse osmosis technology, the filters used in the ion exchange process allow better economics of water treatment,” he says. “With the ion exchange medium with the Waterco filters, you can treat the same volume of water at a much lower cost.”

Sam Schuckert, Waterco’s National Commercial/Industrial Water Treatment Manager, says the company is committed

to providing technology that enables strong industry and environmental outcomes.

“While CSG is an industry with origins dating back decades, it’s only relatively recently that the technology required has become affordable enough to make it a viable energy option,” he says. “Waterco is proud to have been part of the development of a system that not only helps simplify CSG extraction, but also delivers sustainable outcomes for the surrounding environment.”

Having had previous experience with Waterco products, Kele said the choice of Waterco filters for Midell’s ion exchange system was an easy one.

“I’ve been working with Waterco on a variety of projects for seven years and have used the Waterco filters in a number of different locations,” he says. “Our company focuses on the types of different media we put within the filters, and the reason we use the Waterco filters is that we get a very good distribution. We find the framework of Waterco filters very much suits our needs.” ■