



## 400 Man Camp Potable Water Treatment Plant

**Customer:** Origin Energy

**Location:** Reedy Creek, QLD

**Case Study ID:** CS-89

**Date:** November 2013

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### Overview

Dowdens Pumping and Water Treatment were engaged by Origin Energy to design, supply, install and commission a potable Water Treatment Plant (WTP) at their Hamilton Park South 400 man Gathering Camp.

### The Problem

The onsite bores delivered raw water, which was high in conductivity, total dissolved solids, sodium, chloride, iron and aluminium, which needed to be removed to meet Australian Drinking Water Guidelines. Origin Energy required 120kL of treated water produced per day.

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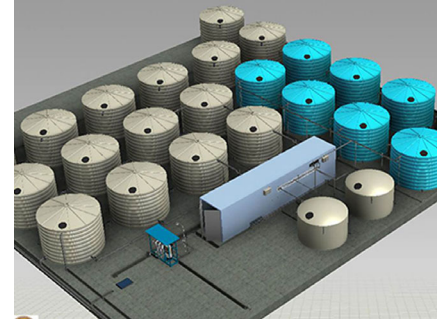
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## Our Solution

Dowdens Pumping and Water Treatment customised a potable water treatment system for Origin Energy. The system consists of pre-treatment, ultrafiltration (UF), reverse osmosis (RO), carbon filtration and disinfection.

The process that was recommended and accepted by Origin Energy included:

- Pre-treatment
- Ultrafiltration (UF)
- Reverse osmosis (RO)
- Carbon filtration and disinfection

## Key Components & Features

- Three days storage capacity of raw water in 8 x 47kL poly tanks
- Three days storage capacity of potable water in 8 x 47kL poly tanks
- Galvanised steel skid set-up complete, pre-wired and pre-plumbed settings
- 1x Temperature controller
- 1x Coagulant dosing system
- 1x Auto-flushing disc filtration system
- 2x RO pressure vessels
- 6x RO membranes
- 1x Antiscalant dosing system
- 1x 30" Activated Carbon Filter with actuated diaphragm valves
- 1x Chlorine Recirculation system with pH and chlorine analyser
- 1x Acid Dosing system
- 1x Shipping container with air conditioning, entry doors, steel plate floor and lights

Hutchinson Builders also contracted Dowdens Pumping and Water Treatment for their Rotating Biological Contactor Sewage Treatment Plant at the same worksite. Click [here](#) to view the case study.

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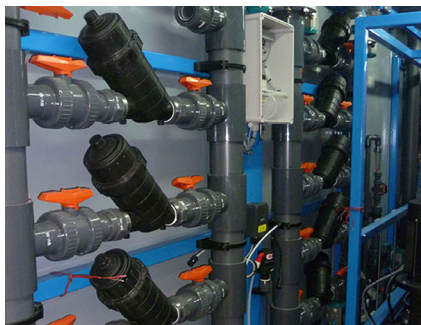
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## Project Design Philosophy

Dowdens Pumping & Water Treatment design philosophy for this project was:

- Cost-Effectiveness
- Innovation
- Ease of Installation
- Simple and Effective Plant Operation
- System Reliability and Reduced Ongoing Maintenance Costs



## Brands used in this project



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