



Grazing Company Agricultural Solar Pumping Systems

Customer: Michelmore Grazing Company

Location: Fort Cooper & Kainga Stations

Case Study ID: CS-129

Date: July 2016

Overview

Long-term customers Michelmore Grazing Company have recently purchased seven solar-powered pumping systems from the Dowdens Pumping & Water Treatment Mackay branch. All the solar systems supplied are used to pump water from onsite bores to poly water storage tanks, to then feed the properties multiple cattle water troughs. Some existing bores were used to replace dated diesel setups/windmills, along with some new bores being added to increase the total number of watering points for the cattle. Michelmore Grazing Co. purchased three Solar Pumping Systems for Fort Cooper Station and another four systems installed at Kainga Station.

The Problem

The existing pump was an old-line shaft MONO pump that was operated by a Diesel engine with the existing bore column also a problem because of accumulated rust. Michelmore Grazing Company

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required Dowdens to update the existing pumping infrastructure to more efficient and cost-effective solar-based systems to gain better efficiencies and cost savings.



Our Solution

This 6-month project saw Dowdens Mackay source, supply, install and commission a number of GRUNDFOS & MONO solar pumps, a MONO 2400 WATT Solar System (all used in conjunction with solar panels/frames) and undertake repairs on an existing Mono Diesel Pump system at Michelmore Grazing Co.'s Fort Cooper and neighbouring Kainga Stations (Nebo, QLD). The repairs carried out on the existing Diesel Driven Mono Helical Rotor Bore Pump involved replacing the rusted head housing with this pump now being used as a backup for one of the new Solar Pumping Systems.

The high-quality GRUNDFOS & MONO Solar Pumping Systems have already delivered Michelmore Grazing Co. notable cost savings via a reduction in diesel fuel usage and a significant decrease in the need for ongoing diesel motor maintenance. Michelmore Grazing Co. now saves both time and money by not having to undertake laborious daily checks on the diesel pump sets fuel levels.

Key Components

The components and upgrades were delivered, installed and commissioned at various locations around the properties.

- 6 x Grundfos Submersible Solar Pumps (these pumps can be run by a generator if needed)
- 1 x Mono Submersible Solar Pumps
- Multiple 250 Watt Solar Panels

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- Mono 2400 Watt Tracking Solar System
- Repairs were also carried out on the existing Diesel driven MONO Helical Rotor Bore Pump by replacing the rusted head housing. The pump is now used as a backup for the new solar pumping system.



Project Design Philosophy

The high-quality GRUNDFOS & MONO Solar Pumping Systems have already delivered Michelmores Grazing Co. notable cost savings via a reduction in diesel fuel usage and a significant decrease in the need for ongoing diesel motor maintenance. Michelmores Grazing Co. now saves both time and money by not having to undertake laborious daily checks on the diesel pump sets fuel levels.

Brands used in this project



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