



water solutions

CASE HISTORY

Lake Hayes Lifting Station

RAW SEWAGE LIFTING STATION TO GRAVITY MAINS SEWER

Situation

Located in Central Otago, New Zealand the Lake Hayes subdivision collects raw sewerage from approximately 560 homes and pumps the sewage 2.4km through a 150mm diameter main to the Shotover treatment station. Duty point was 28L/sec at 75m head.

The site fell within the Queenstown Lakes District Council territory and site maintenance was sub contracted to Fulton Hogan.

The existing pump station contained a dual pump set operating duty/standby. The pumps were prone to ragging and were being removed every 1-2 days for de-ragging that entailed a 15km trip to the workshop for a wet end strip and clean.

Solution

Using the **ZENIT Pump selector** software a set of ZENIT Uniqua ZUG OC 100F 45kW 2 pole pumps were selected to meet the required duty point

A key criteria for choosing the Uniqua open channel wet end was the promise that the **ZENIT Anti-Clogging System (ACS)** was superior to other systems on the market and would offer the Council and sub-contractor ongoing savings in site maintenance costs.

The well thought out design of the Uniqua Wet end also meant that any maintenance on the volute and impeller can be done on-site without the need to disconnect the pump and transport back to a workshop.

ZENIT Group is represented in New Zealand by White International NZ Ltd. Working closely with Hall Machinery, a distributor for Whites, the two pumps along with a set of DAC 100/100V mounting guide rails were supplied in early 2015. The pump set was installed and commission in July 2015 by Fulton Hogan after completing site works to prepare the chamber for the new pumps and guiderail system.

Benefits

Since their installation, the pumps have worked faultlessly. Fulton Hogan have not had to pull either pump from the pumping station for any de-ragging issues or unplanned repairs.

The site maintenance cost savings per year equate to over NZ\$30,000.



Installation place



Pump installation



ZUG OC 100F 50Hz 45kW 2 poles

Customer	Queenstown Lakes District Council			
Company Profile	Regional Council			
Location	Central Otago, New Zeland	Country	New Zealand	Area Oceania
Application	Residential subdivision raw sewage Duty + Standby lifting station to local treatment plant			
Installed Products	2 x ZUG OC 100F 50Hz 45kW 2 pole pumps / 2 x DAC 100/100V Couplings & guide rails			
Date	July 2015			