

# MADCAP testimonial

## To Whom it May concern

SAITL Dairy Laboratory is a non-profit, independent laboratory operated by the **South Auckland Independent Testing Society Ltd.** SAITL's primary role is to test milk samples taken from Dairy Farmers by Dairy companies, the results of which are used to calculate the payment to farmers. SAITL has been in operation since 1984 and currently tests 97% of New Zealand's dairy farm supplier samples. SAITL's member companies include Fonterra and Tatua, but we also test most of the other Dairy company raw milk samples in New Zealand. In addition to supplier payment testing the laboratory performs a range of chemical and microbiological raw milk testing for the member companies, non-member dairy companies and other dairy industry and service groups. See our website for more information [www.saitl.co.nz](http://www.saitl.co.nz).

At peak season SAITL is currently testing:

- 12,000 farmer payment samples per day for composition (Fat, Protein, Lactose, Total solids, Urea) as well as Freezing point depression and Somatic Cells.
- A range of Micro and other quality tests on a regime basis on the 12,000 farmer payment samples. These tests include Total Bacteria (Bactoscan), Coliforms, Thermoduric plate count, Inhibitory substances, Foreign Matter, and sensory evaluation.
- A range of specialty tests as required eg Aflatoxin, IgG etc.
- SAITL also tests samples for a NZ herd testing organisation.

SAITL has had a long relationship with Contec Group International and we have been a Beta test site for many of the iterations of MADCAP over this time (eg MADCAP4, 5 etc.). In recent years SAITL has undertaken a number of projects to streamline, automate and improve our test systems. Many of these projects have had active involvement from Contec and several of these projects have been enabled by the MADCAP software. We therefore have no reservation in recommending Contec or its MADCAP software to other parties

Some specific examples of some of these projects are detailed over page:

## Automated plate counting:

A few years ago SAITL was looking to replace its plate counting technology. However we were unable to find an off-the-shelf laboratory plate counter that met our requirements for counting speed and accuracy. SAITL contracted a vision company in New Zealand to develop a camera plate counter that would initiate off the barcode on the plate being read. To integrate this into our test database Contec made a number of changes to MADCAP including a system to allow XML communication and also a software enhancement so that the images of the petri dish could be viewed in the MADCAP supplier enquiry screen.

## RFID



As part of a project undertaken with Fonterra, SAITL changed from barcode supplier identification to RFID (**R**adio **F**requency **I**dentification). This meant a huge amount of changes within the laboratory and also to the MADCAP software including RFID reader/ writer integration, interfaces for displaying RFID information, and also changes within MADCAP to capture extra information on the RFID tag (volume, temperature, time of collection etc.). These changes have led to a number of efficiencies within the laboratory and has enabled subsequent automation.

## Automating sample sorting



Historically SAITL has manually sorted 12,000 samples each day for a range of micro and other quality tests on a regime basis as controlled by the MADCAP database. This manual sorting process was highly repetitive and took four staff up to six hours to do each day. Recently SAITL has automated this sorting process and now uses a Flexi-pick robot to perform this task. As this selection process is controlled by the MADCAP database Contec had to work closely with SAITL, and the automation manufacturer to integrate the automation with MADCAP without compromising the speed of the process. This process went very well and SAITL is reaping the benefits of this automation.

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