

Water quality proves a key to cow health, milk production

Cows peaked at 0.75 in August and then went downhill. Milk yields slipped away, so did bodyweight.

Milking was depressing and messy.

Blood tests failed to reveal a cause. Desperate, the young sharemilkers fed hay and meal and checked B12, copper, selenium, liver fluke; anything they could think of.

At last they turned to the water — and found it to be thick with faecal coliforms.

Antibiotics and treatment of water brought recovery.

Cows stopped scouring, milk yields picked up and individuals no longer looked as if they would die.

Northland consulting officer **Simon Mackle** relates this story of a dairyfarm he visits and says the sharemilkers be-

lieve other herds could be suffering from poor water. This farm drew water from a drain along the boundary and was probably typical of many.

The supply was analysed 8 years ago and found to be satisfactory. It was that analysis which made the sharemilkers and owners look for other causes before retesting. Results this time were different; water quality had deteriorated.

With the lab report showing high coliform levels, the farmers sought an alternative water source. Three bores were sunk but they proved dry.

The farmers turned to an old bore that had not been used for 10 years because its water was contaminated by iron. They set up swimming pool sand filters to remove some of the iron and

looked for other ways to treat the water.

The farm owners decided on an ozone technique which is used in some overseas cities to treat recycled water. Powered from a 3-pin plug in the farm dairy, an ozone device sucks oxygen from the air and treats it. A venturi effect then injects the resulting ozone into the farm water supply. A chemical reaction kills the bacteria and removes some of the iron, says Simon Mackle quoting the sharemilkers.

Bore water is circulated through a tank, sand filters and treatment units before being pumped into the reticulation to the dairy and troughs.

The ozone units were supplied by *Novozone*, Auckland.

The sharemilkers, milking 310 cows on 100ha, have been



SIMON MACKLE

impressed by the initial results.

With the water problems last season, they ended up with only 34,000kg of milkfat. Cows were affected again this season after returning at condition score 5 from off-farm wintering where they were fed adequately on pasture and hay. They recovered quickly after the ozone unit was installed and soon were on track to hit 34,000kg by Christmas. The sharemilkers were hoping to pass 48,000kg of fat for the season if weather permitted.

But at the start they feared another miserable season.

With ozone treatment of water supply, daily milkfat crept back to 0.80 then 0.95 and eventually 1kg of fat/cow. This happened within 2 or 3 weeks.

The sharemilkers wonder how many other herds may be suffering from poor water from streams or stagnant dams. They say Northland herds have been performing far better this season after the kind winter and drier spring. Something would be wrong if herds failed to peak at more than 0.8kg fat/cow — it could be the water.

Farmers should have their water tested, the sharemilkers said to Simon Mackle.

Working on the principles defined in Northland's focal farm scheme, they are striving to 'get the basics right'. Their view, he says, is that others should do the same before embarking on irrigation projects or winter milk. **D**

OZONE NATURES PURIFIER

Ozone has been used in Europe for almost a century for treating municipal water supplies. Its unique characteristics make it an ideal chemical-free alternative for domestic rural supplies. Novozone Ozone generators now make this technology available for domestic water treatment applications.

- Completely natural non-polluting water sanitiser
- In use world-wide since 1906 for purifying water supplies
- Produced on-site - no storage or handling of chemicals
- Kills bacteria, coliforms, viruses, cysts
- Removes iron, manganese, and sulphur problems
- Removes unpleasant tastes and odours
- Leaves no chemical residue
- Low running cost
- Can be installed by the owner
- NZ designed and built - World-wide patents pending

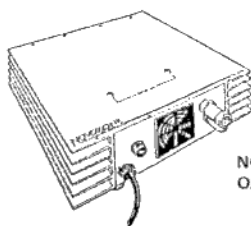
NOVOZONE (NZ) LTD
P. O. Box 100-430, North Shore Mail Centre, Auckland
Tel: 0-9-443 3671 Fax: 0-9-443 1769

The ideal water treatment system
for large and small farms

Improve Your Water Quality
Enjoy Pure Safe Tank Or Bore Water

Suitable for:

- Domestic Water Supplies
- Poultry Farms
- Dairy Farms
- Horticultural Water Supplies
- Iron Removal



NOVOZONE CD1000
OZONE GENERATOR

NOVOZONE
OZONE SYSTEMS