

RETURN OF ANALYSES. (Analytical Laboratory, Christchurch.)—*continued*.

Department or Person from whom Sample received.	Nature of Sample.	Date received.	Adulteration suspected, or for what analysed.	Result.
Customs	Acetic acid	1907. Dec. 20	Tariff	49.8 per cent. acetic acid
	"	" 24	"	49.8 " " (Check.)
	"	1908. Jan. 5	"	58.2 " "
	"	" 5	"	98.5 " " Melting-point, 58.5° Fahr.
Health	"	" 10	"	58.6 " "
	Water, Kaikoura	" 27	Purity	Volatile and organic matter, 1.96; sodium-chloride, 0.8; sulphates, 0.6; lime, 0.84; silicates, 0.84; iron, trace; free ammonia, 0.015; album. ammonia, 0.005.
	"	" 27	"	Volatile and organic matter, 2.4; sodium-chloride, 10.6; sulphates, 1.57; nitric anhydride, 0.07; lime, 1.48; silicates, 1.57; iron, trace; free ammonia, 0.03; album. ammonia, 0.008. Not very good.
	"	" 27	"	58.3 per cent. acetic acid.
Customs	Acetic acid	Feb. 4	Tariff	58.5
Health	Milk	Mar. 5	Purity	Specific gravity, 1.032; total solids, 12.09 per cent.; fat, 3.4 per cent.; solids not fat, 8.69 per cent.; ash, 0.68 per cent.
	Water, Doyleston	" 11	"	Volatile and organic matter, 0.84; sodium-chloride, 1.15; sulphates, 0.35; lime, 0.74; silicates, 1.12; iron, trace; free ammonia, 0.01; album. ammonia, trace.
Police	Contents of stomach	" 22	Poisons	Free from poison.
Customs	Acetic acid	" 24	Tariff	49.2 per cent. acetic acid.
Health	Coal briquette	" 23	Irritants	Found coal-tar hydrocarbons and phenols soluble in ether.
	Water, Waimate	" 28	Purity	Volatile and organic matter, 1.68; sodium chloride, 1.04; carb. lime, 0.64; silicates, 0.56. Traces of iron, sulphates, and ammonia.

6th April, 1908.

A. A. BICKERTON, Analyst.

OTAGO.

SIR,—

University Laboratory, Dunedin, 3rd June, 1908.

I have the honour to forward by this mail my annual report as Government Analyst for the Department of Public Health for the year ending 31st March, 1908.

The work for the year includes analyses and reports on 51 samples of milk, 23 samples of water, 16 samples of whisky, 10 samples of wine, 15 samples of tea, 1 sample of hop-beer, 1 sample of condensed milk—117 samples in all.

My report shows the composition and quality of the *individual* samples of milk submitted for analysis, but there are a few points I wish to draw attention to in connection with them that deserve a little more attention. I am therefore tabulating the milk results in groups 11, 13, 13, 5, 3, 6 samples respectively, as received by me for analysis.

TABULATED SUMMARY of 51 SAMPLES of MILK for Year ending 31st March, 1908, shown in groups as taken by different officers—Constable McIntyre, Messrs. Fountain and Donaldson, and Oamaru Police.

From whom received.	Number of Samples.	Date when received.	Average Percentage of Total Solids.	Average Percentage of Fat.
Constable McIntyre, Dunedin	11	May 18	13.9	4.35
"	13	" 22	13.5	3.69
Mr. Fountain, Dairy Industries	13	June 8	12.5	3.1
"	5	" 13	12.46	3.21
Mr. Donaldson, Inspector of Foods	3	" 26	12.82	3.21
Police, Oamaru	6	" 29	13.34	3.85

(a.) The police in all three of their batches got a much higher quality of milk than Mr. Fountain, of the Dairy Industries Department, or Mr. Donaldson, of the Foods Department.

(b.) The sudden falling-off in quality between the 18th May and the 22nd May is accounted for by the fact that the police (McIntyre) raided the road leading to Dunedin from the north on one of these dates and the road leading from the south on the other.

(c.) The samples submitted by Mr. Fountain for the Dairy Industries Department included, I believe, several samples from the retail shops, and this probably accounts for the low average quality of the batch taken by him.

(d.) The high average quality of the Oamaru samples is very satisfactory. These were taken later, and further into the winter season than Mr. Fountain's Dunedin samples. The Oamaru