LABORATORY

OF THE

INLAND REVENUE DEPARTMENT

OTTAWA, CANADA.

BULLETIN No. 160

NATIVE WINES

OTTAWA, September 1, 1908.

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Deputy Minister of Inland Revenue.

SIR.—I have the honour to report herewith upon 101 samples of Native Wine collected during February, March and April of the present year. These were obtained in 14 of the Inspectoral Districts of Canada (none from Prince Edward Island), and may be taken to fairly represent Native Wine as sold in Canada.

The only other systematic examination of wines by this Department is reported in Bulletin 38, of June 1894. On that occasion 124 samples were analyzed; but this number included many imported wines. Only 36 samples are of acknowledged Canadian manufacture. In his introduction to the Bulletin in question, the late Chief Analyst says.—" In the present report it is proposed to make a first contribution towards a " better understanding of the subject, and to endeavour to point out how far the various " wines sold in Canada have been fortified, or made from added sugar."

The results of analysis shew that, with three doubtful exceptions, all of the samples of Canadian wines examined in 1894, were made from sugared must. This conclusion was reached by assuming a maximum of 20 per cent. natural sugar in grape must, and the production of 50 per cent. (weight) of alcohol from the fermentation of sugar. By far the larger number of these wines contained from 5 to 12 per cent, of unfermented sugar, while the alcohol was usually present to about 10 to 12 per cent, (22 to 26 per cent proof spirit). The popular taste seems to demand a sweet wine, because some 6 or 7 samples occur in which the residual sugar is less than 0.5 per cent, proving that dry wines can be produced in Canada, if desired.

The most difficult and expensive part of wine production is the cellar treatment. Other fermentations than the alcoholic are prone to take place, and acidity results. To check these undesirable fermentations alcohol is sometimes added, and the wine is impaired as regards bouquet, and other qualities. Salicylic acid, or other preservative may be used to check fermentation, without addition of alcohol. In any case, the production of those esters, and other bye-products of the natural fermentation of sugar, whose presence gives character and value to the best wines, is hindered, and the resultant beverage while not necessarily unwholesome, as a wine, is of low quality.

The present report (See Table I) indicates that, if judged by the same standard used in Bulletin 38, all the samples examined this year are made from wine must to 5888-14