LABORATORY

OF THE

INLAND REVENUE DEPARTMENT

BULLETIN No. 86

FERTILIZERS, 1903.

OTTAWA, June 21, 1903.

W. J. Gerald, Esq., Deputy Minister of Inland Revenue.

S18,—I submit herewith a tabulated statement, marked Table I., containing a description of 128 standard samples of agricultural fertilizers, which were sent in to the Department of Inland Revenue by their manufacturers, importers or vendors, in accordance with the provisions of the Fertilizers Act, 1890, and as representing the goods which it was proposed to offer for sale in Canada during the season, 1903—4. There is a slight increase in the number of standard samples this year compared with the three preceding seasons, as will be evident from the following statement:—

In	1897	there	were	107	standard	samples	submitted.
	1898			124	11	1)	!!
	1899	11		154	,,	**	**
	1900	- 11		107		**	
	1901			102	**	·	11
	1902			106		"	11
	1903			128	**	11	11
	1000	14		120	99	11	**

Table I. gives the designations of the various brands of fertilizers, the names of the manufacturers, the claims made as regards their contents in fertilizing ingredients, and the actual quantities of these found in the standard samples on analysis in this laboratory. The guaranteed contents are given in the upper line, and the analytical results in the second line placed opposite the designation of the fertilizer. In many cases the claims made are imperfect and indefinite, and, in some, the requirements of the Act calling for a certificate of analysis, and a statement of the materials used in the manufacture of the fertilizer have been neglected. With regard to indefinite claims it may be mentioned that these are often made by reputable makers, when a particular fertilizer is described as containing say 'from 2.5 to 3.0 p.c. of ammonia,' or 'from 8 to 9 of available phosphoric acid,' or 'from 9.5 to 11.0 p.c. of potash.' In such instances if an ingredient is found deficient, and the sample is challenged, the manufacturer often defends himself by maintaining that his guarantee does not extend above the lowest of