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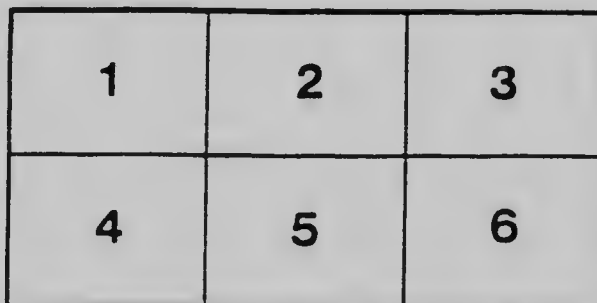
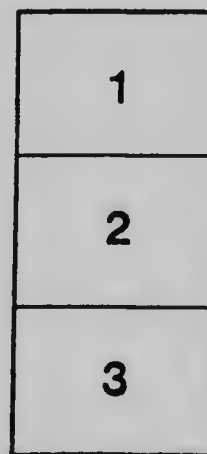
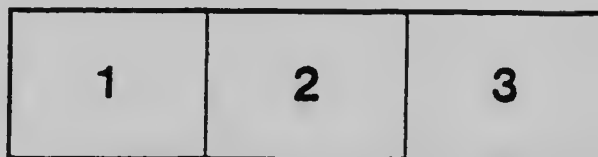
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(ANSI and ISO TEST CHART No. 2)



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W. J. Gerald
Deputy Minister.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA
BULLETIN No 134
STANDARD FERTILIZERS, 1907.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA

BULLETIN No. 134

STANDARD FERTILIZERS, 190..

OTTAWA, May 10, 1907.

W. J. GERALD, Esq.,

Deputy Minister of Inland Revenue.

SIR,—I have the honour to report that up to this date 173 samples of standard fertilizers have been received by this Branch from their manufacturers who propose to offer them for sale in the markets of the Dominion during the year 1907. The Fertilizers Act, 1890, requires that such samples shall be transmitted to the Minister of Inland Revenue 'before the end of the month of January in each year,' but, to suit the convenience of the manufacturers, this time has been gradually extended until samples are accepted which come as late as the end of April. *The number of samples above mentioned exceeds that of last year, and is greatly above the average as will be seen from the following statement:—

In 1897 there were analysed 107 standard samples.

1898	"	124	"
1899	"	154	"
1900	"	107	"
1901	"	102	"
1902	"	106	"
1903	"	128	"
1904	"	111	"
1905	"	120	"
1906	"	153	"
1907	"	173	"

The tabulated description appended to this report contains the designation of the various brands of fertilizers offered for sale in 1907, the names of the manufacturers or importers, the claims made as regards their fertilizing constituents, and the actual percentages of the latter found in the standard samples on analysis in this laboratory. The 'guaranteed contents' must be understood to indicate only the lowest percentages claimed on the manufacturers label or given in correspondence with the Department.

* Indeed ten samples from British Columbia did not arrive till much later.

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BULLETIN No. 134.

STANDARD FERTILIZERS, 1907.

ERRATA.

Owing to the adoption of a uniform valuation of insoluble phosphoric acid, whether occurring in Thomas phosphate powder, or as ground rock, &c., some errors of calculation occur in this bulletin. The present basis of valuation is given on page 3. In former bulletins, insoluble phosphoric acid in Thomas slag has been given a higher value than insoluble phosphoric acid in other materials.

Page 11—No. 1961—Relative value is \$16.00.

"	21—No. 203 3 ⁹	"	"	\$17.48	instead of	\$18.53.
"	21—No. 2039—	"	"	\$17.82	"	\$19.99.
"	21—No. 2049—	"	"	\$15.17	"	\$17.08.

(Sd) A. MCGILL,

Chief Analyst.



As required by the Fertilizers Act, the tabulated statement contains also a column in which the relative value per 2,000 lbs. of each fertilizer is given, calculated from their contents in fertilizing ingredients, the value of these being taken as follows:—

	Cents per lb.
Nitrogen, in salts of ammonia, or nitrates, as well as in compound fertilizers.....	17
Organic nitrogen, in ground bone, fish, blood or tankage.....	16
Phosphoric acid—	
Soluble in water.....	6
Soluble in 1 per cent citric acid solution.....	5½
Insoluble in Thomas phosphate powder, bone and fertilizers generally.....	1½
Potash, in compound fertilizers.....	5

These rates are essentially the same as those of 1905 which were then modified in order to bring them into closer agreement with the market prices of the materials used in the manufacture of fertilizers. The value of each brand is calculated on the results of the analysis of the standard samples, but it has been omitted in the case of the guaranteed contents of those samples regarding which the analysis or information supplied has not been sufficiently explicit. It has also been considered reasonable to expunge from the foregoing list of values the rate formerly given for insoluble phosphoric acid in Thomas phosphate powder or basic slag, because its agricultural effect cannot be considered as higher than that of the insoluble phosphoric acid in bone.

From studying the present tabulated statement it would appear that the number of fertilizers of low price is on the increase, and that it is necessary to call the attention of purchasers to the consideration that the fertilizing constituents in these are likely to cost more than in fertilizers of a higher grade. The expense of mixing a ton of fertilizer containing say 300 lbs. of plant food is as great as in the case of one twice as rich in fertilizing constituents. The cost of package, carting and freight is the same per ton. It is evident, therefore, that the manufacturer is in a position to sell the plant food of high grade fertilizers at cheaper rates per pound than in brands of low grade. In other words, the higher the grade the cheaper can the fertilizing constituents be bought. Farmers should therefore consider the advantage of purchasing only high grade fertilizers. He should also be advised to avoid those brands which have less than two per cent of ammonia or potash. These percentages are too low in cases where such ingredients are required, and where they are not needed is useless to apply them. It is a waste of money to buy nitrogen or potash in fertilizers containing less than one per cent of these constituents.

I have the honour to be, sir,
Your obedient servant,

THOMAS MACFARLANE,
Chief Analyst.

NOTE.

LABORATORY OF THE INLAND REVENUE DEPARTMENT,
317 QUEEN STREET,
OTTAWA, June 19, 1907.

Owing to the lamented death of Mr. Macfarlane, the final revision of this Bulletin has been made by me.

It may be necessary to explain that in calculating the relative values, I have taken the minimum percentages of fertilising materials claimed by the manufacturers, as the basis of calculation. In cases where no differentiation of the phosphoric acid is given, it is impossible, of course, to calculate the value with any reasonable degree of accuracy. Where available phosphoric acid is not distinguished as water soluble, the whole available acid has been given value as 'reverted,' i.e. 5½ cents per lb.

A. MCGILL,
Acting Chief Analyst.

TABULATED DESCRIPTION OF 173 STANDARD SAMPLES

Date when Advised.	Number of Sample.	Designation.	Name of Manufacturer.	By whom sent.	From what materials Produced.
1906.					
May 23	1876	Bone Meal.. . . .	The Chas. H. Lilly Co., Seattle.	Wm. Rennie Co., Ltd., Vancouver Branch.	.....
" 22	1877	Lawn Fertilizer No. 5	Portland Seed Co., Portland, Oregon.	Charles Nelson, Vancouver, B.C.	.....
" 21	1878	Read's Practical Potato Special.	American Agricultural Chemical Co., Boston Sales Dept., 92 State St.	Manufacturers.....	Bone black, animal bone, phosphatic guanos, dried fish, meat or blood, nitrate of soda, or sulphate of ammonia, sulphate or muriate of potash, sulphuric acid.
" 21	1879	Read's Vegetable and Vine.	" " .. .	" .. .	" " .. .
" 21	1880	Read's Potato Manure.	" " .. .	" .. .	" " .. .
" 21	1881	Read's High Grade Farmer's Friend.	" " .. .	" .. .	" " .. .
July 3	1882	Bone Meal.....	The Chas. H. Lilly Co., Seattle.	Imported by M. J. Henry, Vancouver, B.C.	.....
" 6	1883	Fine Bone Fertilizer.	P. Burns & Co., Vancouver, B.C.	Manufacturers.....	.....
Sept. 1	1884	Fish Guano.....	Fraser River Oil and Guano Co.	J. F. E. Kinnell.....	Fraser river salmon refuse..
Oct. 22	1885	Campbell's Fertilizer No. 1.	The Executors of Robt. Campbell, Manchester, Eng.	Blackie Bros., 44 Allen St., Halifax, N.S.	.....
" 22	1886	Campbell's Fertilizer No. 2.	" " .. .	" " .. .	.....
1907.					
Jan. 9	1887	International Grain and Grass Fertilizer	International Seed Co., Rochester, N. Y.	A. E. Howe, Sec'y..	.....
" 9	1888	International Potato and Truck Manure.	" " .. .	" " .. .	.....
" 11	1889	Fertilizer "A".....	Davies Packing Co., Ltd., Harriston, Ont.	Manufacturers.....	Blood, bone and dried albuminous matter.
" 12	1890	Toronto "A".....	Wm. Davies Co., Ltd., Toronto.	" " .. .	Dried blood, bones and tauge.
" 12	1891	Toronto "B".....	" " .. .	" " .. .	Concentrated extract obtained from the evaporation of tank liquors.
" 15	1892	Essex "A1" Super-phosphate.	Russia Cement Company, Manufacturers of Essex High Grade Fertilizers, Gloucester, Mass.	S. C. Shaffner, Granville, Ferry, N.S.	High grade muriate of potash, and sulphate of potash, nitrate of soda, dry ground blood, dry ground fish, fine bone meal and acid phosphate.
" 15	1893	Essex XXX Fish and Potash.	" " .. .	" " .. .	" " .. .
" 15	1894	Essex Market Garden and Potato Manure	" " .. .	" " .. .	" " .. .
" 15	1895	Essex Orchard Fertilizer.	" " .. .	" " .. .	" " .. .

OF AGRICULTURAL FERTILIZERS, REGISTERED FOR 1907.

	RESULTS OF ANALYSIS.										Name of Analyst.	
	Nitrogen.		Phosphoric Acid.						Relative Value per ton of 2,000 lbs.	Number of Sample.		
	Total, including that of nitric acid and ammonia if present.	Total calculated as ammonia.	Soluble in water.	Citric soluble.	Insoluble.	Total.	Total available.	Potash.				Moisture.
P. C.	P. C.	P. C.	P. C.	P. C.	P. C.	P. C.	P. C.	P. C.	P. C.	& cts.		
Guaranteed contents.	3.83	4.05	1.20	9.97	4.15	15.32	11.17	0.05			25 93	1876 Miss E. Wright
Standard sample..	3.03	4.40	.....	20.47	6.35	17.02	20.47	0.00	6.86	30 11	
Guaranteed contents.	2.80	3.51	4.72	12.12	7.40	6.37		25 75	1877 " "
Standard sample..	4.02	4.83	1.12	15.36	5.43	21.91	16.48	0.19	5.36	33 73		
Guaranteed contents.	1.44	1.75	6.24	2.07	2.56	10.87	8.31	8.24	9.64	25 68	1878 " "	
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guaranteed contents.	2.41	2.92	8.61	2.24	2.56	13.43	10.87	7.68	12.22	20 46	1879 " "	
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guaranteed contents.	2.38	2.89	6.49	2.88	2.39	11.67	9.28	11.62	9.22	31 28	1880 " "	
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guaranteed contents.	3.28	3.98	4.80	3.04	3.51	11.35	7.84	10.61	10.64	31 91	1881 " "	
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guaranteed contents.	3.83	4.05	1.20	10.97	4.15	15.32	11.17	0.05	27 82	1882 " "
Standard sample..	2.16	2.62	0.89	6.08	5.11	11.99	6.88	1.02	3.90	17 11		
Guaranteed contents.	3.05	3.70	1883 " "
Standard sample..	3.71	4.50	0.96	10.72	10.39	22.07	11.68	0.48	7.00	28 41		
Guaranteed contents.	8.34	10.13	1884 " "
Standard sample..	7.71	9.36	0.80	0.97	5.72	7.52	1.77	0.96	.....	.....	20 37
Guaranteed contents.	4.73	5.75	3.44	3.44	3.10	23 39	1885 Miss S. E. Wright
Standard sample..	4.03	4.91	3.67	2.57	2.24	8.48	6.23	3.13	1.1	.....	23 93
Guaranteed contents.	3.53	4.17	5.93	4.82	23 46	1886 " "
Standard sample..	3.82	4.64	6.72	1.60	1.60	9.92	8.32	5.60	12.90	.....	28 89
Guaranteed contents.	1.25	1.50	8.00	2.00	1.30	11.00	10.00	2.50	18 85	1887 A. Lemoine.
Standard sample..	1.54	1.87	7.22	2.02	.....	15.15	9.84	1.09	14.20	.....	22 46
Guaranteed contents.	1.25	1.50	6.00	2.00	1.00	9.00	8.00	7.00	20 93	1888 " "
Standard sample..	1.68	2.04	6.71	1.21	4.03	11.95	7.92	9.17	13.10	.....	25 47
Guaranteed contents.	6.46	7.85	17.57	2.90	1889 " "
Standard sample..	6.44	7.82	2.75	14.40	3.19	20.34	17.15	.....	3.90	.....	40 71
Guaranteed contents.	8.00	6.59	17.27	8.85	1890 " "
Standard sample..	6.44	7.82	2.75	14.53	3.19	20.47	17.28	1.58	8.30	.....	42 42
Guaranteed contents.	13.17	16.00	7.29	42 14	1891 " "
Standard sample..	13.04	15.84	.....	1.15	1.23	2.43	1.15	3.12	7.60	.....	46 49
Guaranteed contents.	1.00	1.20	3.00	4.00	2.00	9.00	2.00	14 00	1892 " "
Standard sample..	1.40	1.70	3.19	4.47	7.50	15.16	7.66	2.58	6.20	.....	18 34
Guaranteed contents.	2.06	2.50	12.00	9.90	2.25	20 05	1893 Miss S. E. Wright
Standard sample..	2.14	2.60	5.75	5.60	3.04	14.39	11.35	2.95	8.87	.....	24 20
Guaranteed contents.	2.00	2.40	4.00	4.00	2.00	10.00	5.00	21 60	1894 " "
Standard sample..	2.18	2.65	5.28	4.48	3.83	13.59	9.76	6.00	9.90	.....	25 83
Guaranteed contents.	1.64	2.00	4.00	3.00	2.00	9.00	8.50	22 78	1895 " "
Standard sample..	1.86	2.26	4.13	3.21	4.79	12.15	7.36	9.65	5.12	.....	25 92

TABULATED DESCRIPTION OF 173 STANDARD SAMPLES

Date when Advised.	Number of Sample.	Designation.	Name of Manufacturer.	By whom sent.	From what materials produced.
1907.					
Jan. 15 1896		Essex Complete Manure for Corn, Grain and Grass.	Russia Cement Co. Manufacturers of Essex High Grade Fertilizers. Gloucester Mass.	S. C. Shaffner, Granville, Ferry, N.S.	High grade muriate of potash and sulphate of potash, nitrate of soda, dry ground blood, dry ground fish, fine bone meal and acid phosphate.
" 15 1897		Essex Complete Manure for Potato, Roots or Vegetable	" " "	" " "	" " "
" 15 1898		Essex Fish Bone Meal.	" " "	" " "	" " "
" 21 1899		Fertilizer "E".....	The Harris Abattoir Co., Ltd., Toronto, Canada.	Manufacturers	Dried blood, bones and tankage.
" 4 1900		Great Eastern Northern Corn Special.	The American Agricultural Chemical Co., Rutland, Vermont, U. S. A. (branch.)	"	"
" 4 1901		Great Eastern Potato Manure.	" "	"	"
" 4 1902		Great Eastern General.	" "	"	"
" 4 1903		Great Eastern Grass and Oats.	" "	"	"
" 4 1904		Great Eastern High Grade Potato Manure.	" "	"	"
" 4 1905		Great Eastern Potato Special.	" "	"	"
" 4 1906		A. A. C. Co. Aroostook Complete Manure.	" "	"	"
" 4 1907		A. A. C. Co. Aroostook High Grade Superphosphate.	" "	"	"
" 12 1908		Tankage Fertilizer..	The Laing Packing and Provision Co., Ltd., Montreal.	"	"
" 12 1909		Dried Blood.. . . .	" "	"	"
" 31 1910		Corn Fertilizer.....	Chevalier and Roy, Yonville, Quebec.	"	Pure bones, meat, blood, and muriate of potash.
" 31 1911		Potato Fertilizer....	" "	"	Pure bones, meat, blood, and kaimit.
" 31 1912		Fertilizer "A".	Davies, Ltd., Montreal, Que.	"	Blood, bone and dry albuminous matter.
" 21 1913		Bowker's Vermont Phosphate.	Bowker Fertilizer Co., Boston, Mass.	"	"
" 21 1914		Bowker's Hill and Drill Phosphate.	" "	"	"
" 21 1915		Bowker's Potato and Vegetable Phosphate.	" "	"	"
" 21 1916		Bowker's Corn Phosphate.	" "	"	"

OF AGRICULTURAL FERTILIZERS, REGISTERED FOR 1907—Continued.

	RESULTS OF ANALYSIS.										Relative Value per ton of 2,000 lbs.	Number of Sample.	Name of Analyst
	Nitrogen.		Phosphoric acid.						Potash.	Moisture.			
	Total, including that of nitric acid and ammonia when present.	Total calculated as ammonia.	Soluble in water.	Citric Soluble.	Insoluble.	Total.	Total available.						
p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	cts.				
Guaranteed contents.	3.90	4.00				10.00	7.00	9.50		29.29	1896	Miss S. E. Wright	
Standard sample..	2.84	3.45	7.03	3.52	2.56	13.11	10.55	9.98	11.52	32.72			
Guaranteed contents.	3.71	4.50				9.00	7.00	8.50		29.41	1897	" "	
Standard sample..	3.26	3.84	5.27	2.57	4.31	12.15	7.84	10.52	4.12	32.04			
Guaranteed contents.	8.24	10.00				11.00					1898	" "	
Standard sample..	7.42	9.01		10.24	3.51	13.75	10.24	1.12	6.90	38.06			
Guaranteed contents.	7.89	9.58				9.12			10.85		1899	A. Lemoine.	
Standard sample..	8.62	10.47	0.80	5.27	3.39	9.46	6.07	*	6.10	35.36			
Guaranteed contents.	2.06	2.50	5.00	3.00	2.00	10.00	8.00	1.50		18.40	1900	" "	
Standard sample..	2.21	2.68	6.71	2.88	2.75	12.34	9.49	1.89	13.75	21.44			
Guaranteed contents.	2.06	2.50	5.00	3.00	2.00	10.00	8.00	3.00		19.90	1901	" "	
Standard sample..	2.24	2.72	5.95	3.32	2.75	12.02	9.27	3.22	15.10	22.45			
Guaranteed contents.	0.82	1.00	5.00	3.00	2.00	10.00	8.00	4.00		16.69	1902	" "	
Standard sample..	1.12	1.36	6.90	2.69	2.43	12.02	9.59	3.84	12.85	19.62			
Guaranteed contents.	*	*	6.00	5.00	1.00	12.00	11.00	2.00		15.00	1903	" "	
Standard sample..	*	*	9.59	3.33	1.79	14.71	12.92	1.89	15.05	17.00			
Guaranteed contents.	3.30	4.00	4.00	2.00	1.00	7.00	6.00	10.00		28.52	1904	" "	
Standard sample..	3.36	4.08	7.54	1.73	1.47	10.74	9.27	10.10	11.20	32.91			
Guaranteed contents.	3.30	4.00	6.00	2.00	1.00	9.00	8.00	7.00		27.92	1905	" "	
Standard sample..	3.50	4.25	6.84	2.43	2.75	12.02	9.27	7.01	11.50	30.61			
Guaranteed contents.	2.40	3.00	5.00	1.00	1.00	7.00	6.00	10.00		25.56	1906	" "	
Standard sample..	2.66	3.23	4.67	3.77	1.79	10.23	8.44	9.07	13.65	28.40			
Guaranteed contents.	*	*	11.00				14.00			16.50	1907	" "	
Standard sample..	*	*	12.02	0.78	3.19	15.99	12.80	*	12.50	16.24			
Guaranteed contents.	7.21	8.76				11.71		9.81			1908	" "	
Standard sample..	6.58	7.99	*	9.91	2.75	12.65	9.91	*	9.65	32.78			
Guaranteed contents.	13.47	16.36							12.31		1909	" "	
Standard sample..	13.58	16.49	1.28	0.31	*	1.59	1.59	*	10.70	45.34			
Guaranteed contents.	8.69	10.79				12.68		1.60	7.85		1910	" "	
Standard sample..	4.24	5.27	0.64	11.64	5.63	17.91	12.28	1.68	7.55	31.36			
Guaranteed contents.	5.11	6.20				17.22		0.84	5.02		1911	Miss S. E. Wright	
Standard sample..	5.64	6.80	3.04	6.88	7.19	17.11	11.92	1.64	7.07	34.20			
Guaranteed contents.	8.29	10.07				11.25		2.95			1912	" "	
Standard sample..	7.90	9.61	2.24	4.48	4.79	11.51	6.72	1.51	5.01	35.85			
Guaranteed contents.	2.47	3.00				10.00	8.00	4.00			1913	" "	
Standard sample..	2.69	3.26	8.47	1.60	2.40	12.47	10.07	4.52	12.85	26.31			
Guaranteed contents.	2.47	3.00				10.00	9.00	2.00			1914	" "	
Standard sample..	2.44	2.96	9.11	0.85	1.92	11.83	9.91	2.43	11.97	23.12			
Guaranteed contents.	1.65	2.00				9.00	8.00	2.00			1915	" "	
Standard sample..	1.68	2.04	8.64	1.62	2.08	12.34	10.26	2.07	9.25	20.55			
Guaranteed contents.	1.65	2.00				9.00	8.00	2.00			1916	" "	
Standard sample..	1.86	2.26	8.47	2.08	1.60	12.15	10.55	3.09	9.52	22.34			

*Trace.

TABULATED DESCRIPTION OF 173 STANDARD SAMPLES OF

Date when Advised.	Number of Sample.	Designation.	Name of Manufacturer.	By whom sent.	From what materials Produced.
1007.					
Jan. 21	1917	Bowker's Square Brand Bone and Potash.	Bowker Fertilizer Co., Boston, Mass.	Manufacturers	
" 21	1918	Bowker's Bristol Fish and Potash.	" "	"	
" 21	1919	Bowker's Farm and Garden.	" "	"	
" 21	1920	Bowker's Sure Crop Phosphate.	" "	"	
" 21	1921	Bowker's Potash Bone Phosphate.	" "	"	
" 21	1922	Bowker's 6 p.c. Potato Fertilizer.	" "	"	
" 21	1923	Bowker's 10 p.c. Manure.	" "	"	
" 21	1924	Bowker's Superphosphate and Potash.	" "	"	
" 21	1925	Bowker's Superphosphate.	" "	"	
" 21	1926	Fresh Ground Bone.	" "	"	
" 21	1927	Nitrate of Soda	" "	"	
" 21	1928	Muriate of Potash	" "	"	
" 21	1929	Dissolved Bone Black	" "	"	
" 21	1930	Stockbridge Special Complete Manure.	" "	"	
Feb. 1	1931	Freeman's Sure Growth.	W. A. Freeman Co., Ltd., Hamilton, Ont	"	Phosphate, bone, blood, tannage, sulphuric acid, muriate of potash, sulphate of potash sulphate of ammonia, nitrate of soda.
" 1	1932	Freeman's Bone and Potash.	" "	"	
" 1	1933	Freeman's Celery and Early Vegetable Manure.	" "	"	
" 1	1934	Freeman's Phosphate Powder.	" "	"	
" 1	1935	Freeman's Potato Manure.	" "	"	
" 1	1936	Freeman's Tannage Manure.	" "	"	
" 1	1937	Freeman's Special Tobacco Manure.	" "	"	
" 1	1938	Freeman's Pure Bone Meal.	" "	"	
Jan. 30	1939	Crocker's New York Special Phosphate.	American Agricultural Chemical Co., Buffalo Sales Dept., Buffalo, N. Y.	"	Animal matter (blood, bone and tannage), mineral phosphates, potash; all treated with sulphuric acid.
" 30	1940	Crocker's Wheat and Corn Fertilizer.	" "	"	

AGRICULTURAL FERTILIZERS, REGISTERED FOR 1907—Continued.

	RESULTS OF ANALYSIS.										Relative value per ton of 2,000 lbs.	Number of sample.	Name of Analyst.
	Nitrogen.		Phosphoric Acid.					Potash.	Moisture.				
	o.t.a.l., including that of nitric acid and ammonia when present.	Total, calculated as ammonia.	Soluble in water.	Citric soluble.	Insoluble.	Total.	Total available.						
p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	cts.				
Guaranteed contents	1.65	2.00				7.00	6.00	2.00		14.51			
Standard sample..	1.68	1.92	5.95	3.13	4.03	13.11	9.08	2.20	11.85	19.70	1917	A. Lemoine.	
Guaranteed contents	1.65	2.00				7.00	6.00	2.00		14.51			
Standard sample..	1.82	2.21	6.59	2.56	2.23	11.38	9.15	2.24	13.95	19.82	1918	"	
Guaranteed contents	1.65	2.00				9.00	8.00	2.00		16.71			
Standard sample..	1.54	1.97	7.35	0.77	3.71	11.83	8.12	2.06	13.85	18.08	1919	"	
Guaranteed contents	0.82	1.00				9.00	8.00	2.00		13.92			
Standard sample..	1.12	1.36	6.71	2.37	1.47	10.55	9.08	1.89	14.90	16.80	1920	A. Lemoine.	
Guaranteed contents	0.82	1.00				7.00	6.00	2.00		11.69			
Standard sample..	1.12	1.36	7.22	2.18	2.75	12.15	9.40	1.85	13.45	17.53	1921	"	
Guaranteed contents	0.82	1.00				7.00	6.00	6.00		15.69			
Standard sample..	0.98	1.19	4.47	3.85	2.55	10.87	8.32	4.86	12.95	18.54	1922	"	
Guaranteed contents	0.82	1.00				6.00	5.00	10.00		18.59			
Standard sample..	1.19	1.44	3.50	3.92	2.00	9.42	7.42	8.42	12.20	21.58	1923	A. Valin.	
Guaranteed contents						11.00	10.00	1.00		12.30*			
Standard sample..	0.22	0.27	10.22	1.05	2.45	13.72	11.27	1.12	12.95	16.01	1924	"	
Guaranteed contents						14.00	12.00			13.80			
Standard sample..	0.23	0.28	10.77	2.93	2.50	16.20	13.70		17.10	17.67	1925	"	
Guaranteed contents	2.47	3.00				18.00	5.00			17.80			
Standard sample..	2.95	3.57		15.28	7.97	23.25	15.28		5.70	28.64	1926	"	
Guaranteed contents	14.82	18.00								50.39			
Standard sample..	14.28	17.34							2.00	48.55	1927	"	
Guaranteed contents								50.00		50.00			
Standard sample..								49.90	1.25	49.90	1928	"	
Guaranteed contents						16.00	15.00			16.80			
Standard sample..	0.14	0.17	9.17	3.91	1.82	14.90	13.08		14.95	16.33	1929	"	
Guaranteed contents	3.30	4.00				7.00	6.00	10.00		28.12			
Standard sample..	2.94	3.67	5.62	1.68	0.80	8.10	7.30	10.58	12.90	29.41	1930	"	
Guaranteed contents	2.88	3.50				8.00		3.00					
Standard sample..	3.58	4.35	4.43	4.68	1.60	10.71	9.11	6.12	12.22	29.24	1931	Miss S. E. Wright	
Guaranteed contents	1.65	2.00				9.00		6.00					
Standard sample..	2.83	3.43	1.95	3.36	1.28	9.59	8.31	8.79	9.57	28.43	1932	"	
Guaranteed contents	4.12	5.00				9.00		5.00					
Standard sample..	5.18	6.29	3.35	5.12	1.60	10.07	8.47	8.81	8.57	36.55	1933	"	
Guaranteed contents						15.00							
Standard sample..	0.39	0.48	7.68	2.23	5.92	15.83	9.91		16.80	14.78	1934	"	
Guaranteed contents	2.47	3.00				8.00		5.00					
Standard sample..	3.16	3.84	4.48	3.83	1.92	10.23	8.31	8.03	7.75	28.94	1935	"	
Guaranteed contents	4.12	5.00				12.00							
Standard sample..	5.36	6.49	1.28	7.35	3.04	11.67	8.63		14.25	27.68	1936	"	
Guaranteed contents	2.47	3.00				7.00		4.00					
Standard sample..	3.08	3.74	2.43	3.52	2.87	8.82	5.95	5.02	9.45	23.14	1937	A. Lemoine.	
Guaranteed contents	2.47	3.00				20.00							
Standard sample..	4.14	5.03	1.15	12.29	10.55	23.99	13.44		6.65	31.31	1938	"	
Guaranteed contents			8.00	2.00	1.00	11.00	10.00	8.00		20.10			
Standard sample..			4.63	3.37	3.67	11.67	8.00	8.24	10.70	18.61	1939	"	
Guaranteed contents	2.06	2.50	6.00	2.00	1.00	9.00	8.00	1.50		18.20			
Standard sample..	2.10	2.55	7.35	1.28	3.07	11.70	8.63	2.49	12.55	20.77	1940	"	

* None. † Trace.

TABULATED DESCRIPTION OF 163 STANDARD SAMPLES OF

Date when Advised.	Number of Sample.	Designation.	Name of Manufacturer.	By whom sent.	From what materials produced.
1907.					
Jan. 30	1941	Crocker's Cabbage and Potato Manure	American Agricultural Chemical Co., Buffalo Sales Dept., Buffalo, N. Y.	Manufacturers.....	
" 30	1942	Bradley's New Method Fertilizer.	" " "	"	
" 30	1943	Bradley's B. D. Sea Fowl Guano.	" " "	"	Animal matter (blood, bone and tankage) mineral phosphates, potash; all treated with sulphuric acid.
" 30	1944	Bradley's Complete Manure for Potatoes and Vegetables	" " "	"	"
" 30	1945	Special Potash Mixture.	" " "	"	"
" 30	1946	High Grade Potash Compound.	" " "	"	"
" 30	1947	Northwestern Complete Manure.	" " "	"	"
" 30	1948	Northwestern Tobacco Fertilizer.	" " "	"	"
Feb. 5	1949	New England Peerless Fertilizer.	New England Fertilizer Co., 40 North Market St., Boston, Mass.	"	Blood, meat, bone, bone-black, bone phosphates, nitrate of soda or sulphate of ammonia and sulphate or tartrate of potash.
" 5	1950	New England Potato Fertilizer.	" " "	"	"
" 5	1951	New England Corn & Grain Fertilizer.	" " "	"	"
" 4	1952	Swift's Lowell Bone Fertilizer.	Swift's Lowell Fertilizer Co., 44 North Market St., Boston, Mass.	"	"
" 4	1953	Swift's Lowell Cereal Fertilizer.	" " "	"	"
" 4	1954	Swift's Lowell Empress Brand.	" " "	"	"
" 4	1955	Swift's Lowell Animal Brand.	" " "	"	"
" 4	1956	Swift's Lowell Potato Manure.	" " "	"	"
" 4	1957	Swift's Lowell Potato Phosphate.	" " "	"	"
" 4	1958	Swift's Lowell Grand Bone.	" " "	"	"
" 4	1959	Swift's Lowell Potato Grower.	" " "	"	"
" 4	1960	Swift's Lowell Superior Fertilizer with 10 p.c. Potash.	" " "	"	"
" 12	1961	Thomas Phosphate Powder.	Chemical Works, late Anglo-Canadian H. & E. Albert, 15 Philpot Lane, London, Eng.	Chemical Co., St. John, N.B.	Ground basic slag.....

AGRICULTURAL FERTILIZERS, REGISTERED FOR 1907—Continued.

	RESULTS OF ANALYSIS.										Relative value per ton of 2,600 lbs.	Number of Sample.	Name of Analyst.
	Nitrogen.		Phosphoric Acid.						Potash.	Moisture.			
	Total, including that of nitric acid and ammonia when present.	Total, calculated as ammonia.	Soluble in water.	Citric soluble.	Insoluble.	Total.	Total available.						
p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	%				
Guaranteed contents	2.47	3.00	6.00	2.00	1.00	9.00	8.00	6.00	...	24.10	1941	A. Lemoine.	
Standard sample..	2.72	3.30	5.76	3.19	2.56	11.51	8.95	4.05	12.02	24.40			
Guaranteed contents	0.82	1.00	6.00	2.00	1.00	9.00	8.00	2.00	14.49	1942	"	
Standard sample..	0.86	1.05	5.30	1.95	2.77	10.02	7.25	2.25	11.15	14.51			
Guaranteed contents	2.06	2.50	6.00	2.00	1.00	9.00	8.00	1.50	18.20	1943	A. Valin.	
Standard sample..	1.90	2.55	5.02	2.65	3.00	10.67	7.67	1.80	15.00	18.09			
Guaranteed contents	3.29	4.00	6.00	2.00	1.00	9.00	8.00	7.00	22.89	1944	"	
Standard sample..	3.99	4.84	5.35	2.00	3.75	11.10	7.35	7.32	9.00	30.63			
Guaranteed contents	0.82	1.00	7.00	2.00	1.00	10.00	9.00	7.00	26.49	1945	"	
Standard sample..	1.26	1.53	6.87	1.60	3.04	11.51	8.47	7.18	16.00	21.31			
Guaranteed contents	1.68	2.04	5.12	2.21	1.67	9.00	7.33	10.34	14.25	25.12	1946	"	
Standard sample..	1.68	2.04	5.12	2.21	1.67	9.00	7.33	10.34	14.25	25.12			
Guaranteed contents	2.06	2.50	6.00	2.00	1.00	9.00	8.00	2.00	19.70	1947	Miss S. E. Wright	
Standard sample..	2.49	3.03	6.87	1.76	2.08	10.71	8.63	4.88	13.32	24.15			
Guaranteed contents	1.65	2.00	6.00	2.00	1.00	9.00	8.00	10.00	25.31	1948	"	
Standard sample..	1.72	2.09	6.08	1.11	2.56	9.75	7.19	13.07	12.87	28.21			
Guaranteed contents	0.82	1.00	1.00	8.00	7.00	1.00	11.79	1949	"	
Standard sample..	1.07	1.31	5.59	0.81	1.28	7.68	6.40	2.36	5.27	13.98			
Guaranteed contents	1.65	2.00	8.00	7.00	4.00	17.61	1950	"	
Standard sample..	1.57	1.90	5.43	1.76	2.72	9.91	7.19	4.04	5.70	18.66			
Guaranteed contents	1.24	1.50	8.00	7.00	14.22	1951	"	
Standard sample..	1.36	1.65	6.18	2.13	2.08	10.39	8.31	2.41	5.82	17.47			
Guaranteed contents	1.65	2.00	9.00	8.00	3.00	17.71	1952	"	
Standard sample..	1.65	2.01	6.87	.....	3.68	10.55	6.87	4.2	8.67	10.90		
Guaranteed contents	0.82	1.00	1.00	8.00	7.00	1.00	11.79	1953	A. Lemoine.	
Standard sample..	1.26	1.53	2.43	4.28	2.11	8.82	6.71	2.04	6.25	14.58			
Guaranteed contents	1.24	1.50	1.00	8.00	7.00	2.00	14.22	1954	"	
Standard sample..	1.54	1.87	4.99	3.00	3.39	11.38	7.99	2.72	8.90	18.27			
Guaranteed contents	2.47	3.00	10.00	8.00	4.00	21.80	1955	"	
Standard sample..	2.38	2.89	4.67	3.96	3.39	12.02	8.63	4.67	8.70	23.74			
Guaranteed contents	1.65	2.00	8.00	7.00	4.00	17.61	1956	"	
Standard sample..	1.68	2.04	4.15	3.21	1.91	9.27	7.36	4.42	5.35	19.21			
Guaranteed contents	2.47	3.00	9.00	8.00	6.00	23.50	1957	"	
Standard sample..	2.80	3.40	4.03	4.29	2.55	10.87	8.22	6.46	8.00	26.30			
Guaranteed contents	2.47	3.00	25.00	1958	"	
Standard sample..	2.80	3.40	3.96	19.00	8.18	23.14	19.96	trace	5.80	33.46			
Guaranteed contents	3.30	4.00	7.09	6.00	10.00	28.12	1955	A. C. Macfarlane	
Standard sample..	3.40	4.13	4.64	2.24	1.12	8.00	6.88	10.08	7.50	30.91			
Guaranteed contents	3.70	4.50	1.00	8.00	7.00	10.00	30.58	1960	"	
Standard sample..	3.50	4.25	4.15	4.00	2.24	10.39	8.15	10.87	5.75	32.82			
Guaranteed contents	14.00	1961	"	
Standard sample..	.....	.....	.....	13.76	2.87	16.63	13.76	.....	trace	17.15

TABULATED DESCRIPTION OF 173 STANDARD SAMPLES OF

Date when Advised.	Number of Sample.	Designation.	Name of Manufacturer.	By whom Sent.	From what Materials Produced.
1907.					
Feb. 12 1962		Albert Horticultural Manure, Brand A. G.	Chemical Works, late A. & E. Albert, in Riebrich, on the Rhine, Germany.	Anglo-Canadian Chemical Co., St. John, N.B.	
" 18 1963		Ground Bone.	Pidgeon Fertilizer Co., Ltd., Windsor, N.S.	Manufacturers	Bones ground
" 18 1964		Intense Brand.	" " "	"	Nitrate of soda, dried blood and tankage, ground bone, muriate of potash, potash salts, rock phosphate, sulphuric acid and sulphate of ammonia.
" 18 1965		Eureka Superphosphate.	" " "	"	" " "
" 18 1966		Potato Manure.	" " "	"	" " "
" 18 1967		Potato Guano.	Pidgeon Fertilizer Co., Ltd., Windsor, N.S.	Manufacturers	Nitrate of soda, dried blood and tankage, ground bone, muriate of potash, potash salts, rock phosphate, sulphuric acid and sulphate of ammonia.
" 12 1968		Michigan Carbon Fruit and Vine Fertilizer.	Michigan Carbon Works, Detroit, Mich.	The American Agricultural Chemical Co., Buffalo Sales Dept.	Animal matter (blood, bone and tankage) mineral phosphates, potash; all treated with sulphuric acid.
" 12 1969		Michigan Carbon Complete Manure.	" " "	" " "	" " "
" 12 1970		Michigan Carbon Defiance Fertilizer	" " "	" " "	" " "
" 26 1971		Thomas Phosphate Powder.	Chemical Works, late H. & E. Albert, 15 Philpot Lane, London E.C.	Anglo-Canadian Chemical Co., St. John, N.B.	Ground basic slag.
" 26 1972		Coriolis Fertilizer No. 1, for Potatoes	John Poynter, Son and Macdonalds, Glasgow, Scotland.	Baron Gustave de Coriolis, 56 Notre-Dame St. East, Montreal.	Sulphate of ammonia, nitrogenous substances, superphosphates, sulphate of potash and muriate of potash.
" 28 1973		Homestead, a Bone Black Fertilizer.	Michigan Carbon Works, Detroit, Mich.	Manufacturers	Dissolved bone black, mineral phosphate, sulphate of ammonia, acidulated tankage, sulphate or muriate of potash
" 28 1974		Homestead Potato and Tobacco Fertilizer.	" " "	" " "	" " "
" 28 1975		Homestead High Grade Garden and Vegetable Fertilizer.	" " "	" " "	" " "
" 28 1976		Desiccated Bone.	" " "	" " "	Produced from pure animal bone.
March 2 1977		Coriolis Fertilizer No. 7 for Fodder, Indian Corn and Tobacco.	The Freeman Company, Hamilton, Ont.	Baron Gustave de Coriolis 56 Notre-Dame St. East, Montreal.	Sulphate of ammonia, nitrate of soda, superphosphates, sulphate of potash, and muriate of potash.

AGRICULTURAL FERTILIZERS, REGISTERED FOR 1907--Continued.

	RESULTS OF ANALYSIS.										Name of Analyst.	
	Nitrogen.			Phosphoric Acid.				Potash.	Moisture.	Relative value per ton of 2,000 lbs.		Number of Sample.
	Total, including that of nitric acid and ammonia when present.	Total calculated as ammonia.	Soluble in water.	Citric soluble.	Insoluble.	Total.	Total available.					
p.c.	p.c.	p.p.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	% cts.			
Guaranteed contents	12.37	15.02	10.71	.....	.....	.....	.....	15.50	.....	70.41	
Standard sample..	12.04	14.62	9.14	1.73	1.47	12.34	10.87	16.43	7.55	70.68	1962 A. C. Macfarlane	
Guaranteed contents	2.47	3.00	.....	.....	.....	20.00	.....	.....	.....	.....
Standard sample..	3.01	3.65	.....	13.92	9.22	23.14	13.92	.....	6.05	27.71	1963 A. Valin.
Guaranteed contents	2.88	3.50	.....	.....	.....	7.00	.....	4.50	.....	.....
Standard sample..	2.94	3.57	6.50	0.92	0.70	8.12	7.42	3.70	11.65	22.72	1964 ..	
Guaranteed contents	2.06	2.50	.....	.....	.....	8.00	.....	1.50	.....	.....
Standard sample..	2.33	2.83	5.25	2.77	1.10	9.12	8.02	1.54	16.87	19.14	1965 ..	
Guaranteed contents	2.47	3.00	.....	.....	.....	9.00	.....	4.00	.....	.....
Standard sample..	2.40	2.90	5.92	2.98	1.52	10.42	8.90	3.47	13.95	22.47	1966 ..	
Guaranteed contents	2.06	2.50	.....	.....	.....	10.00	8.00	1.50	.....	17.90	
Standard sample..	2.00	2.42	5.06	2.90	1.07	9.12	8.05	1.79	17.35	18.27	1967 A. Valin.	
Guaranteed contents	1.65	2.00	6.00	2.00	1.00	9.00	8.00	10.00	.....	25.31	
Standard sample..	1.98	2.41	5.43	3.52	2.75	11.70	8.95	9.87	12.90	27.82	1968 A. Lemoine.	
Guaranteed contents	1.65	2.00	6.00	2.00	1.00	9.00	8.00	4.00	.....	19.31	
Standard sample..	1.60	1.94	6.35	2.72	2.55	11.42	9.07	1.03	13.25	20.78	1969 A. Valin.	
Guaranteed contents	1.65	2.00	6.00	2.00	1.00	9.00	8.00	2.00	.....	17.31	
Standard sample..	1.78	2.55	5.85	2.70	1.85	10.46	8.55	2.12	12.50	18.71	1970 ..	
Guaranteed contents	.....	.....	.....	.....	.....	17.00	.....	.....	.....	.....
Standard sample..	.....	.....	.....	14.45	4.25	18.70	14.45	.....	4.75	17.16	1971 ..
Guaranteed contents	4.45	5.40	.....	.....	.....	6.00	.....	9.50	.....	.....
Standard sample..	5.01	6.08	6.15	0.82	0.50	7.47	6.97	9.34	5.95	34.80	1972 ..	
Guaranteed contents	2.06	2.50	.....	.....	.....	8.00	.....	1.50	.....	.....
Standard sample..	1.96	2.38	6.12	1.06	1.82	9.00	7.18	1.56	12.60	17.28	1973 ..	
Guaranteed contents	2.06	2.50	.....	.....	.....	8.00	.....	3.00	.....	.....
Standard sample..	2.25	2.73	5.17	1.73	2.40	9.60	7.20	3.51	13.60	20.34	1974 ..	
Guaranteed contents	2.06	2.50	.....	.....	.....	8.00	.....	6.00	.....	.....
Standard sample..	2.17	2.64	6.27	2.49	2.43	11.19	8.76	6.93	14.90	25.29	1975 A. Lemoir e.	
Guaranteed contents	1.21	1.50	.....	.....	.....	25.00	.....	.....	.....	.....
Standard sample..	1.12	1.36	.....	19.32	13.33	32.75	10.32	.....	10.55	28.86	1976 ..
Guaranteed contents	5.77	7.00	.....	.....	.....	.....	.....	5.00	8.00	.....	
Standard sample..	6.93	8.41	2.75	0.57	1.79	5.11	3.32	7.68	9.55	35.71	1977 ..	

TABULATED DESCRIPTION OF 173 STANDARD SAMPLES OF

Date when Advised.	Number of Sample.	Designation.	Name of Manufacturer.	By whom sent.	From what materials Produced.
1907.					
March 2	1978	Coriolis Extra High Grade Fertilizer No. 1 for cabbage, carrots, beets, celery, other vegetables and flowers.	The Freeman Company, Hamilton, Ont.	Baron Gustave de Coriolis, 56 Notre Dame St., East, Montreal.	Sulphate of ammonia, nitrate of soda, superphosphates, sulphate of potash, and muriate of potash.
"	2 1979	Coriolis Fertilizer No. 3, for grain.	" " "	" " "	" " "
Feb. 25	1980	Ceres Superphosphate.	Nova Scotia Fertilizer Co., Halifax, N.S.	" " "	Bone-char, bone, dried blood, tankage, meat, fish bone, phosphates, sulphate of ammonia, nitrate of soda, high grade muriate of potash or sulphate of potash and sulphuric acid.
"	25 1981	Southern Guano...	" " "	" " "	Phosphatic guanos, bone char, dried blood, tankage, meat, fish, bone, phosphates, sulphates of ammonia, nitrate of soda, high grade muriate of potash or sulphate of potash and sulphuric acid.
"	25 1982	Potato Phosphate.	" " "	" " "	Bone-char, bone, dried blood, tankage, meat, fish, bone, phosphates, sulphate of ammonia, nitrate of soda, high grade muriate of potash or sulphate of potash and sulphuric acid.
"	25 1983	Blood, Bone and Potash.	" " "	" " "	" " "
March 6	1984	Imperial Superphosphate.	Provincial Chemical Fertilizer Co., Ltd. St. John, N.B.	" " "	" " "
"	6 1985	Potato Phosphate...	" " "	" " "	" " "
"	6 1986	Victor Guano...	" " "	" " "	" " "
"	6 1987	Bone meal	" " "	" " "	" " "
"	6 1988	Blood, Bone and Potash.	" " "	" " "	" " "
"	6 1989	10" Complete Aroostook Potato.	" " "	" " "	" " "
Mar. 7	1990	Reid's Superphosphate.	Thos. Reid, St. John, N.B.	Manufacturer.....	Bone, meat, fish refuse, charcoal, kainic, sulphate of ammonia, &c.
"	8 1991	Gregory's Special Tobacco Guano.	Michigan Carbon Works, Detroit, Mich.	Manufacturers	" " "
"	12 1992	Capelton Superphosphate No. 1.	The Capelton Chemical and Fertilizer Co., Buckingham, Que.	"	Phosphate, sulphate of ammonia, sulphate muriate and nitrate of potash and tankage.
"	12 1993	Royal Canadian ...	" " "	"	" " "

AGRICULTURAL FERTILIZERS, REGISTERED FOR 1907—Continued.

	RESULTS OF ANALYSIS.										Relative Value per ton of 2,000 lbs.	Number of Sample.	Name of Analyst.
	Nitrogen.			Phosphoric Acid.				Potash.	Moisture.				
	Total, including that of nitric acid and ammonia when present.	Total calculated as ammonia.	Soluble in water.	Citric soluble.	Insoluble.	Total.	Total available.						
p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	% etc.				
Guaranteed contents	8.23	10.00	6.00	10.00	45.18	1978	A. Lemoine.	
Standard sample..	10.08	12.24	3.07	1.41	1.15	5.63	4.48	6.27	9.50	46.11			
Guaranteed contents	6.58	8.00	6.00	10.00	39.57	1979	"	
Standard sample..	7.35	8.92	2.75	2.37	2.23	7.35	5.12	9.03	8.75	40.60			
Guaranteed contents	1.65	2.00	7.00	2.00	1980	"	
Standard sample..	2.15	2.61	6.90	1.86	2.75	11.51	8.76	3.78	12.65	22.24			
Guaranteed contents	1.65	2.00	7.00	2.50	1981	"	
Standard sample..	2.66	3.23	6.71	0.64	1.79	9.14	7.35	5.19	8.70	23.52			
Guaranteed contents	1.65	2.00	7.00	4.00	1982	"	
Standard sample..	2.74	3.33	6.71	1.28	2.75	10.74	7.99	4.34	9.25	23.94			
Guaranteed contents	1.65	2.00	7.00	4.00	1983	"	
Standard sample..	2.86	3.47	7.51	0.26	2.43	10.23	7.80	4.34	9.60	21.13			
Guaranteed contents	2.47	3.00	10.50	1.50	1984	"	
Standard sample..	3.20	3.89	6.71	1.29	1.91	9.91	8.00	2.27	8.55	23.19			
Guaranteed contents	2.06	2.50	8.00	6.50	1985	A. Valin.	
Standard sample..	2.04	2.48	5.60	1.50	0.40	7.50	7.10	6.94	11.80	22.37			
Guaranteed contents	1.65	2.00	7.00	2.50	1986	"	
Standard sample..	1.99	2.41	4.30	4.25	0.80	9.35	8.55	2.99	10.65	19.83			
Guaranteed contents	2.55	3.10	24.14	1987	"	
Standard sample..	3.22	3.91	.....	15.88	9.07	24.95	15.88	.....	7.00	30.40	
Guaranteed contents	1.65	2.00	7.00	4.00	1988	"	
Standard sample..	2.24	2.72	3.60	3.40	1.60	8.60	7.00	3.47	6.60	19.33			
Guaranteed contents	3.30	4.00	8.00	10.00	1989	"	
Standard sample..	2.80	3.40	4.32	2.95	1.35	8.62	7.27	10.75	9.50	29.09			
Guaranteed contents	1990	A. Valin.	
Standard sample..	4.41	5.35	2.16	3.41	4.99	10.47	5.57	2.00	5.25	24.80			
Guaranteed contents	2.47	3.00	8.00	4.00	1991	A. Lemoine.	
Standard sample..	3.22	3.91	6.71	2.57	1.91	11.19	9.28	4.32	9.52	26.72			
Guaranteed contents	10.00	1992	"	
Standard sample..	2.52	3.06	2.23	7.68	2.43	12.34	9.91	1.33	11.45	21.75			
Guaranteed contents	3.30	4.00	9.00	5.00	1993	"	
Standard sample..	4.34	5.27	7.86	0.97	1.91	10.74	8.83	5.19	11.55	31.02			

OF AGRICULTURAL FERTILIZERS, REGISTERED FOR 1907—Continued.

	RESULTS OF ANALYSIS.											Name of Analyst.			
	Nitrogen.		Phosphoric Acid.						Potash.	Moisture.	Relative Value per ton of 2,000 lbs.		Number of Sample.		
	Total, including that of nitric acid and ammonia when present.	Total calculated as ammonia.	Soluble in water.		Citric soluble.	Insoluble.	Total.	Total available.							
			p. c.	p. c.					p. c.	p. c.	p. c.		p. c.	p. c.	p. c.	cts.
Guaranteed contents	2.00						7.00	3.00							
Standard sample..	3.01	3.87	3.83	2.44	2.23	8.50	6.27	5.29	8.35	23.47	1994				
Guaranteed contents	1.65	2.00					6.00	2.00							
Standard sample..	2.80	3.40	1.91	3.21	1.91	7.03	5.12	3.53	5.30	19.45	1995				
Guaranteed contents															
Standard sample..	4.76	5.84		15.04	6.30	21.43	15.04		4.26	33.69	1996				
Guaranteed contents															
Standard sample..	5.88	7.14		6.20	5.95	12.15	6.20		8.25	28.60	1997				
Guaranteed contents							14.00	12.00							
Standard sample..	0.70	0.85	15.54	1.22	4.67	21.13	16.76	trace	2.35	23.77	1998				
Guaranteed contents	2.88	3.50					10.00	8.00	6.00						
Standard sample..	3.50	4.25	8.82	1.86	4.03	14.71	10.68	7.89	3.85	33.63	1999				
Guaranteed contents	2.00	2.50					11.00	9.00	2.00						
Standard sample..	2.66	3.23	11.83	1.28	4.67	17.78	13.11	2.29	3.85	28.21	2000				
Guaranteed contents	1.65	2.00					10.00	8.00	3.00						
Standard sample..	1.96	2.38	13.11	0.45	4.35	17.91	13.56	3.37	2.70	27.55	2001				
Guaranteed contents	3.29	4.00					20.00								
Standard sample..	2.24	2.48		15.36	10.10	23.46	15.36		6.00	27.09	2002				
Guaranteed contents	14.00	17.00								47.60					
Standard sample..	14.56	17.68							0.50	49.50	2003				
Guaranteed contents	2.47	3.00					20.00								
Standard sample..	3.50	4.25		15.49	12.02	27.51	15.49		3.20	31.85	2004				
Guaranteed contents				11.00						16.50					
Standard sample..				11.51	2.24	2.43	16.18	13.75	0.57	11.50	17.58	2005			
Guaranteed contents	2.06	2.50	5.00	3.00	2.00	10.00	8.00	3.00		19.90					
Standard sample..	2.24	2.48	7.03	5.76	1.15	13.94	12.79	2.99	13.20	25.72	2006				
Guaranteed contents	2.06	2.50	5.00	3.00	2.00	10.00	8.00	1.50		18.40					
Standard sample..	2.10	2.55	4.79	5.64	1.91	12.34	10.43	1.56	14.00	21.23	2007				
Guaranteed contents	1.03	1.25	6.00	2.00	2.00	10.00	8.00	2.00		15.50					
Standard sample..	1.13	1.38	6.87	2.39	1.44	10.70	9.26	2.27	14.60	17.42	2008	A. C. Macfarlane			
Guaranteed contents	2.47	3.00					20.60								
Standard sample..	1.99	2.41	trace	16.62	4.48	21.10	16.62		6.10	25.99	2009				
Guaranteed contents	1.03	1.25	6.00	2.00	2.00	10.00	8.00	2.00		15.50					
Standard sample..	1.08	1.31	5.59	4.16	1.60	11.35	9.75	2.16	15.25	17.60	2010				
Guaranteed contents	1.03	1.25	6.00	2.00	2.00	10.00	8.00	2.00		15.50					
Standard sample..	1.04	1.26	7.19	3.04	1.12	11.35	10.23	1.98	14.10	17.82	2011				
Guaranteed contents							12.00	11.00	2.00	15.00					
Standard sample..				6.91	3.80	1.60	12.31	10.71	4.94	13.75	17.86	2012	Miss S. E. Wright		

TABULATED DESCRIPTION OF 173 STANDARD SAMPLES

Date when Advised.	Number of Sample.	Designation.	Name of Manufacturer.	By whom sent.	From what materials Produced.
1907.					
Feb.	4 2013	Bradley's Complet Manure with 16 p.c. Potash.	The American Agricultural Chemical Co., Boston Sales Dept., Boston, Mass.	Manufacturers ...	Bone black, animal bone, phosphatic Guanos, dried fish, meat or blood, nitrate of soda or sulphate of ammonia, sulphate or muriate of potash, sulphuric acid.
"	4 2014	Read's Standard Superphosphate.	The American Agricultural Chemical Co., Boston Sales Dept., Boston, Mass.	Manufacturers ...	Bone black, animal bone, phosphatic guanos, dried fish, meat or blood, nitrate of soda or sulphate of ammonia, sulphate or muriate of potash, sulphuric acid.
"	4 2015	Read's Sure Catch Fertilizer.	" " "	"	Bone black or phosphatic guanos, muriate or sulphate of potash.
"	4 2016	Read's Fish, Bone and Potash	" " "	"	Bone black, animal bone, phosphatic guanos, dried fish, meat or blood, nitrate of soda or sulphate of ammonia, sulphate or muriate of potash, sulphuric acid.
"	4 2017	Read's Practical Potato Special.	" " "	"	" " "
"	4 2018	Read's Vegetable and Vine.	" " "	"	" " "
"	4 2019	Read's Potato Manure.	" " "	"	" " "
"	4 2020	Read's High Grade Farmer's Friend.	" " "	"	" " "
"	4 2021	Tucker's Imperial Bone Superphosphate.	" " "	"	" " "
"	4 2022	Williams & Clark's American Potato Manure.	" " "	"	" " "
"	4 2023	Pacific Potato Special	" " "	"	" " "
"	4 2024	Pacific Nobsque Guano.	" " "	"	" " "
"	4 2025	Pacific Fine Ground Bone.	" " "	"	" " "
"	4 2026	Soluble Pacific Guano	" " "	"	Bone black, animal bone, phosphatic guanos, dried fish, meat or blood, nitrate of soda or sulphate of ammonia, sulphate or muriate of potash, sulphuric acid.
"	4 2027	Quinnipiac Climax Phosphate for all Crops.	" " "	"	" " "
"	4 2028	Quinnipiac Potato Manure.	" " "	"	" " "
"	4 2029	Quinnipiac Market Garden Manure.	" " "	"	" " "

OF AGRICULTURAL FERTILIZERS, REGISTERED FOR 1907—Continued.

	RESULTS OF ANALYSIS.										Relative Value per ton of 2,000 lbs.	Number of Sample.	Name of Analyst.
	Nitrogen.		Phosphoric Acid.						Potash.	Moisture.			
	Total, including that of nitric acid and ammonia when present.	Total calculated as ammonia.	Soluble in water.	Citric soluble.	Insoluble.	Total.	Total available.						
p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	cts.			
Guaranteed contents	3.30	4.00	4.09	2.00	1.00	7.00	6.00	10.00	28 52	Miss S. E. Wright.		
Standard sample..	3.40	4.10	5.63	2.68	1.28	9.59	8.31	11.64	12.00	33 29 2013			
Guaranteed contents	0.82	1.00	5.00	3.00	2.00	10.00	8.00	4.00	16 69	"		
Standard sample..	0.76	0.92	5.37	4.38	2.08	11.83	9.75	5.14	12.22	19 61 2014			
Guaranteed contents	6.00	5.00	1.00	12.00	11.00	2.00	15 00	"		
Standard sample..	.....	.....	7.67	4.32	1.76	13.75	11.99	4.56	12.90	19 04 2015	
Guaranteed contents	1.98	2.40	4.00	4.00	"		
Standard sample..	2.07	2.52	4.80	4.63	1.44	10.87	9.43	5.14	11.87	23 46 2016			
Guaranteed contents	0.82	1.00	2.00	2.00	1.00	5.00	4.00	8.00	15 69	"		
Standard sample..	1.33	1.50	4.79	1.61	1.60	8.00	6.40	10.56	12.70	23 08 2017			
Guaranteed contents	2.06	2.50	5.00	3.00	2.00	10.00	8.00	6.00	22 90	A. Lemoine.		
Standard sample..	2.10	2.55	6.07	3.72	2.55	12.34	9.79	6.52	15.00	25 79 2018			
Guaranteed contents	2.40	3.00	5.00	1.00	1.00	7.00	6.00	10.00	25 56	"		
Standard sample..	2.52	3.06	4.99	2.05	3.19	10.23	7.04	10.13	11.36	27 90 2019			
Guaranteed contents	3.30	4.00	4.00	2.00	1.00	7.00	6.00	10.00	28 52	"		
Standard sample..	2.94	3.57	5.75	1.92	2.11	9.78	7.67	10.17	12.15	29 81 2020			
Guaranteed contents	1.03	1.25	6.00	2.00	2.00	10.00	8.00	2.00	15 50	"		
Standard sample..	1.40	1.70	5.75	4.61	2.75	13.11	10.36	1.97	14.65	19 53 2021			
Guaranteed contents	2.06	2.50	5.00	3.00	2.00	10.00	8.00	3.00	19 90	"		
Standard sample..	1.96	2.38	6.71	2.89	2.87	12.47	9.60	3.03	14.85	21 79 2022			
Guaranteed contents	2.06	2.50	5.00	3.00	2.00	10.00	8.00	3.00	19 90	"		
Standard sample..	1.96	2.38	6.59	4.09	3.07	13.75	10.68	3.20	12.50	23 19 2023			
Guaranteed contents	1.03	1.25	6.00	2.00	2.00	10.00	8.00	2.00	15 50	A. C. Macfarlane.		
Standard sample..	1.18	1.43	6.71	2.56	2.08	11.35	9.27	4.04	15.26	19 54 2024			
Guaranteed contents	2.47	3.00	20.60	"		
Standard sample..	2.18	2.65	Tr.	12.47	10.71	23.18	12.47	.....	6.85	23 91 2025		
Guaranteed contents	2.06	2.50	5.00	3.00	2.00	10.00	8.00	1.50	18 40	"		
Standard sample..	2.02	2.45	4.95	3.68	2.72	11.35	8.63	3.52	15.00	21 20 2026			
Guaranteed contents	1.03	1.25	6.00	2.00	2.00	10.00	8.00	2.00	15 50	"		
Standard sample..	1.19	1.44	6.87	1.92	2.08	10.87	8.79	3.83	15.40	18 85 2027			
Guaranteed contents	2.50	3.00	5.00	1.00	2.00	5.00	6.00	5.00	21 20	Miss S. E. Wright.		
Standard sample..	2.97	3.60	5.11	2.72	1.60	9.43	7.83	5.12	11.20	24 82 2028			
Guaranteed contents	3.30	4.00	6.00	2.00	1.00	9.00	8.00	7.00	30 92	"		
Standard sample..	3.37	4.10	6.65	1.86	2.56	10.07	8.51	7.92	11.07	30 17 2029			

TABULATED DESCRIPTION OF STANDARD SAMPLES OF

Date when Advised.	Number of Sample.	Designation.	Name of Manufacturer.	By whom sent.	From what materials Produced.
1907.					
Feb.	4 2030	Cumberland Super-phosphate.	The American Agricultural Chemical Co., Boston Sales Dept., Boston, Mass.	Manufacturers.....	Bone black, animal bone, phosphatic guanos, dried fish, meat or blood, nitrate of soda or sulphate of ammonia, sulphate or muriate of potash, sulphuric acid.
"	4 2031	Cumberland Potato Fertilizer.	" " " "	" " " "	" " " "
"	4 2032	Cumberland Fine Ground Bone.	" " " "	" " " "	" " " "
"	4 2033	Standard Special for Potatoes.	" " " "	" " " "	Bone black, animal bone, phosphatic guanos, dried fish, meat or blood, nitrate of soda or sulphate of ammonia, sulphate and muriate of potash, sulphuric acid.
"	4 2034	Darling's Blood, Bone and Potash.	" " " "	" " " "	" " " "
"	4 2035	Clark's Cove Great Planet Manure.	" " " "	" " " "	" " " "
"	4 2036	A. A. C. High Grade Fertilizer with 10 p.c. Potash.	" " " "	" " " "	" " " "
Apr.	18 2037	Bone meal.....	Nova Scotia Fertilizer Co., Halifax, N.S.	" " " "	" " " "
"	18 2038	Bilston Basic Slag...	Alfred Hickman Co., Bilston, England.	E. E. McNutt, Truro, N.S.	" " " "
May	18 2039	Dendorffs ground Basic slag.	Anglo-Continental Co., London.	H. H. McNutt, Lower Truro, N.S.	" " " "
"	22 2040	Fertilizer A.	Victoria Chemical Co. Ltd., Victoria, B.C.	Manufacturers.....	Nitrate of soda, muriate of potash and superphosphate of lime.
"	22 2041	" B.	" " " "	" " " "	" " " "
"	22 2042	" C.	" " " "	" " " "	" " " "
"	22 2043	" D.	" " " "	" " " "	Muriate of potash and superphosphate of lime.
"	22 2044	Superphosphate of lime.	" " " "	" " " "	Nitrate of soda, muriate of potash and superphosphate of lime.
"	22 2045	Nitrate of soda.	Imported from Chili.	Victoria Chemical Co. Ltd., Victoria, B.C.	Spent bone, charcoal and sulphuric acid.
"	22 2046	Kainit.	Imported from Germany.	" " " "	100 per cent real nitrate of soda.
"	22 2047	Sulphate of potash.	" " " "	" " " "	Kainit with 12 per cent potash.
"	22 2048	Muriate of potash.	" " " "	" " " "	Sulphate of potash of 90.5 per cent.
"	22 2049	Thomas Phosphate Powder.	" " " "	" " " "	Muriate of potash of 82.4 per cent.

AGRICULTURE FERTILIZERS, REGISTERED FOR 1907—Continued.

	RESULTS OF ANALYSIS.										Relative Value per ton of 2,000 lbs.	Number of Sample.	Name of Analyst.
	Nitrogen.		Phosphoric Acid.					Potash.	Moisture.				
	Total, including that of nitric acid and ammonia when present.	Total calculated as ammonia.	Soluble in water.	Citric soluble.	Insoluble.	Total.	Total available.						
p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	% cts.				
Guaranteed contents	2.06	2.50	5.00	3.00	2.00	10.00	8.00	1.50	.....	18.40		Miss S.E. Wright
Standard sample..	1.93	2.35	5.24	3.87	2.24	11.35	9.11	2.47	14.37	20.25	2030		
Guaranteed contents	2.06	2.50	5.00	3.00	2.00	10.00	8.00	3.00	.....	19.90		"
Standard sample..	2.16	2.62	5.88	3.35	1.92	11.19	9.27	3.69	14.42	22.40	2031		
Guaranteed contents	2.47	3.00	.....	.....	.....	20.60	.....	.....	.....	.....		"
Standard sample..	2.25	2.74	.....	16.00	6.39	22.39	16.00	.....	6.35	27.17	2032	
Guaranteed contents	2.06	2.50	5.00	3.00	2.00	10.00	8.00	3.00	.....	19.90		"
Standard sample..	2.24	2.72	5.63	2.84	3.20	11.67	8.47	3.86	13.25	22.32	2033		
Guaranteed contents	4.10	5.00	5.00	2.00	1.00	8.00	7.00	7.00	.....	29.44		A. C. Macfarlane.
Standard sample..	4.25	5.17	7.03	1.60	1.44	10.07	8.63	5.52	5.50	30.60	2034		
Guaranteed contents	3.30	4.00	6.00	2.00	1.00	9.00	8.00	7.00	.....	27.92		"
Standard sample..	3.24	4.42	7.19	1.76	1.92	10.87	8.95	6.62	4.88	28.79	2035		
Guaranteed contents	2.40	3.60	5.00	1.60	1.00	7.00	6.00	10.00	.....	25.56		"
Standard sample..	2.48	3.01	4.63	1.44	2.08	8.15	6.07	9.45	5.02	25.64	2036		
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	5.14	6.24	Tr.	18.07	7.07	25.74	18.07	.....	3.14	38.63	2037	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	.....	.....	.....	16.31	5.75	22.06	16.31	.....	0.32	19.67	2038	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		A. Lemoine.
Standard sample..	.....	.....	.....	15.18	2.62	17.80	.....	.....	.....	18.53	.....	
Guaranteed contents	4.00	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	4.06	4.93	10.23	0.38	0.90	11.51	10.61	7.95	9.95	34.72	2040		
Guaranteed contents	3.50	.....	.....	.....	.....	.....	9.00	.....	.....	.....		"
Standard sample..	3.36	4.08	9.78	0.80	0.80	11.38	10.58	11.83	.....	36.11	2041	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	0.56	0.68	12.98	0.78	1.59	15.35	13.76	11.12	7.95	29.94	2042		
Guaranteed contents	2.50	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	2.66	3.23	10.10	0.93	0.80	11.83	11.03	11.31	9.05	33.73	2043		
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	0.56	0.68	17.14	1.29	1.59	20.02	18.43	.....	8.30	24.37	2044	
Guaranteed contents	16.00	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	15.68	19.04	(Corresponds to 95.20 p.c. nitrate of soda.)	.....	.....	.....	.....	.....	1.80	54.40	.....	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	12.00	12.00	.....	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	13.74	13.74	2046	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	50.00	50.00	.....	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	47.24	1.15	47.24	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	50.00	50.00	.....	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	48.56	2.40	48.56	
Guaranteed contents	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		"
Standard sample..	.....	.....	.....	.....	.....	.....	.....	.....	Tr.	1.10	17.08	

TABULATED DESCRIPTION OF 173 STANDARD SAMPLES OF

Date when Advised.	Number of Sample.	Designation.	Name of Manufacturer.	By whom sent.	From what materials Produced.
1907.					
May 14	2050	Standard	The American Agricultural Chemical Co., Boston Sales Dept., Boston, Mass.	Manufacturers	
June 10	2051	No. 1 Fertilizer	Standard Fertilizer & Chemical Co., Ltd., Smith's Falls.	"	Ammonia, potash and magnesia salts, mineral superphosphate and fine bone meal.

AGRICULTURE FERTILIZERS, REGISTERED FOR 1907—*Concluded.*

	RESULTS OF ANALYSIS.											Name of Analyst.	
	Nitrogen.		Phosphoric Acid.						Potash.	Moisture.	Relative Value per ton of 2,000 lbs.		Number of Sample.
	Total, including that of nitric acid and ammonia where present.	Total calculated as ammonia.	Soluble in water.	Citric soluble.	Insoluble.	Total.	Total available.						
p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	\$ cts.			
Guaranteed contents	2.06	2.50	5.90	3.00	2.00	10.00	8.00	1.50	.....	18.40	2050	Miss S. E. Wright
Standard sample..	2.26	2.74	6.65	3.87	3.07	13.59	10.52	2.89	13.73	23.73	2051	"	
Guaranteed contents	1.65	2.00	.....	.....	.....	10.00	9.00	1.50	.....	17.31	2051	"
	1.83	2.23	8.15	1.45	4.31	13.91	9.60	3.31	5.60	22.20			

