
LABORATORY
OF THE
INLAND REVENUE DEPARTMENT

OTTAWA, CANADA.

BULLETIN No. 368

KETCHUP

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NOTES AND COMMENTS.

Under this heading, as occasion arises, the Bulletins issued by this Department will contain, as an appendix, such comment as may seem necessary or advisable upon matters relating to the work of the Department in connection with the administration of the Adulteration Act, the Fertilizers Act, the Feeding Stuffs Act or the Proprietary Medicines Act.

It frequently happens that correspondents ask information regarding the above Acts, of such a nature that the matter in question possesses general interest, and comment upon it would prove acceptable and useful to others than the immediate questioner. In such cases the reply may find a place in these columns. For convenience of reference these notes will be numbered in series.

A. MCGILL,
Chief Analyst.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT

OTTAWA, CANADA.

BULLETIN No. 368

KETCHUP

OTTAWA, 31st March, 1917.

J. U. VINCENT, Esq., K.C.,
Deputy Minister of Inland Revenue.

SIR,—I beg to hand you a report upon 111 samples purchased as Ketchup (Catsup) by our inspectors in October and November of last year. With a single exception these represent Tomato Ketchup.

Four of these samples were found to be more or less fermented. Of this number, only one sample contained a preservative (benzoic acid) and this was present in mere trace. All the other samples were in good condition.

Fifty-five (55) samples contain a preservative; salicylic acid in two cases; in all the others, benzoic acid.

An Order in Council of 4th April, 1914 permits the use of benzoic acid to the amount of 1 part per 1,000 parts; and of salicylic acid, to the amount of 1 part in 5,000, under the following conditions:

“ Provided that not more than one kind of preservative substance, named in this list, shall be added to any one kind of food, or to any mixture of two or more kinds of food; that the amount of preservative shall not exceed the maximum amount herein named, and that the presence of the preservative shall be declared on the label.—(Circular G. 1111.)

Twenty-four (24) samples contain a dye (coal tar dye). This is permitted by Order in Council of 9th January, 1915, provided that only those dyes specially named in Circular G. 1167, may be used, and that the presence of the dye is declared upon the label, in clearly legible type.

No illegal dyes have been found in any of these samples; and preservatives are in all cases but three, within the legal limit. Benzoic acid is present to the amount of 1.8 parts per 1,000 in No. 76332; and to the amount of 1.3 parts per 1,000 in No. 73245. These quantities are probably harmless, in an article like Ketchup, which is employed as a condiment only. Sample No. 56835 contains salicylic acid to the amount of 2.6 parts per 1,000; and as the limit for salicylic acid is only 0.2 per 1,000, this represent a very large excess.

Many of these samples which contain either or both preservative and dye, make declaration of the fact upon the label. In 29 cases, however, there is failure to declare the presence of preservative or dye, or both, as required by the Orders in Council above cited. This, of course, constitutes a violation of the Act, and makes the vendor, or manufacturer liable of penalty.

In extenuation, it is claimed that many of these samples were on the market either before or very shortly after publication of our standards, and are, without any intention of violating the Act, labelled in the same way as was customary before standards regulating the use of preservatives and dyes were established. The standards in question are dated, April 1914 and January 1915 respectively. Purchase of these samples was made about the end of 1916, or about two years after legalization of standards.

There would appear, therefore, to be no validity in the claim made by manufacturers to be held exempt from penalty; but, since nothing that can be regarded as endangering public health can be urged against any of these articles, (with the single exception of No. 56835- I would respectfully suggest that this report, so far as it affects the declaration of preservatives and dyes on the label, be regarded as a warning, to manufacturers of Ketchup that they will, in the future, be strictly held to the terms of our standards as published in G. 1111 and G. 1167.

It will further be noted that these samples vary greatly in the amount of solid material which they contain.

There can be no doubt that, as regards cost of manufacture and value to the consumer, they possess unequal values. A discussion of this phase of the matter will be found in the introduction to Bulletin No. 275 (February 1914) our last report on Ketchup.

I am not prepared however, to discuss this aspect of the question. Ketchup is a condiment, rather than a food proper, and it may be that the kind and quality of the material entering into its manufacture are of more importance than the quantity of such material. The consideration of this subject may be postponed for the present.

I beg to recommend publication of this report as Bulletin No. 368.

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

A. MCGILL,
Chief Analyst.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF HALIFAX—

1916.								
Nov. 16	Tomato Ketchup.	76331	R. T. Caldwell, Kentville, N.S.	3	bots	75	Gorman, Eckert Co., London, Ont.	Bauld Bros., Ltd., Halifax
" 16	"	76332	Boylon & Gaul, Kentville, N.S.	3	"	45	Aylmer Cann. Co., Aylmer, Ont.	Unknown
" 23	"	76333	Wentzells, Ltd., Halifax, N.S.	3	"	75	W. Clark, Ltd., Montreal.	Mfrs.
" 24	"	76334	R. N. McDonald, Halifax, N.S.	3	"	30	T. Upton, Ltd., Hamilton.	"
" 28	"	76335	G. N. Henley, Halifax, N.S.	3	"	36	Canada Pickling Co., Toronto.	Payzant & King, Halifax
" 24	Catsup	73241	James McArthur, New Glasgow, N.S.	3	"	45	Gorman, Eckert Co., London, Ont.	Laporte, Martin Co., Montreal.
" 24	"	73242	"	3	"	45	H. J. Heinz Co., Pittsburg, Pa.	John Tobin Co., Halifax.
" 24	"	73243	James Cavanaugh, New Glasgow, N.S.	3	"	60	T. A. Snider Preserve Co., Chicago, Ill.	Mfrs.
" 25	"	73244	A. J. Roop, New Glasgow, N.S.	3	"	90	H. J. Heinz Co., Pittsburg, Pa.	John Tobin Co., Halifax.
" 25	"	73245	C. Grant, New Glasgow	3	"	75	Wm. Davies Co., Toronto.	Mfrs.

DISTRICT OF NEW BRUNSWICK—

Oct. 12	Ketchup	69561	2 Barkers, Ltd., St. John, N.B.	3	bots.	60	T. A. Snider Preserve Co., Chicago, Ill.	
" 13	"	69562	W. A. Simonds, St. John, N.B.	3	"	75	The Horton Catsup Mfg. Co., Windsor, Ont.	
" 18	"	69563	Boyd Bros., St. Stephen, N.B.	2	"	65	W. Clark, Ltd., Montreal.	
" 24	"	69564	H. C. Jewets, Fredericton, N.B.	3	"	30	The T. Upton Co., Ltd., Hamilton.	
" 25	"	69565	J. B. Snowball Co., Ltd., Chatham, N.B.	3	"	90	H. J. Heinz Co., Pittsburg, Pa.	

DISTRICT OF QUEBEC CITY—

Oct. 18	Ketchup	56812	T. J. Crepault, Beauport — Gifford, Quebec.	3	bots.	75	T. A. Lytle Co.	LamotheFrere
" 18	"	56832	Arthur Bourrett, Gifford, Quebec.	3	"	45	Raymond	J. B. Renaud.
" 18	"	56833	T. J. Crepault, Beauport, Quebec.	3	"	30	Canada Pickling Co.	TurcotteFrere
" 18	"	56834	Jules Belanger, Beauport, Quebec.	3	"	36	Quebec Preserving Co.	Mfrs.
" 18	"	56835	Eug. Doucett & Cie, Beauport, Quebec.	3	"	36	Regal Works	CantinFrere.

KETCHUP (CATSUP).

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids.	Acidity as Acetic.	Benzoic Acid Parts per 1000.	Dyes.	Condition.	Salt.		

R. J. WAUGH, INSPECTOR, W. A. PETIPAS, TEMPORARY INSPECTOR.

Club House Brand	p.c.	p.c.						
	38.63	2.04	None...	None.	.....		76331	
Canada First Brand	24.95	0.72	1.8	Pre- sent.	.....		76332	Preservatives and colour not declared. Excess Benzoic Acid.
.....	23.92	1.38	None...	None.	.....		76333	
.....	26.61	0.90	0.8	"	.....		76334	
.....	12.03	1.14	0.7	"	.....		76335	
.....	18.35	1.26	0.4	"	.....		73241	
.....	37.25	1.68	None...	"	.....		73242	
.....	25.25	1.26	" ..	"	.....		73243	
.....	33.15	1.62	" ..	"	.....		73244	
.....	23.94	1.05	1.3	Pre- sent.	.....		73245	Preservative and colour not declared. Slight excess Benzoic Acid.

JOHN C. FERGUSON, INSPECTOR.

.....	28.09	1.38	None..	None.	.....		69561	
.....	24.00	1.14	0.6	"	.....		69562	
.....	31.49	1.43	None...	"	.....		69563	
.....	27.84	1.32	0.2	"	.....		69564	
.....	33.20	1.62	None...	"	.....		69565	

F. X. W. E. BELAND, INSPECTOR.

.....	23.71	0.96	0.6	None.	.....		56812	
.....	15.38	0.99	Trace...	"	Fermen- ted.		56832	
.....	16.34	1.02	0.4	"	.....		56833	
.....	6.66	1.26	1.0	Pre- sent.	.....		56834	
.....	15.91	0.96	.....	None.	.....		56835	Salicylic Acid 2.6 per 1000 not declared. Decidedly excessive.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vender.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF QUEBEC PROVINCE—J. E. AUDET, O. BROCHU,

T. GE

1916.							
Nov. 22	Ketchup...	5372	J. E. Gagné, Scotts, P.Q....	3 bts.	45	.....	G. E. Couture, Levis.
" 20	Extrait Tomato.	5368	J. E. Fortier, St. Henri	3 "	75	H. J. Heinz, Pittsburg.	.....
" 21	Catsup.....	4351	J. A. Lemieux, St. Michel..	3 "	45	" "	.....
" 21	"	4354	Geo. Roy, St. Michel.....	3 "	35	Aylmer Cann. Co., Aylmer, Ont.	.....
" 23	"	4355	Alphonse Nadeau, St. Charles.	3 "	75	Heinz	J. B. Renaud.
" 24	"	4361	Théodore Bernard, St. Raphael.	3 "	45	Quebec Preserving Co.	.....
" 25	"	4362	Arthur Fredette, Armagh ..	3 "	61	Grantham Cann. Co., Ont.	.....
" 11	Tomato Catsup.	72288	J. B. C. Landreau, Montmagny.	3 "	30	A. Raymond & Co., Montreal.	.....
" 12	"	72290	Anselme Prévost, St. Francois.	3 "	45	Quebec Preserving Co.	.....
" 13	"	72292	Alphonse Litourneau, St. Pierre.	3 "	60	The T. A. Lytle Co., Ltd., Toronto.	.....
" 15	"	72293	Pierre Morin, Cap. St. Ignace.	3 "	45	Gorman Eckert & Co., Ltd., London, Ont.	.....
" 26	"	72297	J. W. Beaumont, Montmagny.	3 "	45	T. A. Lytle, Ltd., Toronto.	.....
" 14	Ketchup...	5742	V. Ethier, St. Jerome	3 "	45	H. Bourque & Fils, Montreal.	.....
" 14	"	5743	Charlemange Tailion, St. Jerome.	3 "	90	H. J. Heinz Co., Pittsburg.	.....
" 14	Catsup.....	5745	C. Huot, St. Jerome	3 "	38	A. Raymond Co., Montreal.	.....
" 14	"	5746	J. N. Desjardins, St. Jerome.	3 "	45	Grantham Preserve Works.	.....
" 16	"	5749	Alexandre Villeneuve, St. Jerome.	3 "	30	Oshawa Cann. Co., Ltd.	.....
Nov. 3	"	72409	B. St. Amand, Mont Joli	3 "	60	Quebec Preserving Co., Quebec.	.....
" 3	"	72415	J. A. Paradis, St. Octave....	3 "	45	Fretz Ltd., Hamilton.	.....
" 3	"	72416	B. St. Amand, Mont Joli....	3 "	45	H. J. Heinz Co., Pittsburg.	.....

DISTRICT OF THREE RIVERS—

DR. V.

Oct. 10	Catsup.....	5461	J. H. Deblois, St. Thomas, Joliette.	3 bts.	45	T. A. Lytle Co., Toronto.	.....
" 10	"	5463	L. J. Poulette, St. Thomas, Joliette.	3 "	45	Heinz Co., Pittsburg	.....
" 11	"	5467	J. A. Boisvert, Joliette.....	3 "	30	Aylmer Cann. Co.	Chevalier & Pouliot, Joliette.
" 11	"	5468	Wm. Perrault, "	3 "	45	T. A. Lytle Co., Toronto.	.....
" 13	"	5475	Belle-feuille & Giroux, Three Rivers.	3 "	45	W. Clark, Montreal.	.....

KETCHUP (CATSUP).

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids.	Acidity as Acetic.	Preservatives.	Dyes.	Condition.	Salt.		

T. GENDREAU, N. CADIEUX, E. DESCHENES, TEMPORARY INSPECTORS.

	p.c.	p.c.				p.c.	
.....	16.37	1.14	Benzoic acid.	None.	.....	5.90	5372
.....	26.75	1.71	None..	"	.....	3.80	5368
.....	27.86	2.04	" ..	"	.....	3.92	4331
.....	20.10	1.50	" ..	"	.....	2.72	4334
.....	26.80	2.07	" ..	"	.....	3.80	4335
.....	17.67	1.65	Salicylic acid.	Pre- sent.	.....	3.15	4361 Preservative & dye not de- clared.
.....	16.55	1.38	Benzoic acid.	None.	.....	3.60	4362 Preservative not declared.
.....	18.40	1.11	" ..	"	.....	4.48	72288
.....	11.88	2.31	" ..	Pre- sent.	.....	3.49	72290
.....	21.99	1.29	None..	None.	.....	2.29	72292
.....	14.66	1.62	Benzoic acid.	"	.....	3.90	72295
.....	16.77	1.71	" ..	"	.....	4.02	72297
.....	16.05	0.90	None..	"	.....	2.63	5742
.....	27.06	2.04	" ..	"	.....	3.40	5743
.....	19.82	1.80	Benzoic acid.	"	.....	5.00	5745
.....	15.16	0.78	" ..	"	.....	4.22	5746 Preservative not declared.
.....	9.28	0.45	" ..	"	.....	3.02	5749 Preservative not declared.
.....	6.77	1.35	" ..	Pre- sent.	.....	1.44	72410
.....	11.07	1.11	None..	None.	.....	3.58	72415
.....	32.52	2.10	" ..	"	.....	3.42	72416

DR. V. P. LAVALLEE, INSPECTOR.

.....	24.14	1.50	None..	None	.....	1.92	5461
.....	26.39	1.86	" ..	"	.....	3.60	5463
.....	18.31	1.05	" ..	"	.....	3.60	5467
.....	19.47	1.65	Benzoic acid.	"	.....	2.45	5468
.....	27.62	2.01	None..	"	.....	5.40	5475

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF EASTERN TOWNSHIPS—

1916.							
Oct. 17	Catsup.....	73828	J. A. Savaie, Plessisville...	3 bota.	45	The J. Lytle Co., Toronto.	
" 17	"	73829	Jos. Hinse, "	3 "	45	Regal Conserve Works, Montreal.	
" 17	"	73830	J. E. Lacerte, "	3 "	45	L. Chaput Fils, Montreal.	
" 17	"	73831	A. M. Jutras, "	3 "	45	Tomato Mfg. Fraser-ville.	
" 17	"	73832	F. N. Houde, "	3 "	60	Canada Pickling, Toronto.	

DISTRICT OF MONTREAL—

Oct. 11	Ketchup..	74941	J. B. Leger, Coteau Station, P.Q.	3 bota.	45	H. J. Heinz.....	
Nov. 8	"	74942	A. Charand, 345 Ontario st., E., Montreal.	3 "	30	Canada Pickling Co.	
" 8	"	74943	A. Benoit, 398 "	3 "	75	Alphonse Raymond Co.	
" 8	"	74944	Rosario Desautels, 424 Ontario st., E., Montreal.	3 "	35	H. Bourque & Fils..	
" 8	"	74945	P. E. Dery, 471 Ontario st., E., Montreal.	3 "	35	St. Louis Preserving Co.	

DISTRICT OF VALLEYFIELD—

Oct. 16	Catsup. ...	67760	W. Beaudry, Valleyfield, P.Q.	3 bota.	45	.....
" 16	"	67761	"	3 "	30	.....
" 16	"	67762	W. Plante, "	3 "	60	.....
" 16	"	67763	"	3 "	45	.....
" 16	"	67764	Leduc & Prieux, "	3 "	30	.....

DISTRICT OF OTTAWA—

Oct. 28	Ketchup....	73740	Geo. Illingworth, Almonte, Ont.	3 bota.	75	Grantham Cann. Co., St. Catherines.	
" 31	"	73741	D. G. Cowan, 1227 Bank St., Ottawa.	3 "	75	T. A. Lytle Co., Ltd., Toronto.	
" 31	"	73746	J. H. McKeen, 901 Bank St., Ottawa.	3 "	30	Aylmer Cann. Co., Aylmer, Ont.	
Nov. 1	Katsup....	73756	A. E. Vallier, Kemptville...	3 "	75	Port Hope P. & C. Co., Port Hope.	
" 1	Ketchup....	73758	E. H. Tallman, Merrickville.	3 "	75	The T. Upton Co., Ltd., Hamilton.	
" 2	"	73762	S. Reinstejn, Cumberland and Clarence Sts., Ottawa.	3 "	30	Quebec Preserving Co.	

KETCHUP (CATSUP).

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids.	Acidity as Acetic.	Preservatives.	Pyes.	Condition.	Salt.		

E. BLONDIN, TEMPORARY INSPECTOR.

	p. c.	p. c.				p. c.	
.....	17.26	1.44	Benzoic acid.	None.	.....	2.95	73825
.....	13.92	1.20	"	Pre- sent.	.....	2.72	73829
.....	16.88	1.35	"	"	.....	4.02	73830 Preservative and dye not declared.
.....	11.53	2.25	"	"	.....	3.50	73831
.....	13.35	1.35	"	"	.....	3.60	73832

D. J. KEARNEY, INSPECTOR.

.....	29.58	2.04	None...	None.	.....	3.89	74941
.....	16.52	1.05	Benzoic acid.	"	.....	4.66	74942
.....	14.19	1.80	None...	"	.....	4.16	74943
.....	14.48	1.35	"	"	.....	2.28	74944
.....	18.27	0.93	Benzoic acid.	"	.....	5.27	74945

J. J. COSTIGAN, ACTING INSPECTOR.

King Brand.....	17.76	1.17	None...	None.	.....	3.02	67760
Davis Brand.....	10.82	1.35	"	Pre- sent.	.....	4.18	67761 Dye not declared.
Club House Brand.....	16.97	1.59	None...	None.	.....	3.41	67762
Victoria Brand.....	11.02	1.41	Benzoic Acid.	"	.....	3.37	67763 Preservative not declared.
Epicure Brand.....	25.87	1.56	"	"	.....	3.77	67764 " " "

J. A. RICKEY, INSPECTOR.

Tiger Brand, Tomato....	15.52	1.32	None...	None.	.....	3.21	73740
Sterling Tomato, guaran- teed free from artificial colouring.	19.33	1.38	"	"	Fermen- ted.	3.10	73741
Canada First Tomato....	22.12	1.14	"	"	.....	4.16	73746
Red Cross Brand Tomato	12.20	1.56	Benzoic Acid.	"	.....	1.36	73756 Preservative not declared.
Uptons.....	21.94	2.85	None...	Pre- sent	Badly fermen- ted	1.87	73758 Dye not declared.
Capital Brand Tomato..	8.37	1.44	Benzoic Acid.	"	.....	2.46	73762

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher, as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF KINGSTON—

1916.							
Oct. 18	Ketchup...	73706	Spratt & Killen, Lindsay, Ont.	3 bota.	75	Gorman & Eckert & Co., London, Ont.	
" 18	"	73710	G. A. Babcock, Lindsay, Ont.	3 "	30	Canada Preserving Co., Hamilton.	
" 19	"	73713	S. R. Artis, Belleville.....	3 "	36	Dom. Can. Ltd.....	
" 19	"	73718	R. Elvins, Belleville....	3 "	35	The T. Upton Co., Ltd., Hamilton.	
" 20	"	73723	D. J. Millan, Kingston....	3 "	45	Fretz Ltd., Hamilton	

DISTRICT OF TORONTO—

Oct. 20	Ketchup...	75473	W. Williams, 267 Parliament St., Toronto.	3 bota.	30	Bell Fruit Farms, Ltd., Grimby.	
" 20	"	75474	The Wm. Davies Co., Ltd., 483 Parliament St., Toronto	3 "	30	Vendors	
" 21	"	75475	The T. A. Lytle Co., Ltd., Stealing Road, Toronto.	3 "	58	"	
" 23	"	75476	F. W. Humphrey, 47 Front St., E., Toronto.	3 "	44	Aylmer Cann. Co., Ltd., Hamilton.	
" 23	"	75477	Perkins, Ince & Co., 43 Front St., E., Toronto.	3 "	25	Vendors	

DISTRICT OF HAMILTON—

Nov. 1	Ketchup...	75511	John Ross, 11 Queen St., St. Catharines.	3 bota.	25	The garden City C. Co., St. Catharines	
" 2	"	75512	J. S. O'Neil, 57 East Main St., Welland.	3 "	30	Delhi Cann. Co., Delhi.	
" 2	"	75514	M. J. Allen, 146 Main St., Niagara Falls, Ont.	3 "	39	J. W. Windsor, Montreal.	
" 2	"	75515	A. E. Dell, 176 Main St., Niagara Falls, Ont.	3 "	45	W. Clark Ltd., Montreal.	
" 2	"	75516	F. H. Taylor, 44 Erie Ave., Niagara Falls, Ont.	3 "	45	H. J. Heinz Co., Leamington.	

DISTRICT OF WINDSOR—

Nov. 6	Catsup....	65045	J. P. Rogers & Co., St. Mary's, Ont.	3 bota.	45	H. J. Heinz, Leamington.	
" 7	"	65049	W. Leary, Parkhill.....	3 "	30	Gorman, Eckert Co., London, Ont.	
" 7	"	65051	Fred. V. Langton, Parkhill	3 "	75	T. A. Snider, Preserve Co., Chicago.	
" 7	"	65052	Fuller Bros., Arkona....	3 "	30	Napanee Cann. Co., Napanee, Ont.	
8 8	"	65057	N. B. Howden, Watford....	3 "	30	Fretz Ltd., Hamilton.	

KETCHUP (CATSUP).

Inspector's Report, (Is not an expression of opinion.)	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids.	Acidity as Acetic.	Preservatives.	Dyes.	Conditions.	Salt.		

J. A. RICKEY, ACTING INSPECTOR.

	p. c.	p. c.				p. c.	
Rex Brand Tomato, contains Benzoate of Soda no artificial colouring.	16.04	1.56	Benzoic Acid.	None.	.....	3.52	73706
Tryme Brand Tomato...	13.22	0.60	"	"	.....	3.42	73710 Preservative not declared.
Red Seal Tomato.....	20.62	1.32	"	Pre-sent.	.....	4.32	73713 Preservative and dye not declared.
Uptons Finest Quality Tomato.	14.38	1.65	None...	"	.....	3.28	73718 Dye not declared.
Rose Brand Tomato.....	12.82	1.35	"	None	.....	4.15	73723

H. J. DAGER, INSPECTOR.

	p. c.	p. c.				p. c.	
M. P. Brand ...	16.68	0.60	None...	Pre-sent.	Badly fermented.	3.20	75473 Dye not declared.
Contains 1/10 of 1 p. c. Benzoate of Soda, artificial colouring.	15.58	1.56	Benzoic Acid.	"	.....	4.02	75474
Sterling Brand	22.11	1.47	None...	None.	.....	5.71	75475
.....	25.94	0.79	"	"	.....	3.54	75476
Sailor Boy, Packed for Vendors.	20.78	1.23	Benzoic Acid.	Pre-sent.	.....	3.30	75477 Preservative and dye not declared.

H. J. DAGER, ACTING INSPECTOR.

	p. c.	p. c.				p. c.	
Garden City Brand contains 1/10 of 1 p. c. Benzoate Soda.	12.65	1.20	Benzoic Acid.	Pre-sent.	.....	2.65	75511
.....	17.86	0.82	"	"	.....	3.40	75512 Preservative and dye not declared.
Royal Brand.....	14.14	1.59	"	"	.....	3.90	75514 " "
.....	28.24	2.10	None...	None.	.....	4.04	75515
.....	25.11	2.19	"	"	.....	3.46	75516

JOHN TALBOT, INSPECTOR.

	p. c.	p. c.				p. c.	
.....	31.12	1.95	None ..	None.	.....	3.70	65045
Rex Brand.	14.40	1.52	Benzoic acid.	"	.....	4.40	65049
.....	23.96	1.89	None...	"	.....	3.44	65051
Canada's Pride.....	15.56	0.90	Benzoic acid.	Pre-sent.	.....	3.90	65052 Preservative and dye not declared.
Rose Brand	18.18	1.86	None ..	None	.....	2.88	65057

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.

DISTRICT OF MANITOBA—

1916.							
Oct. 19	Ketchup . . .	75065	W. F. Marsh, Dauphin, Man.	3 bota.	75	T. A. Snider Preserve Co., Chicago.	
" 20	"	75067	M. Ostrosky, Gilbert Plains, Man.	3 tins.	30	Delhi F. C. Co., Delhi, Ont.	
" 21	"	75068	N. Maybee, Grand View, Man.	3 bota.	75	Libby, McNeill & Libby, Chicago.	
" 23	"	75069	S. Kulberg, Roblin, Man.	3 cans.	40	Bell Fruit Farm, Grimsby, Ont.	
" 24	"	75072	Lane & Co., Minitonas, Man.	3 bota.	90	Heinz & Co., Leamington, Ont.	

DISTRICT OF SASKATCHEWAN—

Nov. 20	Tomato Catsup.	71636	Moose Grocery Co., Moose Jaw.	3 bota.	60	No Vary Products Co., Minneapolis.	
" 21	"	71637	J. R. Ke'ley, Moose Jaw . . .	3 "	30	Delhi C. Co., Delhi, Ont.	
" 21	"	71638	Kent & Brown Co., Ltd., Moose Jaw.	3 "	75	T. A. Snider Preserve Co., Chicago.	
" 21	"	71639	A. McDonald Co., Moose Jaw.	3 "	60	A. McDonald Co., Winnipeg.	
" 21	"	71640	Fairfood Grocery, Moose Jaw	3 "	30	Delhi F. & V. C. Co., Delhi, Ont.	McDonald Crawford Co. Moose Jaw.

DISTRICT OF ALBERTA—

Oct. 18	Tomato Ketchup.	52542	Cannon & Co., Carstairs . . .	3 tins.	45	Aylmer Cann. Co., Aylmer, Ont.	
" 18	"	52543	A. G. Studer, Didsbury . . .	3 "	45	Fretz Ltd., Hamilton.	
" 19	"	52544	Davey Bros., Olds	3 "	40	W. Clark, Ltd., Montreal.	
" 19	Mushroom Ketchup.	52545	Wm. Hodge & Sons, Innisfail.	3 "	75	Crosse & Blackwell, London, Eng.	
" 20	Tomato Ketchup.	52546	Hudson Bay Co., Calgary . . .	3 "	60	T. A. Snider Preserve Co., Chicago.	

DISTRICT OF ROCKY MOUNTAINS—

Nov. 10	Ketchup . . .	68280	L. C. Masson, Revelstoke, B. C.	3 bota.	105	Curtis Bros. & Co., Rochester.	
" 10	"	68281	C. B. Hume & Co., Revelstoke.	3 "	105	H. J. Heinz Co., Leamington.	
" 14	Catsup	68287	The S. A. F. E. Ltd., Salmon Arm, B. C.	3 "	40	Western Pickling Wks., Victoria, B. C.	
" 14	"	68288	"	3 "	90	Aylmer Cann. Co., Hamilton.	
" 18	Ketchup . . .	68293	England & Son, Kamloops, B. C.	3 "	75	Vanc. Pickling Co. Vanc., B. C.	

KETCHUP (CATSUP.)

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids.	Acidity as Acetic	Preservatives.	Dyes.	Condition.	Salt.		

J. B. COSGROVE, INSPECTOR.

.....	26.30	1.24	None...	None.	.....	.....	75065	
.....	18.10	0.72	Benzoic acid.	"	.....	.....	75067	Preservative not declared.
.....	22.60	0.92	None...	"	.....	.....	75068	
.....	13.46	0.45	Benzoic acid.	"	.....	.....	75069	Preservative not declared.
.....	29.10	1.44	None...	"	.....	.....	75072	

L. H. HALL, INSPECTOR.

No Vary Brand.....	25.60	1.06	None...	None.	.....	.....	71636	
.....	31.82	0.95	Benzoic acid.	"	.....	.....	71637	Preservative not declared.
.....	25.72	1.17	None...	"	.....	.....	71638	
Donalco Brand.....	23.92	1.16	"	"	.....	.....	71639	
Maple Leaf Brand. . .	20.54	0.68	Benzoic acid.	"	.....	.....	71640	Preservative not declared.

A. W. R. MARKLEY, INSPECTOR.

Canada First.....	16.56	0.74	Benzoic acid.	None.	.....	.....	52542	Preservative not declared.
Rose Brand.	17.10	0.58	"	Pre- sent.	.....	.....	52543	Preservative and dye not declared.
.....	29.22	1.33	None...	None.	.....	.....	52544	
.....	15.84	0.77	"	"	.....	.....	52545	
.....	24.44	1.07	"	"	.....	.....	52546	

THOS. PARKER, INSPECTOR.

Blue Label.	19.34	0.64	Benzoic acid.	None.	.....	3.15	68280	
.....	31.67	1.60	None...	None.	.....	1.75	68281	
Thistle.....	16.68	0.64	Benzoic acid.	None.	.....	3.21	68282	Preservative not declared.
Aylmer.....	21.60	0.56	None...	pre- sent.	.....	2.51	68283	Dye not declared.
B. C. Home	21.64	1.57	Benzoic acid.	None.	.....	2.28	68285	

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher, as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher.
DISTRICT OF VANCOUVER—							
1916.							
Oct. 16	Catsup.	55896	Vanc. Pickle Co., 801 Powell st., Vanc., B.C.	3 bots.	75	Vendors .....	.....
" 16	Ketchup...	55897	S. T. Wallace, 44 Hasting st. W., Vanc., B.C.	3 "	75	W. Clark Ltd., Montreal.	.....
" 16	Catsup.	55898	Central Market, 32 Hasting st. E., Vanc., B.C.	3 "	60	Sinclair & Co., U.S.A.	.....
" 17	"	55899	Burrard Union Grocery, 2425 Main st., Vanc., B.C.	3 "	45	Hobson Mfg. Co., Vanc.	.....
" 17	"	55810	Scott Bros., 2345 Main st., Vanc., B.C.	3 "	90	Cal. Fruit Cannery Assn., Cal., U.S.A.	.....

KETCHUP (CATSUP).

Inspector's Report. (Is not an expression of opinion.)	Results of Analysis.						No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids.	Acidity as Acetic.	Preservatives	Dyes.	Condition.	Salt.		

C. S. EMES, INSPECTOR.

	p. c.	p. c.				p. c.	
B. C. Home Brand..	21.44	1.00	Benzoic acid.	None.	.....	2.69	55806
Clarks Brand.	36.58	1.22	None...	None.	.....	3.56	55807
Sinclairs Brand.	32.92	1.07	None...	None.	.....	3.21	55808
Hobsons	17.56	1.20	Benzoic acid.	pre-sent.	.....	1.81	55809
Del Monte.	31.06	1.14	None...	None.	.....	2.48	55810