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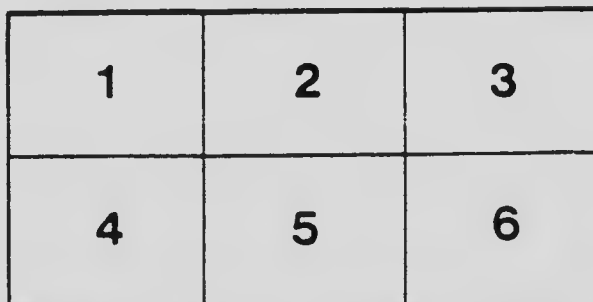
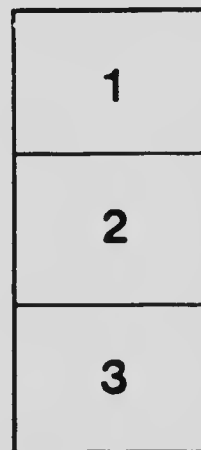
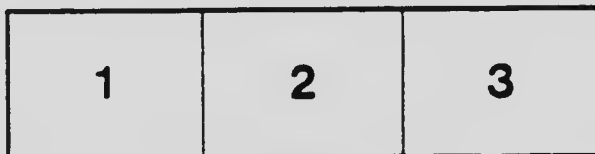
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LABORATORY
OF THE
INLAND REVENUE DEPARTMENT

OTTAWA, CANADA.

BULLETIN No. 275

TOMATO KETCHUP, (CATCHUP, CATSUP)

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA.

BULLETIN No. 275

TOMATO KETCHUP (CATCHUP, CATSUP)

OTTAWA, February 12, 1914.

WM. HINSWORTH, Esq.,
Deputy Minister,
Inland Revenue.

SIR,—I beg to hand you a report on 70 samples purchased by our inspectors as Ketchup or Catsup in September and October last.

Sixty-seven of these samples represent Tomato Ketchup. This article has been made the subject of study in these laboratories as follows:—

Bulletin 83—December, 1902—26 samples reported.				
“ 129— “ 1906—49	“	“	“	“
“ 224—May, 1911—75	“	“	“	“

In 1902, preservatives (salicylic or benzoic acid) were found in 65 per cent of the collection.

In 1906, 57 per cent of the collection contained preservatives.

In 1911, 68 per cent contained preservatives, chiefly benzoic acid.

The present collection shows 74 per cent of the collection to contain preservatives; in every case the preservative is benzoic acid, showing that benzoate of soda has completely displaced salicylic acid as a preservative of Ketchup.

It is evident that manufacturers of Tomato Ketchup are impressed with the necessity of adding a preservative, either to the finished article, or to the stock from which this is made.

We have not, as yet, forbidden the use of benzoate of soda in foods, as the evidence of its use in minimum amounts necessary to prevent spoilage is not convincing as to its harmfulness to health.

A careful study of this matter was made by the Referee Board of the United States Department of Agriculture in 1909, and Food Inspection Decision No. 104 (March 3), 1909) declares:—

‘It having been determined that benzoate of soda mixed with food is not deleterious or poisonous and is not injurious to health, no objection will be raised under the Foods and Drugs Act to the use in food of benzoate of soda, provided that each container or package of such food is plainly labelled to show the presence and amount of benzoate of soda.’

Several state laws, however, forbid its employment in foods.

The fact that 17 samples of this collection of Ketchup contain no preservative, and are nevertheless found to be in sound condition, would argue that Ketchup may be manufactured and marketed without a preservative; a conclusion which is in accord with a careful study of the matter made by A. W. Bitting, Inspector, Bureau of Chemistry, Washington, in 1907, and published as Bulletin No. 119. Mr. Bitting's conclusions are summed up as follows: ‘The experiments . . . were conducted under factory conditions, and upon a commercial scale. The results prove that such a Ketchup can be made and delivered to the consumer in perfect condition; the product in question having already stood ten months unopened, without showing the slightest indication of spoilage.’ It was also proved that after opening, the article could be kept at a temperature of 67° for eight days, without any development of moulds.

Since Ketchup is valued rather as a condiment than as a food, it may be unfair to place too much importance upon the amount of solid matter contained in it. At the same time it is believed that the extremely low solids in some of these samples does not constitute a defect. It is certain that most of the brands recognized by the trade as of first excellence are characterized by a relatively high content in solids.

The samples now reported show solids as below:—

Above 30 per cent in 11 samples.			
“ 25	“	3	“
“ 20	“	11	“
“ 15	“	14	“
“ 10	“	24	“
Below 10	“	4	“

It will be seen that 60 per cent of these samples contain practically from 15 to 30 per cent of solids

It has been sufficiently proven that a Ketchup made from ripe and fresh tomatoes, shows a good colour without any addition of a dye. Dyes are absent in 42 samples of this collection (62 per cent) and these samples are for the most part of very satisfactory
55864—1½

colour. The late Chief Analyst, Mr. T. MacFarlane, wrote as follows in 1906 (Bulletin 129, page 3) 'I have inclined to the opinion that those samples in the manufacture of which a dye has been used are adulterated according to the Act. This judgment would not be based upon the injurious nature of the dye but because its use is prohibited by the Adulteration Act, Sec. 3 (h) of the latter provides that food shall be deemed to be adulterated, within the meaning of this Act, if it is so coloured or coated or polished or powdered that damage is concealed, or if it is made to appear better, or of greater value than it really is. According to information obtained from manufacturers, the use of a dye is unnecessary when the Catsup is made from fresh tomatoes. It is when the fruit is out of season, and the pulp has to be kept in stock for a considerable time that the colour suffers, and the use of a dye becomes necessary. In such case it might be reasonably inferred that they have been coloured to conceal damage, or that the dye has been used to make the article appear of greater value than it really is, and consequently that the word adulterated should be applied.'

I am inclined to hold that the above ruling is correct, in the main; but in the absence of direct evidence of the inferior character of the stock used, I think it scarcely justifiable to assert that such stock must necessarily have been of inferior quality because of the presence of a dye in the finished product.

Tomato Ketchup should be prepared only from sound, fresh and ripe tomatoes. There is too much reason to believe that some makers of the article have, at times used fruit which could not find a market except under a disguise; employing antiseptics to arrest decay, and dyes to give a desirable colour. This conclusion is justified by such facts as, that the federal government of the United States obtained judgments against nineteen interstate shipments of Ketchup between May, 1912, and March, 1913, on the ground that these consisted in part of a decomposed and putrid vegetable substance. All these samples contained benzoate of soda, and it goes without saying that this preservative had been added to an already decomposed or decayed material in order to attest further decay.

Decomposition and putridity in vegetable material of the kind in question is indicated, (1) by the percentage of microscopic fields which show mould filaments, (2) by the number of yeasts and spores found in $\frac{1}{60}$ of a cubic millimeter, (3) by the number of bacteria found in 1 cubic centimeter.

It has been shown conclusively (Circular No. 68, Bureau of Chemistry, Washington) that under good factory conditions, the maximum percentage of fields showing moulds need never exceed 25; that the number of yeasts and spores in $\frac{1}{60}$ cubic millimeter need never exceed 25; and that the number of bacteria per cubic centimeter need never exceed 25,000,000. The maxima quoted are very liberal, and it will be seen by a study of this report that very few of the samples examined show numbers approaching them. All the nineteen samples condemned by United States Courts, and referred to above, gave numbers greatly in excess of these, moulds being found in 32 to 84 per cent of the fields examined; yeasts and spores varying from 65 to 225 per $\frac{1}{60}$ cubic millimeter, and bacteria per cubic centimeter running from 60,000,000 to 480,000,000.

None of the samples herein reported give such results as would justify their being condemned; but great variation exists among them; and the careful reader will find much to think about, if he studies the appended tables closely.

The matter of fixing exact standards by which to judge commercial Ketchups will be considered in the light of this and previous reports.

I beg to recommend its publication as Bulletin No. 275.

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 NOVA SCOTIA—

1913.							
Oct. 13	Catsup	54306	Zexas, Yarmouth, N. S.	3 bots.	30	Wm. Davies Co.,	Manufacturers.. Toronto, Ont.
" 23	"	54307	E. W. Crease & Son, Halifax, N. S.	3 "	75	Crosse & Blackwell,	" .. London, Eng.
" 23	"	54308	Jas. Scott & Co., Halifax, N. S.	3 "	90	" ..	" ..
" 23	"	54309	A. L. Doyle & Co., Halifax, N. S.	3 "	30	Canadian Cannery,	Payzant & King, Hamilton, Ont.
" 23	"	54310	Wm. Moore, Halifax, N. S.	3 "	25	Gorman & Eckert Manufacturers..	Co., London, Ont.

DISTRICT OF NEW BRUNSWICK—

Sept. 22	Catsup	50347	H. W. Cole, Ltd., John, N. B.	St. 3 bots.	44	Libby, McNeill & Libby, Chicago.	
" 25	"	50348	Z. Barkers, Ltd., John, N. B.	St. 3 "	30	The Wm. Davies Co., Ltd., Toronto, Ont.	
Oct. 8	"	50349	G. A. Irving Estate, Stephen, N. B.	St. 3 "	30	The Leys Ltd., Simcoe, Ont.	
" 16	"	50350	E. A. Burden, N. B.	Woodstock, 3 "	45	Gorman, Eckert Co., Ltd., London, Ont.	
" 22	"	50351	Mrs. P. White, N. B.	Moneton, 3 "	36	The Aylmer Canning, Aylmer, Ont.	

DISTRICT OF QUEBEC—

Sept. 23	Catsup	56129	G. Pepin, 132 Rue Massue, Quebec.	2 bots.	75	Heinz Co., Pitts- burgh, U. S.	J. B. Reneaud..
" 23	"	56130	" ..	3 "	30	T. A. Lytle Co., Toronto.	Turcote & frere.
" 24	"	56131	O. Bacon, 28 Rue Hermine, Quebec.	3 "	45	" ..	Langlois & Paradis.
" 24	"	56132	" ..	3 "	36	Heinz Co., Pitts- burgh, U. S.	" ..
" 24	"	56133	" ..	3 "	45	T. A. Lytle Co., Toronto.	J. B. Reneaud & Cie.

DISTRICT OF THREE RIVERS—

Sept. 17	Catsup	59711	P. A. Guibeault, bert.	St. Nor- 3 bots.	30	Quebec Preserving Co.	Chevalier & Pouliat, Joliette.
" 18	"	59712	J. O. Davian, ville.	Berthier- 3 "	45	T. A. Lytle Co., Toronto.	" ..

CATSUP.

Inspector's Report. (Is not an expression of Opinion).	Results of Analysis.						Remarks.	No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids	Preservatives	Coal Tar Dyes.	Micro-chemical Examination.					
				Percentage of microscopic fields examined showing molds.	Yeasts and spores per c.c. mm.	Bacteria per cc.			

R. J. WAUGH, INSPECTOR.

	p. c.							
Tomato.....	11 60	Ben- zoic acid.	Pre- sent.	6	6	12,000,000	54306	
Mushroom.....	12 74	None	None				54307	Mushroom.
Walnut.....	22 96	"	"				54308	Walnut.
Tomato.....	9 00	Ben- zoic acid.	Pre- sent.	5	18	10,800,000	54309	
".....	14 82	"	None	traces.	20	7,200,000	54310	

J. C. FERGUSON, INSPECTOR.

.....	19 30	None.	None.	traces.	4	4,800,000	50347	
.....	10 50	Ben- zoic acid.	Pre- sent.	"	14	4,800,000	50348	
Tomato.....	26 34	"	None	"	39	12,000,000	50349	Yeasts & spore too many.
" (Rex).....	15 20	"	"	"	8	9,600,000	50550	
Canada First....	13 60	"	Pre- sent.	10	8	12,000,000	50351	

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

.....	31 30	None.	None.	traces.	18	18,800,000	56129	
.....	18 47	Ben- zoic acid.	Pre- sent.	10	12	16,800,000	56130	
.....	16 46	"	None.	traces.	4	4,800,000	56131	
.....	26 12	"	"	"	8	4,800,000	56132	
.....	31 18	None.	"	"	16	24,000,000	56133	

DR. V. P. LAVALLE, INSPECTOR.

.....	12 14	Ben- zoic acid.	Pre- sent.	25	26	9,600,000	59711	
.....	21 30	"	None.	traces.	6	24,000,000	59712	

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost		Name and Address of Manufacturer and Furnisher as given by the Vendor.	
				Quantity.	Cents.	Manufacturer.	Furnisher
DISTRICT OF THREE RIVERS							
1913.							
Sept. 18	Catsup.....	59713	A. L. Caisse, Berthierville.	3 bots.	36	Upton Co., Hamilton, Ont.	
" 19	"	59714	O. Paquette, Berthierville.	3 "	75	Heinz Co., Leamington, Ont.	
" 19	"	59715	J. A. Laporte, Berthierville.	3 "	75	" "	
DISTRICT OF EASTERN TOWNSHIPS—							
Sept. 29	Catsup.....	1712	F. Maken & fils, Arthabaskaville.	3 bots.	45		Quebec Preserving Co., Que.
" 30	"	1713	F. W. Gibson, Danville.	3 "	75	H. J. Heinz Co., Leamington, Ont.	
" 30	"	1714	V. J. Hudon, Richmond.	3 "	45	Grantham Canning Co., St. Catharines, Ont.	L. Chaput fils & Cie, Montreal.
Oct. 9	"	1715	O. Bienvenue, Granby	3 "	45	Canadian Canners Consolidated Co., Ltd., Hamilton.	
" 10	"	1716	N. Hamel, Magog	3 "	36	Aylmer Canning Co., Aylmer, Ont.	
DISTRICT OF MONTREAL—							
Oct. 21	Catsup.....	58611	F. Dumouchel, 244 Church Ave., Verdun.	3 bots.	36	Burlington Canning Co., Hamilton, Ont.	
" 21	"	58612	Jos. Bonenfant, 428 Church Ave., Verdun.	3 "	45	H. J. Heinz Co.	
" 21	"	58613	P. Brunet, 418 Church Ave., Verdun.	8 "	36	H. Bourque & fils, Montreal.	
" 21	"	58614	P. Lajoie, 514 Church Ave., Verdun.	3 "	36	The Upton Co., Hamilton, Ont.	
" 21	"	58615	L. LeBlanc, 143 Church Ave., Verdun.	3 "	75	E. D. Smith, Windsor, Ont.	
DISTRICT OF OTTAWA—							
Sept. 17	Catsup.....	59186	N. Dear & Son, Renfrew, Ont.	3 bots.	75	Gorman, Eckert & Co., Ltd., London, Ont.	
" 20	"	59187	Alex. Sibbitt, Carleton Place.	3 "	30	The T. Upton Co., Hamilton, Ont.	S. J. Major, Ltd., Ottawa.

CATSUP.

Inspector's Report. (Is not an expression of Opinion).	Results of Analysis.						Remarks.	No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids.	Preservatives.	Coal Tar Dyes.	Micro-Chemical Examination.					
				Percentage of microscopic fields examined showing molds.	Yeast and spores per $\frac{1}{2}$ cc. mm.	Bacteria per cc.			

Concluded.

	p.c.						
.....	19.90	None	None	Traces...	12	17,200,000	59713
.....	32.10	"	"	10	14	16,000,000	59714
.....	31.24	"	"	traces.	16	18,600,000	59715

J. C. ROULEAU, INSPECTOR.

.....	7.96	Ben-zoic Acid	Pre-sent	25	20	16,800,000	1712	
Factory 16.....	32.64	None.	None.	6	14	24,000,000	1713	
.....	10.26	Ben-zoic Acid	Pre-sent	50	64	9,600,000	1714	Moulds, yeasts and spores too many.
.....	12.30	"	None.	10	8	2,400,000	1715	
.....	15.90	"	Pre-sent	30	10	9,600,000	1716	Excess of moulds.

D. J. KEARNEY, INSPECTOR.

.....	15.32	Ben-zoic Acid	None.	15	35	9,600,000	58611	Excess of yeasts and spores.	Yeasts & spores rather too high.
.....	32.70	None.	"	traces ..	12	19,200,000	58612		
.....	11.60	Ben-zoic Acid	"	10	10	7,200,000	58613		
.....	18.30	None.	"	10	16	14,400,000	58614		
.....	20.10	Ben-zoic Acid	Pre-sent	10	4	2,400,000	58615		

J. A. RICKEY, INSPECTOR.

Tomato	12.30	Ben-zoic Acid	None.	traces ..	14	10,200,000	59186	
"	19.50	None.	"	" ..	13	7,200,000	59187	

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 OTTAWA—							
1913.							
Sept. 30	Catsup.....	59188	McDonald Bros., Gladstone Ave., Ottawa.	3 bts.	30	T. A. Lytle Co., Ltd., Toronto.	J. F. Castle Co., Ottawa.
" 30	"	59189	M. Greenburg, Bank St., Ottawa.	3 "	30	Quebec Preserving Co.	Dover, Ottawa.
Oct. 1	"	59190	J. H. Bradley, Prescott..	3 "	45	Standard Canning Co., Hamilton, Ont.	Lumsden Bros., Hamilton.
DISTRICT OF KINGSTON—							
Sept. 22	Catsup.....	60011	Thompson Bros., Belleville.	3 bts.	75	Heinz .....	.....
" 23	"	60012	M. C. Nichols, Cobourg..	3 "	45	Canada Preserving Co., Hamilton.	.....
" 22	"	60013	Geo. Boyle, Belleville....	3 "	30	Davies, Toronto..	.....
" 23	"	60014	W. P. Platt, Cobourg....	3 "	35	Standard Canning Co., Hamilton.	.....
" 24	"	60015	P. S. White, Peterboro...	3 "	35	Gorman, Eckert & Co., London, Ont.	.....
DISTRICT OF TORONTO—							
Sept. 19	Catsup.....	57489	M. R. Yost & Son, Dundas St., Toronto.	84 3 bts.	20	Vendors. ....	.....
" 19	"	57490	The Wm. Davies Co., Ltd., 300 Queen St., East, Toronto.	3 "	45	" .....	.....
" 22	"	57491	Bishop & Son, 1039 Gerard St., East, Toronto.	3 "	30	C. Gildner & Co., Toronto.	.....
" 22	"	57492	F. W. Newell, 250 Greenwood, Ave, Toronto.	3 "	30	Aylmer Canning Co., Aylmer, Ont.	.....
" 22	"	57493	The T. A. Lytle Co., Ltd., Sterling Road, Toronto.	3 "	37	Vendors .....	.....
DISTRICT OF HAMILTON—							
Sept. 29	Catsup.....	50395	George Hareling, 227 King St., East, Hamilton.	3 bts.	30	London Canning Co.	.....
" 29	"	50896	Young Bros., 241 King St., East, Hamilton.	3 "	30	W. Sommerville Co.	.....

CATSUP.

Inspector's Report. (Is not an expression of Opinion).	Results of Analysis.						Remarks.	No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids.	Preservatives.	Coal Tar Dyes.	Micro-chemical Examination.					
				Percentage of microscopic fields examined showing molds.	Yeasts and spores per 1/2 c. mm.	Bacteria per cc.			

Concluded.

Tomato, Guaranteed free from Artificial Colouring.	22.18	Benzoic Acid	None.	10	24	4,800,000		59188	
Tomato	6.56	"	Present	25	36	19,260,000	Excess of yeasts and spores.	59189	Yeasts & spores too high.
" Old Church	13.02	"	"	25	41	19,200,000	" "	59190	" "

JAS. HOGAN, INSPECTOR.

	31.40	None.	None.	5	16	9,600,000		60011	
	16.70	Benzoic Acid	"	traces	4	4,800,000		60012	
	14.04	"	Present	"	4	4,800,000		60013	
	12.56	"	"	10	24	4,800,000		60014	
	15.14	"	None.	traces	14	4,800,000		60015	

H. J. DAGER, INSPECTOR.

Yost Brand.	14.87	Benzoic Acid.	Present.	Traces.	2	A few		57489	
Davies	12.46	"	"	Present.	16	2,400,000		57490	
Gildner's Standard Brand.	13.70	"	"	"	20	2,400,000		57491	
Canada First.	12.04	"	"	"	1	A few		57492	
Sterling	29.92	"	None.	None	20	14,400,000		57493	

J. J. COSTIGAN, ACTING INSPECTOR.

Peacock Brand.	9.82	Benzoic Acid.	Present.	Traces.	22	16,000,000		50895	
Sweet Clover	12.84	"	None.	35	12	12,000,000	Excess of molds.	50896	Excess of molds.

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 HAMILTON—							
1913.							
Sept. 29	Catsup.....	50897	G. Lees, 201 King St., East, Hamilton.	3 bots.	30	National Cannery, Ltd.	
" 29	"	50898	A. V. Brown, 241, James St., North, Hamilton.	3 "	45	Aylmer Canning Co.	
" 29	"	50899	" " "	3 "	45	H. J. Heinz Co.	
DISTRICT OF WINDSOR—							
Oct. 8	Catsup.....	54407	Fred Searsbrook, Petrolia	3 bots.	30		
" 9	"	54430	A. H. Gannon & Son, Sarnia.	3 "	45	Aylmer Canning Co., Aylmer, Ont.	
" 9	"	54432	Heinz Co., Leamington	3 "	45	Vendors.....	
" 16	"	54436	Gill Bros., Strathroy.....	3 "	30	Gorman Eckert Co., London, Ont.	
" 10	"	54440	Wm. Cross, Strathroy....	3 "	45	Lea's Ltd., Simcoe, Ont.	
DISTRICT OF MANITOBA—							
Oct. 1	Catsup.....	48971	F. Abbott, Kildonan West	3 bots.	75	Upton & Co., Hamilton.	The Codville Co., Winnipeg.
" 7	"	48972	Green & Co., Kildonan West.	3 "	45	Aylmer Canning Co., Aylmer, Ont.	Campbell Bros. & Wilson, Winnipeg.
" 7	"	48973	Stanley's, 1623 Logan Ave., Weston, Winnipeg.	3 "	45	" "	
" 7	"	48974	" " "	3 "	75	Heinz, Leamington, Ont.	
7	"	48975	J. B. Bell, Logan Ave., Weston, Winnipeg.	3 "	30	Gorman, Eckert Co., London, Ont.	Mason & Hickey, Winnipeg.
DISTRICT OF ROCKY MOUNTAINS—							
Oct. 2	Catsup.....	49949	Bell Trading Co., Nelson, B. C.	3 bots.	60	Curtice Bros., Rochester, N. Y.	
" 2	"	49950	" " "	3 "	45	Imperial Spice Co., Hamilton.	
" 17	"	49984	Trites Wood Co., Fernie, B. C.	3 "	75	Kelowna Canning Co., Kelowna, B. C.	

CATSUP.

Inspector's Report. (Is not an expression of Opinion).	Results of Analysis.						Remarks.	No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Solids.	Preservatives.	Coal Tar Dyes.	Micro chemical Examination.					
				Percentage of microscopic fields examined showing molds.	Yeasts and spores per 1/2 c. min.	Bacteria per cc.			

Concluded.

	p. c.							
	21.40	Benzoic Acid.	Present.	25	28	21,600,000		50897
	18.32	"	None.	Traces..	2	2,400,000		50898
	32.12	None.	"	5	14	9,600,000		50899

JNO. TALBOT, INSPECTOR.

Rex Brand.	15.00	Benzoic Acid.	None.	Traces..	10	11,200,000		54407
Canada First.	14.24	"	"	15	8	9,600,000		54430
Henz Tomato	31.50	None.	"	Traces..	12	26,000,000		54432
Rex Brand. Guaranteed Pure.	12.80	Benzoic Acid.	"	"	22	A few....		54436
Lea's Quality Tomato.	23.76	"	"	"	8	9,600,000		54440

A. C. LARIVIERE, INSPECTOR.

Tomato	20.39	None.	None.	Traces..	18	20,800,000		48971
"	21.10	Benzoic Acid.	Present.	10	8	A few....		48972
"	20.78	"	"	20	6	"		48973
Factory No 16.	31.42	None.	None.	5	12	4,800,000		48974
Tomato.	13.20	Benzoic Acid.	"	Traces..	8	7,300,000		48975

THOS. PARKER, INSPECTOR.

Blue Label.	22.52	Benzoic acid.	None.	traces.	8	24,000,000		49949
Champion	12.18	"	Present.	20	28	14,400,000		49950
Blue Funnell.	11.62	"	None.	traces.	98	12,000,000	Mostly yeast cells probably made from fermented fruit.	49984 Yeasts & spores too high.

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 ROCKY MOUNTAINS

1913.							
Oct.	17	Catsup.	49985	Trites Wood Co., Fernie, B. C.	3 bots.	75	Aylmer Canning Co., Aylmer, Ont
"	17	"	49986	"	3 "	75	Taylor & Pringle Co., Owen Sound

DISTRICT OF VICTORIA

Oct.	29	Catsup	57674	Windsor Grocery Co., 817 Govt. st., Victoria, B.C.	3 bots.	75	W. K. Houston & Co., Victoria, B. C.
"	29	"	57678	The West End Grocery Co., Ltd., 1002 Govt. st., Victoria, B. C.	3 "	1.05	Crosse & Blackwell, London, Eng.
"	29	"	57682	Fenerty Bros., Oak Bay Junction, Victoria, B. C.	3 "	90	H. J. Heinz & Co., Pittsburgh, U. S.
"	29	"	57687	James Adam, Cook and Mears sts., Victoria, B. C.	3 "	90	Curtice Bros. Co., Rochester, U. S.
Nov.	5	"	57690	H. O. Kirkham, 714 Fort st., Victoria, B. C.	3 "	90	The T. A. Snider Preserve Co., Cincinnati.

CATSUP.

Inspector's Report. (Is not an expression of Opinion.	Results of Analysis.						Remarks.	No. of Sample.	Remarks and Opinion of the Chief Analyst.
	Total Soluble.	Preservatives.	Coal Tar Dyes.	Micro-chemical Examination.					
				Percentage of microscopic fields examined showing molds.	Yeasts and spores per 1/2 c. mm.	Bacteria per cc.			

Concluded.

	p. c.							
Canada First	16.30	Ben-zoic Acid.	Pre-sent.	Traces.	12	7,200,000	.....	49985
T. & P.	10.70	"	"	25	24	7,200,000	.....	49986

D. O'SULLIVAN, INSPECTOR.

Queen City, Tomato.	14.04	Ben-zoic acid.	None.	traces.	12	9,600,000	.....	57674
Mushroom	14.04	None.	"	.....	.....	.....	.....	57678 Mushroom.
Heinz Tomato	32.52	"	"	traces.	8	6,000,000	.....	57682
Blue Label Tomato	23.00	Ben-zoic acid.	"	15	18	16,000,000	.....	57687
Snider's Tomato	21.40	None.	"	traces.	6	4,500,000	.....	57690

