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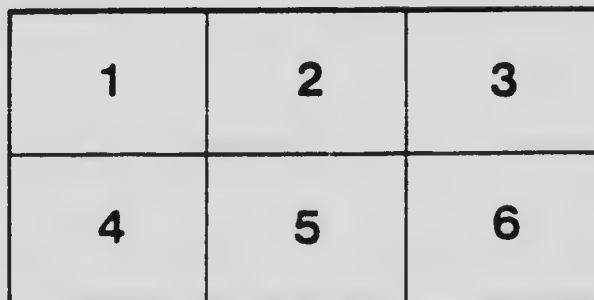
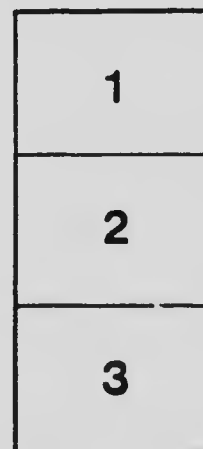
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O. H. M. S.

W. J. Gerald
Deputy Minister.

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA

BULLETIN No. 202.

Borax (Examination for Arsenic.)

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA

BULLETIN No. 202

Borax (Examination for Arsenic.)

OTTAWA, March 17, 1910.

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

SIR,—I beg to hand you herewith a report upon the examination of 151 samples of Borax collected throughout Canada in December last.

The inspection has regard to the contamination of this article by arsenic. Borax is very largely employed as a preservative for meats, butter, and other articles of food and it is consequently of great importance that it should be free from arsenic, or other dangerous impurity. One hundred and thirty-five (135) samples are found to be entirely free from arsenic. The remaining sixteen (16) samples contain the following amounts of arsenic (As_2O_3) per 100 grammes; also stated as parts per million.

No. of Sample.	Milligrammes per 100 grammes.	Parts per million.
42670.....	1.0	10
36659.....	0.5	5
42844.....	0.5	5
30867.....	0.5	5
42673.....	0.5	5
42689.....	0.5	5
43606.....	0.5	5
41622.....	0.5	5
36660.....	0.4	4
41407.....	0.4	4
42691.....	0.4	4
41784.....	0.3	3
41777.....	0.2	2
39589.....	0.2	2
42681.....	0.2	2
41624.....	0.2	2

The effective dose of arsenic named by the British Pharmacopoeia varies from 1 to 4 milligrammes. We possess no standard of purity for borax as regards arsenic, but it is safe to say that even the maximum amount found cannot be regarded as dangerous to health.

I have the honour to be, Sir,

Your obedient servant,

A. MCGILL,

Chief Analyst.

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Borax
food
other
to be
owing

BULLETIN No. 202—BORAX—EXAMINATION FOR ARSENIC.

Date of Collection.	Nature of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	Inspector's Report. (Is not an expression of opinion).	RESULTS OF ANALYSIS.	
			Quantity.	Cents.			Arsenic per 100 Grams.	No. of Sample.

DISTRICT OF NOVA SCOTIA—R. J. WAUGH, INSPECTOR.

1902.								
Dec.	6 Borax	Nat. Drug and Chem. Co., Halifax, N.S.	1 lb.	8	Am. Alkali Co.	20th Century crystals.	None.	41776
"	"	C. E. Huggins, Halifax, N.S.	1 "	10	Nat. Drug and Chem. Co., Halifax, N.S.	Crystals.	0.2 Milligrams.	41777
"	"	M. P. Caffrey, Halifax, N.S.	1 "	10	"	"	None.	41778
"	"	M. D. Logan, Halifax, N.S.	1 "	15	"	"	"	41779
"	"	Irwin & Sons, Halifax, N.S.	1 "	35	E. Merck, Darmstadt, Ger.	C. P. powdered.	"	41780
"	"	J. St. C. Coombs, Halifax, N.S.	1 "	20	Nat. Drug and Chem. Co., Halifax, N.S.	Powdered.	"	41781
"	"	Truro Drug Store, Truro, N.S.	1 "	15	Black & Co., Truro, N.S.	"	"	41782
"	10 "	Black & Co., Truro, N.S.	1 "	8	W. T. Cox, Montreal, P. Q.	"	0.3 Milligrams.	41784
"	10 "	D. Day, Wolfville, N.S.	1 "	10	Nat. Drug and Chem. Co., Halifax, N.S.	Powdered.	"	41785
"	13 "	A. V. Rand, Wolfville, N.S.	1 "	15	"	Crystals.	None.	41787

DISTRICT OF PRINCE EDWARD ISLAND—THEO. MOORE, INSPECTOR.

Dec.	7 Borax	A. A. McDonald, Souris	1 lb.	10	Nat. Drug and Chem. Co., Halifax, N.S.	"	None.	38573
"	"	J. C. Ferguson, Souris	1 "	15	"	"	"	38574
"	"	Johnson & Johnson, Charlotte-town, P. E. I.	1 "	15	Lynans, Ltd., Montreal.	"	"	38575
"	"	A. W. Reddin, Charlotte-town, P. E. I.	1 "	15	Lynan & Son, Montreal.	"	"	38576

BULLETIN No. 202—BORAX—EXAMINATION FOR ARSENIC.

Date of Collection.	Nature of Sample.	No. of Sample.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Finisher as given by the Vendor.	Inspector's Report. (Is not an expression of opinion.)	RESULTS OF ANALYSIS.	
				Quantity.	Cents.			Arsenic per 100 Grams.	No. of Sample.
DISTRICT OF QUEBEC—E. BELAND, INSPECTOR—Continued.									
1909.								0.4	Milligrams.
Dec.	1 Borax	38660	J. M. Ouellet, St. Ansdue	1 lb.	15	Carrier fils, Levis			38660
"	"	38661	Urban Roy, St. Ansdue	1 "	15	"		None	38661
"	"	38662	J. B. Cadaret, St. Ansdue	1 "	15	Whiteal & Turner, Quebec		"	38662
"	"	38663	C. E. Royer, St. Claire	1 "	13	Lemieux fils, Quebec		"	38663
"	"	38664	Venerand Allaire, St. Leon de Standon.	1 "	15	Unknown		"	38664
"	"	38665	O. Gagnon, St. Leon de Stan-don.	1 "	30	Dr. Ed. Morin, Quebec		"	38665
"	"	38666	William Bernard, St. Rose	1 "	15	Unknown		"	38666
DISTRICT OF ST. HYACINTHE—J. C. ROULEAU, INSPECTOR.									
Dec.	6 Borax	38849	Aff. Plante, Sorel	2 pkts.	10	Pugsley, Diguau & Co., Toronto.		None	38849
"	"	38850	R. Duguay & Cie, La Baie	1 lb.	10	Hudson & Orsali, Montreal		"	38850
"	"	38851	G. Langlois, Verchers	1 "	14	L. Chaput fils & Cie, Montreal.		"	38851
"	"	38852	G. L. Elmes, Farnham	2 pkgs	14	The R. Creig Co., Ltd., Toronto.	"White-Swan"	"	38852
"	"	38853	A. McLean & Middle Bros., Danville.	3 "	15	Lynnans Ltd., Montreal		"	38853
"	"	38854	H. Roux, Danville	2 "	20	The Alph. Chem. Co., Berlin Moody's reliable powder and borax compound.		"	38854
"	"	38855	P. J. Girard, Richmond	2 "	20	The Pure Cold Mfg. Co., Toronto.		"	38855

BULLETIN No. 202—BORAX—EXAMINATION FOR ARSENIC.

Date of Collection.	Nature of Sample	No. of Samples	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	Inspector's Report (Is not an expression of opinion).	RESULTS OF ANALYSIS.	
				Quantity.	Cents.			Arsenic per 100 Grams.	No. of Samples.
DISTRICT OF OTTAWA—J. A. RICKEY, INSPECTOR— <i>Concluded.</i>									
Dec. 15	Borax	12843	C. H. Lewis, Ottawa.	1 lb.	12	Nat. Drug & Chem. Co., Ltd., Ottawa.	Crystals.	None.	12843
" 16	"	12844	J. A. Johnston, Smiths Falls.	1 "	20	Unknown.	Powdered	0.5 Milligrams	12844
" 17	"	12845	G. A. Aikin, Finch.	1 "	15	Nat. Drug & Chem. Co., Ltd., Ottawa.	Crystals.	None.	12845
DISTRICT OF KINGSTON—JAS. HOGAN, INSPECTOR.									
Nov. 20	Borax	12752	Nat. Drug Co., Kingston.	1 lb.	19	Unknown.		None.	12752
" 20	"	12753	A. P. Chown, Kingston	1 "	15	H. Skinner Co., Kingston.		"	12753
" 20	"	12754	C. S. Prouse, Kingston.	1 "	20	Unknown		"	12754
" 20	"	12755	G. Malwood, Kingston.	1 "	15	Nat. Drug Co.		"	12755
" 20	"	12756	T. L. Best, Kingston	1 "	20	Unknown		"	12756
Dec. 1	"	12757	D. Bleeker, Belleville.	1 "	15	"		"	12757
" 1	"	12758	W. H. A. Sample, Cobourg.	1 "	15	E. G. West, Toronto.		"	12758
" 1	"	12759	H. Mitchell, Port Hope	1 "	15	Lynan, Montreal.		"	12759
" 2	"	12760	W. Madill, Peterboro.	1 "	15	Unknown		"	12760
" 2	"	12761	Nugent Drug Co., Peterboro.	1 "	15	Drug Trading Co., Toronto.		"	12761

DISTRICT OF TORONTO—H. J. DAGIEL, INSPECTOR.

Dec.	1	Borax	41401	H. Poehlman, Collingwood.....	1 lb.	10	Young Winfield, Ltd., Ham- ilton.	Young's Im- proved pure Borax.	41401
"	"	"	41402	J. H. Brown, Thornbury.....	1 "	10	McLaren's, Ltd., Hamilton.	McLaren's invincible quality for as the high- est grade obtainable.	41402
"	"	"	41403	Geo. Dyce & Co., Meaford.....	1 "	10	The F. F. Dalley Co., Ltd., Hamilton.	Dalley's Clean really pure borax.	41403
"	"	"	41404	W. J. Ward, Owen Sound.....	1 "	10	Canada Spice & Grocery Co., Ltd., London, Ont.	"Crest" brand.	41404
"	"	"	41405	The Hennessy Drug Stores, Ltd., Hamilton.	1 "	10	The Nat. Drug & Chem. Co., Ltd., Hamilton.	"	41405
"	"	"	41406	Reliable Drug Stores, Duville	1 "	15	The Nat. Drug & Chem. Co., Ltd., Hamilton.	"	41406
"	"	"	41407	F. J. Brown, Port Colborne.....	1 "	15	The Dom. Drug Co., Ltd., Hamilton.	"	41407
"	"	"	41408	Chas. Collins, Welland.....	1 "	20	The Lyman Bros. Co., Ltd., Toronto.	0.1 Milligrams	41408
"	"	"	41409	W. F. Cantelon, Toronto.....	1 "	10	Drug Trading Co., Ltd., To- ronto.	None	41409
"	"	"	41410	J. W. Struthers, Toronto.....	1 "	15	Drug Trading Co., Ltd., To- ronto.	"	41410

DISTRICT OF LONDON T. KIDD, INSPECTOR.

Dec.	6	Borax	30867	J. Burgardes, Guelph.....	1 lb.	20	Nat. Drug Co., Toronto.	0.5	Milligrams	30867
"	"	"	30869	Beattie & Co., Guelph.....	5 pks	15	Winer & Co., Hamilton.	None	"	30869
"	"	"	30873	Mr. Petrie, Guelph.....	3 "	15	McArthur Cornell & Co., Montreal.	"	"	30873
"	"	"	30878	Roose Pharmacy, Berlin.....	1 lb.	20	Unknown	"	"	30878
"	"	"	30879	J. A. Monteth & Co., Stratford	3 pks	30	McLaren's, Hamilton	"	"	30879
"	"	"	30880	Barnsdale & Co., Stratford	3 "	15	Canada Spice & Grocery Co., London, Ont.	"	"	30880
"	"	"	30884	McCalla & Hank, Stratford	1 lb.	15	F. F. Dalley Co., Hamilton.	"	"	30884
"	"	"	30890	Mathew Williams, Seaforth	3 pks	15	Lyon Spice Co., London	"	"	30890
"	"	"	30891	Chas. Aberhart, Seaforth	1 lb.	20	Lyman Bros., Toronto.	"	"	30891
"	"	"	44703	Michael Klinghammer, Dublin	"	15	Gorman & Eckart, London	"	"	44703

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			Quantity.	Cents.			Arsenic per 100 Grams.		
1907.									
Dec.	6	Borax	1 lb.	20	Nat. Drug Co., Hamilton.	None	None	42656	
"	9	"	1 "	20	Saunderson & Percy, Toronto	"	"	42657	
"	9	"	1 "	20	Nat. Drug Co.	"	"	42661	
"	6	"	1 "	15	Nat. Drug Co., Hamilton	1.0 Milligrams	"	42670	
"	8	"	1 "	20	Unknown	0.5 "	"	42673	
"	8	"	1 "	10	"	None	"	42676	
"	9	"	1 "	15	G. Foster & Son, Brantford	0.2 Milligrams	"	42681	
"	9	"	1 "	20	Nat. Drug Co., London	0.5 "	"	42689	
"	10	"	1 "	15	"	None	"	42690	
"	10	"	1 "	20	"	0.4 Milligrams	"	42691	

DISTRICT OF WINDSOR—JNO. TALBOT, INSPECTOR.

DISTRICT OF MANITOBA—A. C. LARIVIERE, INSPECTOR.

Dec.	21	Borax	1 lb.	20	Martin, Bole Wynne Co., Winnipeg.	None	"	39841
"	21	"	1 "	20	Unknown	"	"	39842
"	21	"	1 "	15	The Bole Drug Co., Winnipeg	"	"	39843

"	"	"	"	38844	The Lincoln Park Drug Co., Winnipeg.	15	Unknown.	"	38844
"	"	"	"	38845	Gillespie & Campbell, Winnipeg.	25	"	"	38845
"	"	"	"	38846	Gibbs Drug Store, Selkirk.	15	Winer & Co., Hamilton.	"	38846
"	"	"	"	38847	R. H. Gilhuly, Selkirk.	15	Unknown.	"	38847
"	"	"	"	38848	S. S. Smith, Souris.	15	"	"	38848
"	"	"	"	38849	The Morton Drug Co., Souris.	20	The Bole Drug Co., Winnipeg.	"	38849
"	"	"	"	38850	D. E. Clements Drug Store, Brandon.	20	Unknown.	"	38850

DISTRICT OF CALGARY—R. W. FLETCHER, INSPECTOR.

Dec.	10	Barax	"	43601	B. F. Souch, Medicine Hat.	20	Nat. Drug and Chem. Co., Hamilton.	None.	43601
"	"	"	"	43602	F. M. Cawker, Medicine Hat.	25	Unknown.	"	43602
"	"	"	"	43603	C. S. Pringle, Medicine Hat.	20	Lynan & Sons, Montreal.	"	43603
"	"	"	"	43604	McCutcheon & McGill, Calgary.	20	Martin Bole Wynne, Winnipeg.	"	43604
"	"	"	"	43605	C. A. Wallace, Calgary.	20	Unknown.	"	43605
"	"	"	"	43606	Higinbotham & Co., Lethbridge.	20	"	0.5 Milligrams.	43606
"	"	"	"	43607	Alberta Drug and Ek. Co., Lethbridge.	20	"	None.	43607
1910.									
Jan.	4	"	"	43608	D. W. MacDonald Drug Co., Edmonton.	20	"	"	43608
"	"	"	"	43609	C. H. Graydon Drug Store, Edmonton.	20	Lynan's, Ltd., Montreal.	"	43609
"	"	"	"	43610	A. Archibald, Edmonton.	20	"	"	43610

DISTRICT OF VANCOUVER—J. F. POWER, INSPECTOR.

1909.	Dec.	8	Barax	37768	Mcdowell Atkins Watson Co., Vancouver.	25	Henderson Bros., Vancouver.	None.	37768
"	"	8	"	37769	Red Haven Drug Store, Vancouver.	35	"	"	37769

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Date of Collection.	Nature of Sample.	No. of Samples.	Name and Address of Vendor.	Cost.		Name and Address of Manufacturer or Furnisher as given by the Vendor.	Inspector's Report. (Is not an expression of opinion).	RESULTS OF ANALYSIS.	
				Quantity.	Cents.			Arsenic per 100 Grams.	Sample No.
Dec.	Borax	37770	Nelson's Drug Store, Vancouver.	1 lb.	25	Henderson Bros, Vancouver	None		37770
"	"	37771	W. E. Law, Vancouver	1 "	25	"	"		37771
"	"	37772	W. Ferguson & Co., Vancouver	1 "	30	"	"		37772
"	"	37773	McDuffie Bros., Vancouver	1 "	25	"	"		37773
"	"	37774	Red Cross Drug Store, Vancouver.	1 "	35	"	"		37774
"	"	37775	Henderson Bros., Ltd., Vancouver.	1 "	15	"	"		37775
"	"	37776	W. E. Law, Vancouver.	1 "	20	"	"		37776
"	"	37777	E. Shoff, Vancouver.	1 "	20	"	"		37777

DISTRICT OF VANCOUVER—J. F. POWER, INSPECTOR—Concluded.

DISTRICT OF VICTORIA—D. O'SULLIVAN, INSPECTOR.

Dec	Borax	41619	Wm. Jackson & Co., Victoria, B.C.	1 lb.	25	Henderson Bros., Ltd., Victoria, B.C.	None		41619
"	"	41620	D. E. Campbell, Victoria, B.C.	1 "	25	Lyncaut's, Ltd., Montreal	"		41620
"	"	41621	W. S. Terry, Victoria, B.C.	1 "	25	"	"		41621
"	"	41622	Wall & Co., Victoria, B.C.	1 "	25	Henderson Bros., Ltd., Victoria, B.C.	Pure powdered borax.	0.5 Milligrams.	41622

"	20	"	41623	Cyrus H. Lower, Victoria, B.C.	Victoria, 1	25	Lynan & Sons, Ltd., Mont- real.	None	41623	
"	20	"	41624	E. C. Drug Co., Ltd., Victoria, B.C.	Vic 1	25	Henderson Bros., Ltd., Vic- toria, B.C.	0 2 Milligrams	41624	
"	20	"	41625	Dean & Hiscocks, Victoria, B.C.	Victoria, 1	25	"	None	41625	
"	20	"	41626	F. J. Williams, Victoria, B.C.	Victoria, B.C. 1	25	"	"	41626	
"	20	"	41627	Thos. Shotbolt, Victoria, B.C.	Victoria, B.C. 1	25	Lynan's, Ltd., Montreal	"	41627	
"	20	"	41628	Henderson Bros., Victoria, B.C.	Vic. 1	25	Henderson Bros., Ltd., Vic- toria, B.C.	"	41628	

