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STATISTICS STATISTIQUE  
CANADA CANADA

DEPARTMENT OF TRADE AND COMMERCE  
DOMINION BUREAU OF STATISTICS  
MINING, METALLURGICAL AND CHEMICAL BRANCH  
OTTAWA - CANADA

SEP 13 2009

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LIME, 1934

Sales of lime by Canadian producers in 1934, including both quick and hydrated, and inclusive of lime used by producers, amounted to 368,113 short tons valued at \$2,745,797 as compared with 323,540 short tons worth \$2,432,306 in 1933. The 1934 output represents an increase over 1933 of 13.8 per cent in quantity and 12.9 per cent in value. The tonnage produced in 1934 is the largest since 1930 and the pronounced increase in sales especially for building purposes reflects the increasing activities in the various spheres of construction.

The consumption of lime for chemical purposes is a factor of increasing importance in the Canadian lime industry as evidenced by a tonnage of 229,906 reported as sold or used for chemical processes in 1934, this quantity comprises 62.4 per cent of the total lime sales and includes 94,216 tons for pulp and paper mills, 26,170 tons for the cyaniding of ores in the gold mining industry, 17,140 tons for use in iron and steel mills and 92,380 tons for sugar refining, glass manufacture, etc.

Ontario and Quebec are the two most important lime producing provinces and of the total tonnage recorded for 1934 the former province contributed 191,041 or 51.9 per cent and Quebec 108,690 tons or 29.5 per cent. Quick lime at 308,122 tons and hydrated at 59,991 tons constituted 83.7 per cent and 16.3 per cent respectively of the total lime output in 1934.

Producers received in 1934 an average of \$7.26 per ton for quicklime and \$8.46 per ton for hydrated lime as compared with \$7.30 for quicklime and \$9.14 for hydrated in the preceding year.

In 1934 the Canadian lime industries employed \$8,497,895 in capital, paid \$535,492 in salaries and wages to 737 employees and consumed fuel and electricity to the value of \$606,335. The value for fuel and electricity included \$173,350 for Canadian bituminous coal, \$194,568 for imported bituminous coal and \$113,220 for wood.

"The value of hydrated lime for use as a finishing plaster depends in large measure on that property, variously called plasticity, workability or fatness which allows it to spread readily under the trowel without tearing or rolling, to give smooth uniform surface. In this respect magnesian or dolomitic hydrates are usually superior to those high in calcium although the latter, other things being equal, are superior when slaked with an excess of water and used without being dried. The possibility of improving the properties of hydrated high-calcium lime to render it as valuable as dolomitic material for plaster finishing has long been of interest to owners of small lime plants, and indeed to those of many larger ones to whom dolomitic stone is not readily available. Attempts have been made by various investigators to improve hydrated lime through the addition of chemicals to the limestone, to the quicklime or to the dry hydrate. Though certain improvements have been reported, no treatment of this kind, as far as the authors are aware, is being used commercially. It was considered that an

ideal admixture would be a material which would precipitate an artificial gel around the lime particles. This suggested the possibility of using aluminium sulphate ---. Qualitative trials made in the laboratory indicated that the proposal was technically feasible. It appeared, however, that an amount approaching 10 per cent of the weight of a high-calcium hydrate would be necessary in many cases to give sufficient improvement--owing, however, to the receipt of repeated inquiries by this laboratory from manufacturers interested in the improvement of their product and a considerable reduction in the market price of aluminium sulphate, the matter was re-opened, and accurate experimental results were obtained." (a)

(a) Abstract from a paper by A.F. Gill and T.H. Way of the National Research Laboratories Ottawa.

Principal Statistics of the Lime Industry in Canada, 1932, 1933 and 1934.

	1932	1933	1934
Number of plants .....	60	60	58
Capital employed .....\$	6,823,949	8,920,042	8,497,895
Number of employees -			
On salary .....	70	65	62
On wages .....	607	631	675
Total .....	677	696	737
Salaries and wages -			
Salaries .....\$	106,150	85,861	82,983
Wages .....\$	468,922	394,972	452,509
Total .....\$	575,072	480,833	535,492
Cost of fuel and electricity .....\$	535,433	473,125	606,335
Selling value of products .....\$	2,394,537	2,432,306	2,745,797

Number of Wage-earners on Payroll or time record on the 15th of each Month or nearest representative date, 1932, 1933 and 1934.

Month	1932		1933		1934	
	Quarry	Kiln	Quarry	Kiln	Quarry	Kiln
January .....	193	330	202	274	247	337
February .....	199	348	185	247	259	339
March .....	230	375	209	265	252	332
April .....	254	406	218	326	259	360
May .....	283	381	305	367	337	442
June .....	259	376	337	380	337	440
July .....	292	393	361	408	311	425
August .....	281	345	350	375	279	390
September .....	265	346	339	366	311	399
October .....	246	385	323	390	330	418
November .....	223	348	288	350	263	396
December .....	196	260	273	308	233	341

Number of Firms, Employees, Salaries & Wages and Lime (quick & hydrated) Sold or Used by Provinces, 1933-34.

Province	Number of Firms	Number of Employees	Salaries and Wages	Production	
				Tons of lime Sold or Used	Value \$
1933					
New Brunswick /	7	84	71,055	20,763	164,946
Quebec	18	237	141,573	110,334	647,558
Ontario	19	189	135,338	146,193	1,227,197
Manitoba	3	93	61,639	18,032	167,640
Alberta	3	15	15,974	7,501	62,037
British Columbia	4	78	55,254	20,717	162,928
Canada	54	696	480,833	323,540	2,432,306
1934					
New Brunswick /	7	75	63,173	24,672	194,363
Quebec	17	272	175,225	108,690	631,984
Ontario	19	215	166,297	191,041	1,536,289
Manitoba	3	68	59,341	16,568	163,608
Alberta	3	20	20,065	7,455	65,697
British Columbia	4	87	51,391	19,687	153,856
Canada	53	737	535,492	368,113	2,745,797

/ Includes data relating to two firms in Nova Scotia.

Fuel and Electricity Used in the Lime Industry in Canada, 1933 and 1934.

Kind	Unit of measure	1933		1934	
		Quantity	Value \$	Quantity	Value \$
Bituminous coal - Canadian	short ton	21,593	120,885	29,144	173,350
Imported	short ton	27,795	126,097	40,156	194,568
Anthracite coal	short ton	110	558	65	324
Coke	short ton	10,096	64,286	10,035	66,580
Gasoline (excluding vehicle fuel)	Imp. gal.	4,120	889	7,738	1,492
Fuel oil and diesel oil	Imp. gal.	324,095	9,865	327,454	15,230
Wood	cord	35,677	110,601	39,467	113,220
Gas - Manufactured	M cu.ft.	1,300	780	-	-
Natural	M cu.ft.	-	-	1,450	840
Other fuel	xxx	-	208	-	-
Electricity purchased	K.W.H.	5,343,821	38,956	6,241,560	40,535
TOTAL	xxx	-	473,125	-	606,335

Electricity generated for own use in 1934 totalled 342,167 K.W.H.

Power Equipment Installation in Canadian Lime Plants, 1934.

	Number of Units	Total Horse Power
Steam engines and steam turbines	11	410
Diesel engines	3	329
Other internal combustion engines	16	321
Hydraulic water wheels	2	60
Electric motors	306	6,263
Boilers	25	1,795



Lime Sold or Used for Chemical and Other Purposes and Value of Contracts Awarded in Canada 1930-1934.

Year	Lime Sold or Used for Chemical Purposes		Lime Sold or Used for Building or other Non-chemical Purposes		Value of Construction Contracts Awarded in Canada(a) \$
	Tons	Value \$	Tons	Value \$	
	1930 .....	351,443	2,596,112	139,359	
1931 .....	231,837	1,637,319	112,948	1,127,096	315,482,000
1932 .....	255,472	1,758,898	65,178	635,639	132,872,400
1933 .....	235,810	1,664,946	87,730	767,360	97,289,800
1934 .....	229,906	1,598,906	138,207	1,146,891	125,811,500

(a) Compiled by McLean Building Reports Ltd.

Production of Lime in Canada, by Provinces, 1933, Showing Purposes for which Used or Sold.

		Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba and Alberta	British Columbia	CANADA
<u>QUICKLIME</u>							
Building trades -							
Finishing lime .....	ton	-	111	2,693	519	144	3,467
	\$	-	1,000	17,471	4,150	719	23,340
Masons' lime .....	ton	779	2,337	5,861	490	-	9,667
	\$	8,835	19,320	47,850	6,560	-	82,565
Sand-lime brick .....	ton	-	203	1,643	-	-	1,846
	\$	-	1,319	11,094	-	-	12,413
Agriculture .....	ton	345	110	32,561	-	-	33,016
	\$	4,250	700	243,677	-	-	248,627
<u>CHEMICAL -</u>							
Smelters .....	ton	-	250	1,261	4,620	1,110	7,241
	\$	-	2,625	7,029	39,988	9,513	59,155
Iron and steel mills ....	ton	3,325	285	9,569	-	-	13,179
	\$	24,270	2,445	65,988	-	-	92,703
Cyanide mills .....	ton	-	-	20,342	-	313	20,655
	\$	-	-	143,682	-	3,713	147,395
Pulp and paper mills ....	ton	4,283	39,846	2,096	8,844	13,277	68,346
	\$	33,461	215,770	12,980	58,456	110,805	431,472
Glass works .....	ton	-	-	5,672	63	-	5,735
	\$	-	-	56,233	505	-	56,738
Sugar refineries .....	ton	130	77	7,022	5,765	-	12,994
	\$	1,550	817	57,215	46,921	-	106,503
Tanneries .....	ton	-	624	2,056	-	-	2,680
	\$	-	4,173	13,793	-	-	17,966
Other chemical works ....	ton	-	41,546	34,933	154	-	76,633
	\$	-	257,546	325,496	1,297	-	584,339
Dealers - Uses Unspecified	ton	2,522	4,018	702	1,541	3,303	12,086
	\$	20,350	31,120	4,000	14,141	19,729	89,340
Other consumers .....	ton	-	333	49	-	-	382
	\$	-	2,768	398	-	-	3,166
<b>TOTAL QUICKLIME .....</b>	<b>ton</b>	<b>11,384</b>	<b>89,740</b>	<b>126,460</b>	<b>22,196</b>	<b>18,147</b>	<b>267,927</b>
	<b>\$</b>	<b>92,716</b>	<b>539,603</b>	<b>1,006,906</b>	<b>172,018</b>	<b>144,479</b>	<b>1,955,722</b>

Production of Lime in Canada, by Provinces, 1933, Showing Purposes for which Used or Sold. - Concluded.

		Nova Scotia and New Brunswick	Quebec	Ontario	Mani- toba and Al- berta	British Columbia	CANADA
<u>HYDRATED LIME</u>							
Building trades -							
Finishing lime .....	ton	5	125	13,851	3,337	-	17,318
	\$	60	1,125	163,543	57,659	-	222,387
Masons' lime .....	ton	163	117	3,417	-	-	3,697
	\$	1,605	877	33,356	-	-	35,838
Sand-lime brick .....	ton	-	-	387	-	-	387
	\$	-	-	3,675	-	-	3,675
Agriculture .....	ton	1,100	400	572	-	761	2,833
	\$	11,500	3,090	5,877	-	4,837	25,304
CHEMICAL -							
Smelters .....	ton	-	260	50	-	425	735
	\$	-	2,340	625	-	3,196	6,161
Iron and steel mills ...	ton	-	3	5	-	-	8
	\$	-	27	52	-	-	79
Cyanide mills .....	ton	-	-	25	-	3	28
	\$	-	-	200	-	23	223
Pulp and paper mills ...	ton	7,275	16,422	101	-	665	24,463
	\$	51,000	77,910	1,061	-	5,000	134,971
Glass works .....	ton	-	-	-	-	-	-
	\$	-	-	-	-	-	-
Sugar refineries .....	ton	25	-	-	-	-	25
	\$	215	-	-	-	-	215
Tanneries .....	ton	-	237	178	-	-	415
	\$	-	1,705	1,857	-	-	3,562
Other chemical works ...	ton	551	1,220	902	-	-	2,673
	\$	5,510	8,700	9,254	-	-	23,464
Dealers - Uses unspeci- fied .....	ton	260	1,631	245	-	716	2,852
	\$	2,340	10,867	791	-	5,393	19,391
Other consumers .....	ton	-	179	-	-	-	179
	\$	-	1,314	-	-	-	1,314
<hr/>							
TOTAL HYDRATED LIME ..	ton	9,379	20,594	19,733	3,337	2,570	55,613
	\$	72,230	107,955	220,291	57,659	18,449	476,584
<hr/>							
GRAND TOTAL .....	ton	20,763	110,334	146,193	25,533	20,717	323,540
	\$	164,946	647,558	1,227,197	229,677	162,928	2,432,306

Production of Lime in Canada, by Provinces, 1934, Showing Purposes for which Used or Sold.

		Nova Scotia and New Brunswick	Quebec	Ontario	Mani- toba and Al- berta	British Columbia	CANADA
<u>QUICKLIME</u>							
Building trades -							
Finishing lime .....	ton	-	1,518	3,384	1,613	-	6,515
	\$	-	13,969	21,305	14,614	-	49,888
Masons' lime .....	ton	1,210	1,929	9,690	1,394	-	14,223
	\$	12,018	15,694	66,649	14,214	-	108,575
Sand-lime brick .....	ton	-	1,249	2,321	-	-	3,570
	\$	-	7,261	16,912	-	-	24,173
Agriculture .....	ton	774	-	67,580	-	-	68,354
	\$	5,757	-	505,300	-	-	511,057
CHEMICAL -							
Smelters .....	ton	-	437	2,634	1,075	1,320	5,466
	\$	-	4,049	14,598	10,754	9,887	39,288
Iron and steel mills ...	ton	8,298	222	8,612	-	-	17,132
	\$	63,630	1,821	60,255	-	-	125,706
Cyanide mills .....	ton	-	-	19,479	4,126	483	24,088
	\$	-	-	135,957	33,645	5,250	174,852
Pulp and paper mills ...	ton	4,823	44,997	3,239	6,965	11,544	71,568
	\$	38,306	239,665	19,784	46,894	95,120	439,769
Glass works .....	ton	-	-	2,226	-	-	2,226
	\$	-	-	16,472	-	-	16,472
Sugar refineries .....	ton	185	20	3,198	4,708	-	8,111
	\$	1,500	140	47,573	40,000	-	89,213
Fertilizer .....	ton	-	-	22	-	-	22
	\$	-	-	154	-	-	154
Tanneries .....	ton	-	616	2,284	-	-	2,900
	\$	-	4,080	15,859	-	-	19,939
Insecticide .....	ton	-	-	725	-	-	725
	\$	-	-	5,075	-	-	5,075
Other chemical works ...	ton	-	29,170	40,088	113	-	69,371
	\$	-	189,779	339,036	938	-	529,753
Dealers - Uses Unspeci- fied .....	ton	1,957	4,680	3,235	163	3,374	13,409
	\$	18,551	33,180	22,029	2,159	25,271	101,190
Other consumers .....	ton	-	268	43	131	-	442
	\$	-	976	293	1,883	-	3,152
<b>TOTAL QUICKLIME .....</b>	<b>ton</b>	<b>17,247</b>	<b>85,106</b>	<b>168,760</b>	<b>20,288</b>	<b>16,721</b>	<b>308,122</b>
	<b>\$</b>	<b>139,762</b>	<b>510,614</b>	<b>1,287,251</b>	<b>165,101</b>	<b>135,528</b>	<b>2,238,256</b>

Production of Lime in Canada, by Provinces, 1934, Showing Purposes for which Used or Sold. - Concluded.

		Nova Scotia and New Brunswick	Quebec	Ontario	Mani- toba and Al- berta	British Columbia	CANADA
<u>HYDRATED LIME</u>							
Building trades -							
Finishing lime .....	ton	-	-	14,647	3,650	-	18,297
	\$	-	-	180,288	62,717	-	243,005
Masons' lime .....	ton	73	184	4,728	-	-	4,985
	\$	591	1,414	43,548	-	-	45,553
Sand-lime brick .....	ton	125	-	635	-	-	760
	\$	1,235	-	4,516	-	-	5,751
Agriculture .....	ton	800	1,086	575	-	1,404	3,865
	\$	7,800	6,100	5,419	-	8,676	27,995
CHEMICAL -							
Smelters .....	ton	-	320	102	-	325	747
	\$	-	2,100	918	-	2,008	5,026
Iron and steel mills .....	ton	-	-	8	-	-	8
	\$	-	-	72	-	-	72
Cyanide mills .....	ton	-	2,052	-	-	30	2,082
	\$	-	12,533	-	-	185	12,718
Pulp and paper mills .....	ton	5,850	16,362	110	-	326	22,648
	\$	40,950	75,455	990	-	2,014	119,409
Glass works .....	ton	-	100	-	-	-	100
	\$	-	510	-	-	-	510
Sugar refineries .....	ton	8	311	-	-	-	319
	\$	72	1,913	-	-	-	1,985
Fertilizer .....	ton	-	-	152	-	-	152
	\$	-	-	1,368	-	-	1,368
Tanneries .....	ton	-	150	257	-	-	407
	\$	-	940	2,313	-	-	3,253
Insecticide .....	ton	569	5	245	-	-	819
	\$	3,953	20	2,205	-	-	6,178
Other chemical works .....	ton	-	884	46	85	-	1,015
	\$	-	6,262	417	1,487	-	8,166
Dealers - Uses unspeci- fied .....	ton	-	2,087	776	-	881	3,744
	\$	-	13,613	6,984	-	5,445	26,042
Other consumers .....	ton	-	43	-	-	-	43
	\$	-	510	-	-	-	510
TOTAL HYDRATED LIME ...	ton	7,425	23,584	22,281	3,735	2,966	59,991
	\$	54,601	121,370	249,038	64,204	18,328	507,541
GRAND TOTAL .....	ton	24,672	108,690	191,041	24,023	19,687	368,113
	\$	194,363	631,984	1,536,289	229,305	153,856	2,745,797



Imports into Canada and Exports of Lime and Various Lime Compounds, 1933 and 1934.

	1 9 3 3		1 9 3 4	
	Quantity	Value	Quantity	Value
		\$		\$
<u>IMPORTS -</u>				
Lime .....	Cwt. 5,448	4,444	6,543	5,118
Calcium chloride in packages of not less than 25 pounds .....	lb. 5,788,300	56,758	6,634,500	66,957
Calcium chloride in packages of less than 25 pounds .....	lb. 479	158	460	107
Calcium chloride not in solution for road treating purposes .....	lb. 28,095,700	319,683	44,940,900	480,623
Calcium arsenate .....	lb. 287,420	17,426	165,077	9,123
Chloride of lime and hypochlorite of lime in packages not less than 25 pounds .....	lb. 4,346,500	68,681	4,585,300	75,500
Chloride of lime and hypochlorite of lime in packages of less than 25 pounds .....	lb. 61,899	8,020	57,293	6,048
<u>EXPORTS -</u>				
Lime .....	cwt. 207,786	192,029	213,491	151,983
Acetate of lime .....	cwt. 8,958	20,252	30,754	53,245



OPERATORS IN CANADIAN LIME INDUSTRY, 1934.

<u>Name of Operator</u>	<u>Head Office</u>	<u>Plant Location</u>
<u>NOVA SCOTIA -</u>		
Dominion Steel & Coal Corp. Ltd.	Sydney	Sydney
Eastern Lime Co. Ltd.	Windsor	Windsor
<u>NEW BRUNSWICK -</u>		
Bathurst Power and Paper Co. Ltd.	Bathurst	Bathurst
Purdy & Green, Ltd.	323 Main St., Saint John	Saint John
Randolph & Baker, Ltd.	Randolph	Randolph
Saint John Lime Co.	Brookville	Brookville
Snowflake Lime Ltd.	3 Pokiok Road, Saint John	Saint John
<u>QUEBEC -</u>		
Arnaud & Beaudry	Joliette	Joliette
Boivin, Arthur	Pont Rouge	Pont Rouge
Canada Lime Products Co.	7403 Drolet St., Montreal	Cap St. Martin
Canada Lime & Stone, Ltd.	St. Marc des Carrières	St. Marc des Carrières
Dominion Lime Co.	Lime Ridge	Lime Ridge
Filion, Narcisse	St. Joachim	St. Joachim
Gagne, Octave	St. Ulric	St. Ulric
Heon and Heon	St. Louis de Champlain	St. Louis de Champlain
Laurentian Stone Co. Ltd.	195 Nicholas St., Ottawa	Hull
Lalumière, Joseph	St. Dominique de Bagot	St. Dominique de Bagot
Limoges, Henri	552 Poupart St., Montreal	Montreal
Mercure, C.	9 rue St. Denis, St. Hyacinthe	St. Dominique Bagot Co.
Montreal Lime Co. Ltd.	St. Marc des Carrières	Ville St. Michel
National Stone & Lime Co. Reg'd.	386 rue Lemoine, Montreal	St. Marc des Carrières
Shawinigan Chemicals Ltd.	Power Bldg., Montreal	Shawinigan Falls
Standard Lime Co. Ltd.	Joliette	Joliette, St. Marc des Carrières
Trottier, David	St. Marc des Carrières	St. Marc des Carrières
<u>ONTARIO -</u>		
American Cyanamid Co.	30 Rockefeller Plaza, New York City, U.S.A.	Niagara Falls
Bell, Harry	R. R. 4, Chesley	Grey county
Brown's Lime Works	491-9th Ave. E., Owen Sound	Owen Sound
Brunner, Mond Canada, Limited	Canadian Bank of Commerce Bldg., Toronto	Amherstburg
Cameron, W. M.	Carleton Place	Carleton Place

OPERATORS IN CANADIAN LIME INDUSTRY, 1934. - Concluded.

<u>Name of Operator</u>	<u>Head Office</u>	<u>Plant Location</u>
<u>ONTARIO - Concluded.</u>		
Canada & Dominion Sugar Co. Ltd.	Chatham	Chatham and Wallaceburg
Canada Lime Co. Ltd.	114 Cluny Drive, Toronto	Coboconk
Canadian Gypsum Co. Ltd.	Windsor, N.S.	Guelph
Chalmers Lime Works	Owen Sound	Owen Sound
Dominion Rock Products Ltd.	941 Dominion Square Bldg., Montreal, P.Q.	Eganville
Gallagher Lime & Stone Co. Ltd.	Upper James St., Hamilton	Barton twp.
Gypsum, Lime & Alabastine, Canada, Ltd.	Paris	Oxford twp. Oxford Co. GlenChristie, Massagaweya Tp.
Innerkip Lime & Stone Co. Ltd.	Beachville	Beachville
Jamieson Lime Co.	Renfrew	Renfrew
Morris, Stanley	Delta	Delta
Rockwood Lime Co.	Rockwood	Eramosa, Conc. 5.
Shane Lime Co.	Eganville	Eganville
Toronto Brick Co. Ltd.	897 Bay St., Toronto	Coboconk
Weppler, Henry	Priceville	Grey county
<u>MANITOBA -</u>		
Gillis Quarries Ltd.	Spruce and Richard Sts., Winnipeg	Winnipeg
Gypsum, Lime & Alabastine, Canada, Ltd.	Paris, Ont.	Winnipeg
Winnipeg Supply & Fuel Co. Ltd.	812 Boyd Bldg., Winnipeg	Spearhill and Stonewall
<u>ALBERTA -</u>		
Canadian Sugar Factories Ltd.	Raymond	Raymond
Loder's Lime Co. Ltd.	Kananaskis	Kananaskis
Summit Lime Works	Box 273, Lethbridge	S $\frac{1}{2}$ Sec. 7 Tp. 8 R. 5, W 5th
<u>BRITISH COLUMBIA -</u>		
Lyon, F.	Hedley	Hedley
Pacific Mills Ltd.	Ft. Raymur Ave., Vancouver	Ocean Falls
Pacific Lime Co. Ltd.	744 West Hastings St., Vancouver	Blubber Bay
Reno Gold Mines Ltd.	Yorkshire Bldg., Vancouver	Salmo





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