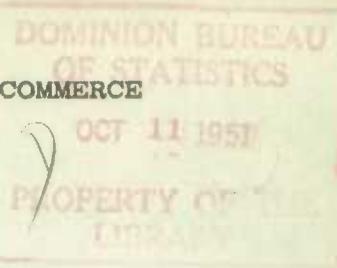


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DOMINION BUREAU OF STATISTICS — DEPARTMENT OF TRADE AND COMMERCE
CANADA



THE SALT INDUSTRY
1950

Published by Authority of the RT. HON. C. D. HOWE
Minister of Trade and Commerce

Prepared in the Mining, Metallurgical and Chemical Section
Industry and Merchandising Division
Dominion Bureau of Statistics, Ottawa

NOTICE

It has been the practice of the Bureau of Statistics, since 1920, to issue an annual printed report on the Mineral Production of Canada. This report was comprised to a large extent of the data which had already been issued in bulletin form as statistics for each industry were completed. The final report was necessarily late in being issued, and its main use was for library purposes and for historical research. It also had the advantage of having complete statistics of the Canadian Mining Industry for a year in one volume.

Such a procedure necessitated the preparation of new manuscript, duplication of proof-reading, and extra costs in type-setting and printing. In order to avoid this extra cost, a system has been devised whereby libraries and other similar organizations may file the separate reports in a ring binder as issued, and if they so desire, may have them bound in a volume when the series for the year is complete.

The reports have been paged in such a manner that when bound they will correspond to the chapters of the annual printed report hitherto issued, but which has been discontinued.

The following reports will constitute the complete volume on Mineral Statistics of Canada:

- A General Review of the Mining Industry, 25¢.
- B The Gold Mining Industry, 50¢.
- C The Silver-Lead-Zinc Mining Industry, 30¢.
- D The Nickel-Copper Mining, Smelting and Refining Industry, 25¢.
- E The Miscellaneous Metal Mining Industry, 30¢.
- F The Non-ferrous Smelting and Refining Industry, 25¢.
- G The Coal Mining Industry, 75¢.
- H The Natural Gas and Crude Petroleum Industry, 25¢.
- I The Asbestos Mining Industry, 25¢.
- J The Feldspar and Quartz Mining Industry, 25¢.
- K The Gypsum Industry, 15¢.
- L The Peat Industry, 25¢.
- M The Salt Industry, 25¢.
- N The Talc and Soapstone Industry, 25¢.
- O The Miscellaneous Non-Metal Mining Industry, 30¢.
- P The Cement Manufacturing Industry, 25¢.
- Q The Clay and Clay Products Industry, 25¢.
- R The Lime Industry, 25¢.
- S The Sand and Gravel Industry, 25¢.
- T The Stone Industry, 35¢.
- U Contract Diamond Drilling in the Mining Industry, 25¢.

THE SALT INDUSTRY

1950

Producers' shipments of common salt or natural sodium chloride during 1950 amounted to 858,896 tons valued at \$7,011,306 f.o.b. works (excluding cost of containers) compared with 749,015 tons worth \$5,566,725 in the preceding year. About 81 per cent of the salt was produced in Ontario, and 12 per cent in Nova Scotia; the remainder originated in Alberta, Saskatchewan and Manitoba.

About 66 per cent of the output, or 405,400 tons of salt in brine and 52,634 tons dry salt, was used in the producers' own plants for the manufacture of caustic soda, soda ash, chlorine and other chemicals. The sales of salt included 290,538 tons of fine vacuum grade, 9,869 tons of coarse grainer grade, 57,068 tons of rock salt and 43,387 tons of dry salt recovered in chemical operations.

The addition of the Dow Chemical of Canada to the industry in 1950 raised the number of operating plants to 13, but in July the number declined again to 12 due to the closing of Industrials Minerals Limited plant at Waterways, Alberta.

The industry employed 643 persons to whom \$1,521,593 were paid in salaries and wages. Fuel and electricity cost \$837,453, this including 7,806,607 k.w.h. of purchased electricity at a cost of \$51,855. Process supplies cost \$254,350 and containers cost \$1,054,758.

Exports of salt in 1950 totalled 4,100 tons valued at \$52,974 and imports amounted to 238,239 tons valued at \$1,734,363. The apparent consumption of salt in Canada for all purposes computed from production plus imports less exports, totalled 1,412,687 tons valued at \$8,692,695.

TABLE 1. Principal statistics for the salt industry, 1941-1950

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity at works	Cost of process supplies and containers	Gross value of products shipped ¹ during year, including containers (f.o.b. works)
						\$
	No.	No.	\$	\$	\$	\$
1941.....	9	668	1,018,652	450,291	725,675	3,852,499
1942.....	9	675	1,114,574	536,649	882,599	4,593,003
1943.....	9	682	1,223,009	596,252	943,522	5,188,628
1944.....	9	710	1,302,143	652,126	846,298	4,786,064
1945.....	9	724	1,260,769	670,187	953,054	4,864,097
1946.....	9	713	918,566	597,112	993,304	4,480,839
1947.....	10	700	1,399,693	771,916	1,100,923	5,366,032
1948.....	11	673	1,367,353	822,066	1,240,616	5,828,467
1949.....	12	698	1,565,210	699,443	1,205,317	6,621,483
1950.....	13	643	1,521,593	837,453	1,343,157	8,100,113

1. Includes brine and dry salt used in producers' own associated plants.

TABLE 2. Production and shipments¹ of salt, 1949 and 1950

	1949			1950		
	Production	Shipments		Production	Shipments	
		Quantity	Value, excluding containers		Quantity	Value, excluding containers
	tons	tons	\$	tons	tons	\$
Fine vacuum salt	269,320	265,959	4,149,240	291,769	290,533	4,816,077
Coarse grainer salt	11,021	11,437	264,035	9,493	9,869	273,919
Mined rock salt	42,410	43,303	380,695	55,169	57,068	438,155
Salt recovered in chemical operations	48,535	48,618	223,087	44,379	43,387	178,441
Salt used or shipped to producers' own chemical works for the manufacture of chemicals (not elsewhere specified)	29,977	29,977	196,974	52,641	52,634	359,607
Total dry salt	401,263	399,294	5,214,031	453,451	453,496	6,066,199
Salt content of brines used and shipped	349,721	349,721	352,694	405,400	405,400	945,107
Total salt and salt content of brine	730,984	749,015	5,566,725	858,851	858,896	7,011,306
Value of containers	-	-	1,054,758	-	-	1,088,807
Total value including containers	-	-	6,621,483	-	-	8,100,113

1. Includes brine and dry salt used in producers' own associated plants.

MINERAL STATISTICS OF CANADA

TABLE 3. Shipments of salt by producers, 1941-1950

Year	Tons	\$	Year	Tons	\$
1941	560,845	3,196,165	1946	537,985	3,626,165
1942	653,672	3,844,187	1947	728,545	4,436,930
1943	687,686	4,379,378	1948	741,261	4,836,028
1944	695,217	4,074,021	1949	749,015	5,566,725
1945	673,076	4,054,720	1950	858,896	7,011,306

TABLE 4. Producers' shipments of salt, by provinces, 1941-1950

Year	Nova Scotia		Ontario		Manitoba		Saskatchewan		Alberta	
	Tons	\$	Tons	\$	Tons	\$	Tons	\$	Tons	\$
1941	54,007	307,637	477,170	2,512,166	13,051	115,367	—	—	16,617	260,995
1942	50,199	317,798	558,407	2,793,328	22,706	397,101	—	—	22,360	335,960
1943	47,775	245,157	594,889	3,356,870	27,523	497,227	—	—	17,499	280,124
1944	38,809	281,482	603,806	2,906,117	27,267	488,776	—	—	25,335	397,646
1945	37,825	254,138	578,697	2,920,973	27,133	449,561	—	—	29,421	430,048
1946	38,371	329,579	441,679	2,408,279	26,166	446,472	—	—	31,769	441,835
1947	40,107	416,332	633,766	3,132,165	24,974	449,608	—	—	29,698	438,825
1948	61,799	700,164	619,598	3,265,654	25,251	420,430	—	—	34,613	449,780
1949	86,612	1,030,126	607,206	3,477,583	18,734	367,186	8,104	144,526	28,359	547,304
1950	101,930	1,080,154	696,582	4,639,867	16,592	378,297	18,186	373,701	25,606	539,287

TABLE 5. Salt used by producers for manufacture of chemicals, 1941-1950

Year	Quantity tons	Per cent of total salt output	Year	Quantity tons	Per cent of total salt output
1941	258,711	46	1946	247,911	46
1942	327,548	50	1947	401,491	55
1943	346,145	50	1948	370,701	50
1944	370,199	53	1949	379,698	51
1945	348,488	52	1950	458,034	53

TABLE 6. Producers' shipments of salt, by months 1948-1950

Month	1948	1949	1950	Month	1948	1949	1950
	tons	tons	tons		tons	tons	tons
January	53,282	61,041	60,405	July	67,898	65,133	66,811
February	53,434	55,640	62,959	August	65,371	64,660	67,516
March	53,792	50,794	66,815	September	63,968	72,171	81,895
April	57,166	53,398	60,488	October	68,817	68,563	82,198
May	61,090	60,430	70,528	November	69,577	70,123	84,637
June	63,844	65,983	77,387	December	63,022	61,079	77,237
				Total	741,261	749,015	858,896

THE SALT INDUSTRY

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TABLE 7. Consumption of Salt in Specified Canadian Industries 1948 and 1949

Industry	1948		1949	
	Quantity used	Cost at works	Quantity used	Cost at works
			lb.	\$
Acids, alkalies and salts: Brine (salt content)	577,815,430	268,917	615,726,000	307,663 ¹
Dry salt	109,222,014	894,927	246,535,251	1,154,085
Abrasives: Artificial	560,000	3,915	824,000	5,849
Slaughtering and meat packing	113,217,864	829,966	95,451,519	728,349
Sausages and sausage casings	805,250	10,235	1,073,419	14,225
Animal oils and fats	370,000	2,066	210,000	1,897
Fish canning and curing (factories only)	58,635,000	610,477	60,231,800	632,488
Foods, breakfast	1,409,934	13,300	1,559,967	15,351
Biscuits, confectionery, etc.	2,144,092	26,525 ¹	2,229,457	31,260
Bread and bakery products	20,965,912	256,729	20,449,963	263,292
Macaroni, vermicelli, etc.	176,245	1,999	57,966	697
Ice cream cones			Included in the Biscuit Industry	
Foods, miscellaneous, including coffee, tea, etc.	5,535,856	55,949	6,501,409	83,618
Butter and cheese	—	217,142	—	224,077
Cheese, processed	443,288	4,819	32,957	556
Condensed milk	—	1,178	—	2,883
Starch and glucose	635,165	3,484	748,361	4,247
Fruit and vegetable products	25,348,750	210,532	18,342,628	179,093
Breweries	1,523,705	18,100	1,925,418	29,080
Malt and malt products	378,624	3,154	305,100	3,059
Stock and poultry foods	29,512,000	261,721	30,798,000	303,186
Leather tanneries	17,563,250	110,758	15,739,638	114,782
Soaps and cleaning preparations	6,716,087	35,709	6,241,248	42,549
Dyeing, cleaning and laundry work			Not available	
Dyeing and finishing of textiles	3,978,768	40,089	4,719,267	44,497
Artificial ice	974,310	10,025	995,187	8,544
Waterworks	13,886,080	—	—	—
Pulp and paper mills	49,556,000	260,410	48,728,000	258,915
Dairy products, n.e.s.	2,750	31	—	—
Woollen goods, n.e.s.	—	3,639	—	10,083
Vegetable oils	17,042	301	10,370	170
Confectionery, cocoa, etc.	531,679	6,190	468,752	6,338
Miscellaneous chemicals	7,949,224	12,603	9,819,467	14,779

1. Biscuit industry only.

TABLE 8. World production of salt, by countries, 1946-1949 (From reports issued by the United States Bureau of Mines)

Country	1946	1947	1948	1949
	Metric tons	Metric tons	Metric tons	Metric tons
North America:				
Canada	488,781	672,697	672,457	680,137
Costa Rica	8,000	6,252	6,500	2
Guatemala	2	2	10,614 ³	11,962
Honduras	850	726	1,089	2
Mexico	131,972 ³	122,235	156,685 ³	2
Nicaragua	6,000 ³	7,503	9,475	10,230 ³
Panama	7,958	4,412	3,374	3,300 ³
Salvador	22,680	16,483	21,213	2
United States:				
Rock salt	3,095,305	3,405,874	3,489,782	3,146,105
Other salt	10,632,274	11,157,887	11,390,957	10,997,464
West Indies:				
Bahamas	36,580	60,960	63,000	60,960
Turks & Caicos Islands	31,571	—	38,610	2
Cuba	56,782	51,225	56,000 ³	2
Dominican Republic	15,750 ³	13,519	16,946	2
Haiti ³	8,000	8,000	8,000	2
Netherlands West Indies	2,017	217	482	2

MINERAL STATISTICS OF CANADA

TABLE 8. World production of salt, by countries, 1946-1949 (From reports issued by the United States Bureau of Mines)
Continued

Country	1946	1947	1948	1949
	Metric tons	Metric tons	Metric tons	Metric tons
South America:				
Argentina:				
Rock salt	2	2	2	2
Other salt	384,000	384,000	2	2
Brazil	609,198	562,570	781,378	2
Chile:				
Rock salt	52,093	54,289	47,164	2
Other salt	31,033 ³	28,001 ³	30,804 ³	2
Colombia	124,367	121,247	124,081	52,573 ⁴
Ecuador	35,070	24,943	23,000 ³	2
Peru	56,615	60,108	60,002	60,000
Venezuela	90,555	35,794	35,533	71,000
Europe:				
Austria:				
Rock salt	554	4,348	1,752	2
Other salt	168,150	183,764	197,615	2
Bulgaria:				
Rock salt	13,659	2		
Other salt	2	2	120,000 ³	2
Czechoslovakia ⁵	9,232	2	2	2
France:				
Rock salt and from springs	1,514,470	2,148,140	2	2
Other salt	476,750	467,410	2	2
Germany	1,541,228	1,731,000 ⁶	1,910,300 ⁶	1,966,000 ⁶
Greece	105,000	51,000	52,208	2
Italy	708,586	534,794	464,456	580,000 ³
Malta	1,402	1,631	1,869	2
Netherlands	180,241	240,579	250,417	331,000
Poland	280,099	619,770	726,774	800,000
Portugal:				
Rock salt	46	69	2	2
Other salt ⁷	82,974	25,071	2	2
Rumania:				
Rock salt	345,000	314,485	2	2
Spain:				
Rock salt	262,651	265,248	292,881	2
Other salt	510,121	569,343	696,600	2
Switzerland	92,089	95,435	112,218	2
Great Britain:				
Rock salt	20,819	40,639	2	2
Other salt	3,385,540	3,148,639	2	2
Ireland, Northern	13,474	12,603	13,245	2
Asia:				
Aden	114,856	197,672	275,408	308,302
Burma	56,000 ⁸	2	2	2
Ceylon	43,666	23,231	78,300	2
China ³	1,683,000	2,007,000	2,480,000	2,000,000
Cyprus	3,429 ⁹	15,622	2	2
Formosa	191,850	250,000 ³	360,000 ³	250,000
India:				
Rock salt	266,447	4,605	4,243	
Other salt	1,948,894	1,560,471	2,300,882	2,600,000 ³
Indo-China, French	14,735 ¹⁰	41,556	64,000	2
Indonesia	80,000	12,000	130,000	2
Iraq	9,512	12,635	14,000	2
Israel-Jordan:				
Rock salt	1,571	2,454	2	2
Other salt	23,163	12,567	2	2
Japan	358,946 ¹¹	247,466	339,668	395,676
Korea	152,000 ³	131,000 ³	89,979 ¹²	188,812 ¹²

TABLE 8. World production of salt, by countries, 1946-1949 (From reports issued by the United States Bureau of Mines)
Concluded

Country	1946	1947	1948	1949
	Metric tons	Metric tons	Metric tons	Metric tons
Asia — Concluded:				
Lebanon	2	2	2	2
Pakistan	13	13	156,378 ¹⁴	223,500 ¹⁴
Portuguese India ⁷	15,428	13,267	10,719	2
Syria	34,000 ³	30,000	30,000 ³	2
Thailand	137,601	2	2	2
Turkey:				
Rock salt	20,215	26,978		
Other salt	186,088	249,865	236,905 ³	263,000 ³
Africa:				
Algeria	66,570	76,682	13,038	2
Anglo-Egyptian Sudan	40,982	36,992	36,238	2
Angola	61,657	38,783	53,423	2
Belgian Congo	900 ³	900 ³	1,000 ³	2
Canary Islands	13,659	6,956	2	2
Cape Verde Islands	14,376	9,246	2	2
Egypt	226,090	622,629	359,823	343,416 ¹⁵
Eritrea	40,967	45,722	2	2
Ethiopia:				
Rock salt	10,000	10,000	2	2
French West Africa ³	55,000	2	2	2
French Morocco:				
Rock salt	8,570	10,480	15,566	34,100
Other salt	40,975	34,095	2	2
French Somaliland	45,000	48,000	60,000	60,000
Italian Somaliland (formerly)	114	715	2	2
Kenya	15,635	14,058	16,813	2
Libya:				
Cyrenaica	700	200	140	2
Tripolitania	2,350	3,000	6,000	2
Mauritius ³	3,165	3,991	2	2
Mozambique	7,210	8,663	2	2
Nigeria ³	2	2	2	2
South-West Africa:				
Rock salt	3,533	2,788	4,207	1,433 ¹⁵
Other salt	10,590	9,861	10,612	10,190 ¹⁵
Tanganyika	13,373	10,837	12,073	2
Tunisia	93,400	114,790	98,029	2
Uganda	5,679	7,003	7,011	2
Union of South Africa ¹⁶	143,677	2	2	2
Australia, South Australia	160,753	157,563	175,865	84,615 ⁴
Australia, other	2	2	88,308	2
Total, estimate	32,510,000	34,032,000	37,465,000	2

1. In addition to the countries listed, salt is produced in Afghanistan, Albania, Bolivia, British Somaliland, Gold Coast, Hungary, Iran, Leeward Islands, Madagascar, Philippines, Southern Rhodesia, U.S.S.R., Yugoslavia, but figures of production are not available. Russian production is known to exceed 4,000,000 tons annually. Estimates are included in the total.

2. Data not available.

3. Estimate.

4. January to June inclusive.

5. Excludes Sub-Carpathia, ceded to Hungary and U.S.S.R.

6. Bizonal area.

7. Exports.

8. January to April inclusive.

9. Incomplete data.

10. Cochin-China only.

11. Fiscal year ended March 31 of year following that stated.

12. South Korea only.

13. Included under India.

14. Punjab.

15. January to September, inclusive.

16. Fiscal year ended June 30 of year stated.

MINERAL STATISTICS OF CANADA

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TABLE 9. Production, Imports, Exports and Consumption of Salt, 1948-1950

	1948		1949		1950	
	Tons	\$	Tons	\$	Tons	\$
Production.....	741,261	4,836,028	749,015	5,566,725	8 58,896	7,011,306
Imports:						
Table salt.....	—	—	—	—	—	104
Salt, for the use of fisheries.....	29,312	179,805	83,254	548,032	57,580	395,787
Salt, in bulk, n.o.p.	138,527	688,116	137,185	779,034	157,753	961,034
Salt, n.o.p., in bags, barrels, etc.....	18,232	210,909	16,244	240,806	22,906	377,438
Total imports.....	186,071	1,078,830	236,683	1,567,872	238,239	1,734,363
Exports.....	5,630	127,104	3,472	63,015	4,100	52,974
Apparent consumption.....	921,702	5,787,754	982,226	7,197,612	1,412,687	8,692,695

TABLE 10. Employees and Their Earnings in the Salt Industry, 1946-1950

Year	Number of employees					Earnings		
	Administration		Workmen		Total employees	Administration	Workmen	Total
	Male	Female	Male	Female				
1946.....	43	26	577	67	713	207,532	711,034	918,566
1947.....	44	18	582	56	700	239,576	1,160,117	1,399,693
1948.....	63	19	546	45	673	198,349	1,169,004	1,367,353
1949.....	101	29	522	46	698	373,376	1,191,834	1,565,210
1950.....	59	24	487	43	643	328,189	1,193,404	1,521,593

Note. Administration employees include executives, superintendents, other working officials, and professional and clerical employees.

TABLE 11. Number of Workmen in the Salt Industry by Months, 1948-1950

Month	1948			1949			1950		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
January.....	521	47	568	519	46	565	468	42	510
February.....	516	46	562	531	46	577	478	42	520
March.....	443	44	487	538	48	586	487	44	531
April.....	542	48	590	559	45	605	481	39	520
May.....	546	43	589	549	37	586	489	43	532
June.....	550	34	584	522	38	560	483	43	526
July.....	607	35	642	513	46	559	511	44	555
August.....	609	49	658	532	49	581	494	42	536
September.....	577	48	625	525	54	580	507	47	554
October.....	568	48	616	500	51	551	493	47	540
November.....	541	44	585	489	48	537	507	46	553
December.....	529	41	570	482	45	527	470	39	509
Average.....	546	45	591	522	46	568	487	43	530

Directory of Firms in the Salt Industry, 1950

Name of firm	Head or executive office	Location of plant
Nova Scotia:		
Malagash Salt Co. Limited.....	196 Provost St., New Glasgow.....	Cumberland Co.
Dominion Tar & Chemical Co. Ltd.	Amherst.....	Nappan
Ontario:		
Brunner, Mond Canada, Ltd.	Canadian Bank of Commerce Bldg., Toronto.....	Essex Co.
Canadian Industries Limited.....	Box 10, Montreal, Quebec.....	Essex Co.
Dominion Tar & Chemical Co. Ltd.	2240 Sun Life Bldg., Montreal, Quebec.....	Sarnia and Goderich
Dow Chemical of Canada Ltd.	204 Richmond St. W., Toronto.....	Sarnia
Purity Flour Mills Ltd.	287 MacPherson Ave., Toronto.....	Goderich
Warwick Pure Salt Co. Ltd.	R.R. No. 5, Watford.....	Lambton Co.
Manitoba:		
Canadian Industries Ltd.	Box 10, Montreal, Quebec.....	Neepawa
Saskatchewan:		
Prairie Salt Co. Ltd.	2240 Sun Life Bldg., Montreal, Quebec.....	Unity
Alberta:		
Alberta Salt Co. Ltd.	Memorial Walk, Edmonton.....	Lindbergh
Dominion Tar & Chemical Co. Ltd.	2240 Sun Life Bldg., Montreal, Quebec.....	Waterways