

26-214



DOMINION BUREAU OF STATISTICS

— DEPARTMENT OF TRADE AND COMMERCE

CANADA

DOMINION BUREAU
OF STATISTICS

D SEP 20 1950

PROPERTY OF THE
LIBRARY

THE SALT INDUSTRY

1949

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 will now be discontinued.

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

- A General Review of the Mining Industry
- B The Gold Mining Industry
- C The Silver-Lead-Zinc Mining Industry
- D The Nickel-Copper Mining, Smelting and Refining Industry
- E The Miscellaneous Metal Mining Industry
- F The Non-ferrous Smelting and Refining Industry
- G The Coal Mining Industry
- H The Natural Gas and Crude Petroleum Industry
- I The Asbestos Mining Industry
- J The Feldspar and Quartz Mining Industry
- K The Gypsum Industry
- L The Peat Industry
- M The Salt Industry
- N The Talc and Soapstone Industry
- O The Miscellaneous Industrial or Non-metallic Minerals Mining Industry
- P The Cement Manufacturing Industry
- Q The Clay and Clay Products Industry
- R The Lime Industry
- S The Sand and Gravel Industry
- T The Stone Industry
- U Contract Diamond Drilling in the Mining Industry
- V Appendix — Explanatory notes on the method of computing the quantities and values of the Mineral Production of Canada

THE SALT INDUSTRY

1949

Producers' sales of common salt or natural sodium chloride in Canada during 1949 amounted to 749,015 tons valued at \$5,566,725, f.o.b. works (excluding cost of containers), compared with 741,261 tons worth \$4,836,028 in 1948. The six works in Ontario produced 81.1 per cent of the total tonnage, and the 2 plants in Nova Scotia accounted for 11.5 per cent. The remaining 7.4 per cent came from 2 wells in Alberta, 1 in Manitoba and 1 in Saskatchewan.

About one-half of the output, or 349,721 tons of brine and 29,977 tons of dry salt, was used in the producers' own plants for the manufacture of caustic soda, soda ash and other chemicals. The sales of salt included 265,959 tons of fine vacuum grade, 11,437 tons of coarse grainer grade, 43,303 tons of rock salt and 48,618 tons of salt recovered in chemical operations.

The Prairie Salt Co. Ltd. started producing salt early in the year at Unity, Saskatchewan. With this addition, the number of operating plants was raised to 12, and in 1949 they employed an average of 698 persons to whom \$1,565,210 were paid in salaries and wages. Fuel and electricity cost \$699,443, including an item of 6,415,114 k.w.h. of purchased electricity at a cost of \$41,728. Process supplies cost \$150,559 and the containers used were valued at \$1,054,758.

Exports of salt in 1949 totalled 3,472 tons valued at \$63,015. Imports at 236,683 tons were higher than in previous years as the salt used in Newfoundland fisheries was recorded in Canada's imports for the first time. The apparent consumption of salt in Canada in 1949 was 982,226 tons valued at \$7,197,612.

TABLE 1. Principal statistics for the salt industry, 1940-1949

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies and containers	Gross value of products sold during year, including containers (f.o.b. works)
	No.	No.	\$	\$	\$	\$
1940.....	9	586	836,506	321,589	539,179	3,322,250
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	4,786,084
1945.....	9	724	1,260,769	670,187	953,054	4,864,697
1946.....	9	713	913,566	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

TABLE 2. Production and shipments¹ of salt, 1948 and 1949

	1948			1949		
	Production	Shipments		Production	Shipments	
		Quantity	Value, excluding containers		Quantity	Value, excluding containers
	tons	tons	\$	tons	tons	\$
Fine vacuum salt	275,264	282,711	3,464,190	269,320	265,959	4,149,240
Coarse grainer salt	19,620	19,419	376,277	11,021	11,437	264,035
Mined rock salt	28,824	28,908	266,285	42,410	43,303	380,695
Salt recovered in chemical operations	42,200	42,522	186,278	48,535	48,618	223,087
Salt used or shipped to producers' own chemical works for the manufacture of chemicals (not elsewhere specified)	35,847	35,795	203,316	29,977	29,977	196,974
Total salt	401,755	406,355	4,496,346	401,263	399,294	5,214,031
Salt content of brines used and shipped.....	334,906	334,906	339,682	349,721	349,721	352,694
Total salt and salt content of brine	736,661	741,261	4,836,028	750,984	749,015	5,566,725
Value of containers.....	-	-	992,439	-	-	1,054,758
Total value including containers.....	-	-	5,828,467	-	-	6,621,483

1. Includes tonnage used by producers.

MINERAL PRODUCTION OF CANADA

TABLE 3. Shipments of salt by producers', 1940-1949

Year	Tons	\$	Year	Tons	\$
1940.....	464,714	2,823,269	1945	673,076	4,054,720
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

TABLE 4. Producers' shipments of salt, by provinces, 1940-1949

Year	Nova Scotia		Ontario		Manitoba		Alberta	
	Tons	\$	Tons	\$	Tons	\$	Tons	\$
1940.....	42,495	220,328	412,401	2,371,780	3,076	45,731	6,742	185,430
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	28,359	547,304

Note.—Shipments from Saskatchewan plant totalled 8,104 tons valued at \$144,526 in 1949.

TABLE 5. Salt used for manufacture of chemicals, 1940-1949

Year	Quantity tons	Per cent of total salt output	Year	Quantity tons	Per cent of total salt output
1940.....	224,009	48	1945	348,488	52
1941.....	258,711	46	1946	247,911	46
1942.....	327,548	50	1947	401,491	55
1943.....	346,145	50	1946	370,701	50
1944.....	370,199	53	1949	379,698	51

TABLE 6. Producers' shipments of salt, by months 1948 and 1949

Month	1948	1949	Month	1948	1949
	tons	tons		tons	tons
January	53,282	61,041	July	67,898	65,133
February	53,434	55,640	August.....	65,371	64,660
March	53,792	50,794	September.....	63,968	72,171
April	57,166	53,398	October.....	68,817	68,563
May	61,090	60,430	November	69,577	70,123
June	63,844	65,983	December	63,022	61,079
			Total.....	741,261	749,015

TABLE 7. Production imports, exports and consumption of salt, 1948 and 1949

	1948		1949	
	Tons	Value	Tons	Value
	\$	\$		
Production.....	741,261	4,836,028	749,015	5,566,725
Imports:				
Table salt.....	—	—	—	—
Salt, for the use of fisheries.....	29,312	179,805	83,254	548,032
Salt, in bulk, n.o.p.....	138,527	688,116	137,185	779,034
Salt, n.o.p., in bags, barrels, etc.....	18,232	210,909	16,244	240,806
Total imports.....	186,071	1,078,830	236,683	1,567,872
Exports.....	5,630	127,104	3,472	63,015
Apparent consumption.....	921,702	5,787,754	982,226	7,197,612

TABLE 8. Employees, salaries and wages in the salt industry, 1944-1949

Year	Number of employees				Total employees	Salaries	Wages	Total salaries and wages				
	On salaries		On wages									
	Male	Female	Male	Female								
1944.....	87	59	504	60	710	397,113	905,030	1,302,143				
1945.....	93	54	517	60	724	367,132	893,637	1,260,769				
	Administration		Workmen			Earnings						
						Administration	Workmen					
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				

TABLE 9. Number of workmen in the salt industry by months, 1948 and 1949

Month	1948			1949		
	Male	Female	Total	Male	Female	Total
January.....	521	47	568	519	46	565
February.....	516	46	562	531	46	577
March.....	443	44	487	538	48	586
April.....	542	48	590	559	46	605
May.....	546	43	589	549	37	586
June.....	550	34	584	522	38	560
July.....	607	35	642	513	46	559
August.....	609	49	658	532	49	581
September.....	577	48	625	526	54	580
October.....	568	48	616	500	51	551
November.....	541	44	585	489	48	537
December.....	529	41	570	482	45	527
Average.....	546	45	591	522	46	568

TABLE 10. World production of salt, by countries, 1945-1948 (U.S. Bureau of Mines)

Country	1945	1946	1947	1948
	Metric tons	Metric tons	Metric tons	Metric tons
North America:				
Canada	610,601	488,049	660,921	671,715
Costa Rica.....	6,033	8,000	6,252	6,500
Guatemala.....	12,600	2	2	2
Honduras	900	850	726	1,089
Mexico	130,380	131,972	122,235	156,685 ³
Nicaragua	6,000 ³	6,000 ³	7,503	9,475 ³
Panama.....	2,437	7,958	4,412	3,374
Salvador	18,004	22,680	16,483	21,213
United States:				
Rock salt.....	3,180,337	3,095,305	3,405,874	3,489,782
Other salt.....	10,784,920	10,632,274	11,157,887	11,390,657
West Indies:				
Bahamas.....	38,825	36,580	60,960	63,000
Turks & Caicos Islands	21,229	31,571	-	38,610
Cuba	63,504	58,967	54,431	55,330
Dominican Republic	15,100 ³	15,750 ³	13,519	16,946
Haiti ³	8,000	8,000	8,000	8,000
Netherlands West Indies.....	3,109	2,017	2	2
South America:				
Argentina:				
Rock salt.....	3,275	2	2	2
Other salt.....	433,116	384,000	384,000	2
Brazil.....	506,626	609,198	562,570	781,378
Chile:				
Rock salt.....	47,136 ³	52,093 ³	54,289 ³	47,164 ³
Other salt.....	30,655 ³	31,033 ³	28,001 ³	30,804 ³
Colombia:.....	105,072	124,367	121,247	124,081
Ecuador	27,600	35,070	24,943	23,000 ³
Peru.....	55,143	56,615	60,108	60,002
Venezuela.....	57,459	90,555	35,794	35,533
Europe:				
Austria:				
Rock salt.....	2	554	4,348	1,752
Other salt.....	82,648	168,150	183,764	197,615
Bulgaria:				
Rock salt.....	2	13,659	2	2
Other salt.....	2	-	2	2
Czechoslovakia ⁴	4,235	9,232	2	2
France:				
Rock salt.....	642,378	1,514,470	1,095,112	2
Other salt.....	514,038	476,750	2	2
Germany.....	2	1,541,228	1,731,000 ⁵	1,912,000 ⁵
Greece.....	90,000	105,000	51,000	52,208
Hungary	2,6	-	-	2
Italy.....	1,148,359	708,586	534,794	559,000 ³
Malta.....	3,350	1,402	1,631	2
Netherlands	53,600	2	243,000	250,417
Poland.....	2	280,099	619,770	725,774
Rumania:				
Rock salt	277,183	345,000	314,485	2
Spain:				
Rock salt.....	228,029	262,651	265,248	283,952
Other salt.....	562,453	510,121	569,343	2
Switzerland.....	81,113	93,000	95,435	100,200 ²
Great Britain:				
Rock salt.....	17,062	20,819	40,639	2
Other salt.....	3,268,083	3,385,540	3,148,639	2
Ireland, Northern.....	12,679	13,474	12,603	13,245

1. In addition to the countries listed, salt is produced in Albania, Bolivia, British Somaliland, Gold Coast, Leeward Islands, Madagascar, Pakistan, Republic of the Philippines, Portugal, Southern Rhodesia, U.S.S.R., Yugoslavia, and Australian States (Victoria and Western Australia) 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. Excludes Sub-Carpathia, ceded to Hungary and U.S.S.R.

5. Bizonal area.

6. Represents Trianon Hungary.

TABLE 10. World production of salt, by countries, 1945-1949 (U.S. Bureau of Mines) - Con.

Country	1945	1946	1947	1948
	Metric tons	Metric tons	Metric tons	Metric tons
Asia:				
Aden	142,191	114,856	197,672	275,408
Burma.....	2	56,000 ³	2	2
Ceylon.....	42,364	43,666	23,231	78,300
China	800,435 ⁴	2,267,345 ⁴	2,256,502	2,842,300 ³
Cyprus.....	2	3,429	15,622	2
Formosa.....	2	2	2	360,000 ³
India:				
Rock salt.....	256,366	266,447	1,560,471	2,377,951
Other salt.....	1,974,788	1,948,894		
Indo-china, French	2	2	2	64,000
Indonesia.....	2	130,000	27,000	360,000 ³
Iraq:				
Rock salt.....	2,521	2,521	2	2
Other salt.....	12,364	12,364	12,500 ³	2
Japan	193,845	358,946	247,466	318,979
Korea	63,200 ³	152,000 ³	131,000	89,979
Lebanon.....	6,959	2	2	2
Palestine and Israel	18,494	24,734	15,021	2
Portuguese India ⁵	9,146	15,428	13,267	10,719
Syria	12,000 ³	34,000 ³	30,000	2
Thailand	23,774	78,017	2	2
Turkey.....	271,496	225,917	278,742	236,905 ³
Africa:				
Algeria	49,969	66,570	76,682	2
Belgian Congo.....	900 ³	900 ³	900 ³	2
Canary Islands ³	2,500	2	2	2
Egypt	255,107	226,090	622,629	359,823
Eritrea.....	35,000 ³	140,000	2	2
Ethiopia:				
Rock salt.....	2	2	10,000	2
French West Africa ³	55,000	55,000	2	2
Kenya.....	15,491	15,635	14,058	2
Libya:				
Cyrenaica.....	2	700	200	140
Tripolitania	-	2,350	3,000	6,000
Maritius ³	1,500	2	2	2
Morocco, French	31,730	49,545	64,000	2
Nigeria ³	400	2	2	2
Portuguese East Africa	10	71	75	75
Portuguese West Africa	49,552	61,657	38,783	53,423
Somaliland:				
French.....	55,000	45,000	48,000	2
Italian	2	114	715	2
South-West Africa.....	13,249	14,123	12,649	14,819
Sudan, Anglo-Egyptian	44,471	40,982	71,916	2
Tanganyika.....	9,546	13,014	10,837	12,073
Tunisia.....	61,289	93,000	2	2
Uganda.....	2	5,679	7,003	6,900
Union of South Africa ³	120,000	2	2	2
Australia, South Australia.....	173,813	160,753	157,563	88,545
Total, estimate.....	34,984,000	38,335,000	38,751,000	42,488,000

1. In addition to the countries listed, salt is produced in Albania, Bolivia, British Somaliland, Gold Coast, Leeward Islands, Madagascar, Pakistan, Republic of the Philippines, Portugal, Southern Rhodesia, U.S.S.R., Yugoslavia, and Australian States (Victoria and Western Australia) 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. Data represents areas designated as "Free China" during the period of Japanese occupation.

5. Exports.



Directory of firms in the salt industry, 1949

Name of firm	Head or executive office	Location of plant
Nova Scotia:		
Malagash Salt Co. Limited	196 Provost St., New Glasgow.....	Cumberland Co.
Maritime Industries 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.
Goderich Salt Co. Ltd.	Box 577, Goderich	Goderich
Sifto Salt Co. Ltd.	2240 Sun Life Bldg., Montreal, Quebec	Sarnia
Warwick Pure Salt Co. Ltd.	R. R. #5, Watford	Lambton Co.
Purity Flour Mills Ltd.	287 MacPherson Ave., Toronto	Goderich
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
Industrial Minerals Ltd.	2240 Sun Life Bldg., Montreal, Quebec.....	Waterways