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CANADA

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

MINING, METALLURGICAL & CHEMICAL BRANCH

THE SALT INDUSTRY

IN

CANADA

1936



OTTAWA 1937

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

Dominion Statistician: R. H. Coats, LL.D., F.R.S.C., F.S.S. (Hon.) Chief - Mining, Metallurgical and Chemical Branch: W. H. Losee, B.Sc. Mining Statistician: R. J. McDowall, B.Sc.

SALT, 1936.

The quantity of salt produced in Canada during 1936 totalled 391,316 short tons valued at \$1,773,144 as compared with 360,343 short tons worth \$1,880,978 in 1935, according to finally revised statistics issued by the Dominion Bureau of Statistics at Ottewa. The tonnage produced in 1936 was the greatest ever recorded for the Canadian salt industry and increases over 1935 on the quantity shipped were realized for each particular grade. In 1936 salt was produced in Nova Scotia, Ontario and Manitoba, with the tonnage originating in Ontario comprising 89.5 per cent of the total Dominion output. Salt consumed in the manufacture of chemicals during 1936 totalled 165,882 short tons or approximately 42 per cent of the entire Canadian salt production.

The chemical industry is the largest single consumer of salt in Canada, there being 386,228,680 pounds of salt utilized during 1936 by manufacturers of acids, alkalies and salts; in the same year the slaughtering and meat packing industry used 70,680,249 pounds, and 53,532,600 pounds were employed in the canning and curing of fish. Relatively large quantities of the mineral were also consumed in the manufacture of soaps, in the dyeing and finishing of textiles, in pulp and paper mills, in tanneries, and in the making of biscuits, confectionery, sausages, malt products, etc.

Imports of salt into Canada in 1936 totalled 108,923 short tons valued at \$460,998. Of this quantity, 31,967 tons were classified as salt for use of sea or gulf fisheries. Exports of salt from the Dominion in 1936 amounted to 5,549 short tons appraised at \$46,601 and of this quantity 3,475 short tons were consigned to the United States, 738 tons to Newfoundland, and 882 tons to New Zealand. Imports of potash and potassium compounds in 1936 totalled 4,568,919 pounds valued at \$352,636; soda and sodium compounds, 87,841,053 pounds worth \$2,327,268; liquid chlorine, 6,296,562 pounds valued at \$133,570, and crude iodine, 65,318 pounds at \$61,357. Bromine salts imported into Canada in 1936 totalled only 845; pounds worth \$623.

The number of firms active in the production of salt in 1936 was eight; capital employed by these totalled \$3,856,187 and \$640,644 was disbursed as salaries and wages to 506 employees; of the wage-earners, 347 were recorded as male and 37 as female. The industry expended \$181,502 for fuel and electricity, \$31,195 for process supplies, and \$527,647 for packages or containers.

Salt production in Nova Scotia is confined to the output of the Malagash rock salt mine located on the Malagash Peninsula, Cumberland county. During the year under review underground work was mainly conducted on Nos. 13 and

15 levels above which the white salt was stoped by overhand methods, using a longwall undercutter; one of these machines also began stoping operations towards the end of the year on No. 24 level. The brine for the evaporator was still obtained from No. 4 level.

In Ontario, Manitoba and Saskatchewan, salt is obtained from brine wells. Production in Ontario comes entirely from the southern part of the province where in 1936 brines were processed by the Dominion Salt Co. Ltd., Goderich Salt Co. Ltd., Walker Salt Corp. Ltd., Warwick Pure Salt Co., Western Canada Flour Mills Co. Ltd., Canadian Industries Limited, and Brunner, Mond Canada, Limited.

Caustic soda, chlorine and hydrochloric acid are now manufactured by Canadian Industries Limited at its new plant located at Cornwall, Ontario. Salt consumed in this plant is obtained from the company's wells at Sandwich. The Brunner, Mond Canada, Limited, located at Amherstburg, Ontario, manufacture soda ash from brine; calcium chloride is also recovered as a by-product by this company.

At Neepawa in Manitoba, operations were conducted steadily throughout 1936 by Neepawa Salt Ltd., and the successful drilling of an additional brine well was reported. No salt production has been recorded for Saskatchewan since 1935 in which year shipments of the mineral were made by the Simpson Oil Co. Ltd. A well was drilled during 1936 at Waterways, Alberta, by Industrial Minerals Ltd. and almost 200 feet of pure salt was reported as being encountered at 694 feet from the surface; a plant for the production of salt from brine by direct-fired pans is being erected by this company.

In the Maritime Provinces extensive beds of salt are known to occur near Gautreau, New Brunswick, and near Amherst, in Cumberland county, Nova Scotia. It is also interesting to note that potassium chloride occurs in a number of definite bands in the salt deposit at Malagash, Nova Scotia.

The following information relating to the utilization of salt in highway construction is taken from a report issued by the Bureau of Mines, Ottawa: "Experiments have been carried on with encouraging results in Nova Scotia and elsewhere for the past few years to determine the effect of a mixture of salt with clay as a surface veneer and in the foundations of gravel highways, in order to decrease, if not entirely eliminate, the dust nuisance and heavy maintenance cost of such roads, and to form a hard wearing surface. matter is now being studied seriously not only by the salt producers in Canada, but by several of the provincial departments of highways, and during 1936 a number of stretches of road in Ontario were treated in this manner. stretches of road in Ontario treated by salt stabilization in 1935 have now been under traffic for over a year, including one winter season, and the results have been sufficiently encouraging to warrant further tests. Another interesting use is the mixing of salt with the sand piles placed at the side of the main highways in Ontario in order to keep the sand free-flowing for distributing on icy roads."

-3-

Table 1 - PRODUCTION OF	SALT IN C					
	1	9 3	5	1	9 3	
Grade	Manu-		Value of	Manu-		Value of
	factured	Sold	salt sold(x)	A REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN	the same of the last of the la	salt sold(x)
	Tons	Tons	\$	Tons	Tons	\$
Table, dairy and pressed						
blocks	. 72,210	73,704	990,222	77,428	76,567	
Common, fine	. 84,748	82,608	422,724	81,646	83,095	358,776
Common, coarse	. 23,057	22,014	181,543	27,477	28,162	218,176
Land salt	. 289	261	962	1,061	1,046	3,780
Other grades	. 32,488	36,323	140,094	38,364	36,564	159,315
Brine for chemical works						
(salt equivalent sold						
or used)	145,433	145,433	145,433	165,882	165,882	165,882
TOTAL		360,343	1,880,978	391,858	391,316	1,773,144
Value of containers	000	دده	492,050	300	- 00'0	527,647
GRAND TOTAL	358, 225	360,343	2,373,028	391,858	391,316	2,300,791
	AND REAL PROPERTY AND PERSONS ASSESSED.	0009010	2,0,0,000	322,300	0129020	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
(x) Not including contain						
Table 2 - PRODUCTION OF	SALT BY PI	ROVINCES	(x), $1926 - 1$	936。	8 16	
NOVA S	COTIA	ONTAI		MANITOBA	the state of the later of	ASKATCHEWAN
Year Tons	\$	Tons	\$	Tons	\$ To	ons \$
1926 8,165	68,781	252,345	1,388,672	000	000	000 000
1927 14,391	102,590	254,181	1,510,777	000	000	000 000
1928 19,604	118,342	279,841	1,377,629	000	000	000 000
1929 27,819	157,662	302,445	1,420,424	000	000	000
1930 23,058	136,226	248,637	1,558,405	000	200	000 000
1931 27,718	143,761	231,329	1,760,388	0 9 0	000	000
1932 31,897	150,708	231,138	1,789,751	508	7,092	000
1933 34,278	161,889	244,107	1,755,087	1,499 1	8,388	231 4,510
1934 42,886	191,917	276,751	1,734,196	1,664 2	0,137	452 8,703
1935 38,701	161,659	320,003	1,698,508	1,538 1	8,765	101 2,046
1936 38,774	183,915	350,044	1,557,078	*	0 3 53	000 000
(x) In addition, Alberta						
1926	00000000			\$ 22,6		
1927	0000000	osso tons	100	\$ 1,3	00	
Table 3 - TOTAL PRODUCTI	ON OF SAL	T IN CANA	ADA FOR YEARS	SPECIFI	ED_ 1886	1936。
				1 14 10 1		3125 121
Year Tons	\$		Year	T	ons	\$
						2 03 4 0 0 0
1886 62,359	227,195					1,614,667
1890 43,754	198,857				,	1,495,971
1895 52,376	160,455				-	1,578,086
1900 62,055	279,458				-	1,694,631
1905 67,340	320,858		1931			1,904,149
1910 84,092	409,624		1932			1,947,551
1915 119,900	600,226		1933	28	0,115	1,939,874
	,047,792		1934			1,954,953
	673,685		1935			1,880,978
	,480,149		1936 .			1,773,144
22.000	,					

Table 4 - SALT PRODUCED FOR CHEMICAL PURPOSES, 1925 - 1936	Table 4 -	SALT	PRODUCED.	FOR	CHEMICAL	PURPOSES,	1925 -	1936
--	-----------	------	-----------	-----	----------	-----------	--------	------

93,500 113,020 115,995	40 43
113,020	43
115 995	
TT0 0 2 2 2 2	43
	45
	51.
	42
,	38
,	37
*	37
	39
,	
145,433	40
165,882	42
	135,138 168,327 114,737 97,958 96,242 104,740 124,132 145,433 165,882

Table 5 - PRODUCTION OF SALT IN CANADA, BY GRADES, JANUARY 1 to JUNE 50, 1936 and 1937.

- 1	9 3	6	1	9 3	7
Manu-	1	Value of	Manu-		Value of
factured	Sold s	salt sold(x)	factured	Sold	salt sold(x)
Tons	Tons	\$	Tons	Tons	\$
39,315	32,940	417,013	32,515	31,820	362,264
31,089	35,830	161,672	49,170	44,154	191,251
13,194	14,106	105,185	11,450	11,367	103,982
115	115	420	715	763	4,308
16,694	15,301	63,796	21,092	20,076	80,426
	-				
78,609	78,609	78,609	100,634	100,634	100,634
	176,901	826,695	215,576	208,814	842,865
000	000	(a)219,837	000	0 7 0	199,770
0 0 0	+00	1,046,532	• • •	000	1,042,635
	Manu- factured Tons 39,315 31,089 13,194 115 16,694 78,609 179,016	Manu- factured Sold s Tons Tons 39,315 32,940 31,089 35,830 13,194 14,106 115 115 16,694 15,301 78,609 78,609 179,016 176,901	Manu-factured Value of salt sold(x) Tons \$ 39,315 32,940 417,013 31,089 35,830 161,672 13,194 14,106 105,185 115 115 420 16,694 15,301 63,796 78,609 78,609 78,609 179,016 176,901 826,695 (a)219,837	Manu-factured Value of salt sold(x) Manu-factured Tons Tons Tons 39,315 32,940 417,013 32,515 31,089 35,830 161,672 49,170 13,194 14,106 105,185 11,450 115 115 420 715 16,694 15,301 63,796 21,092 78,609 78,609 78,609 100,634 179,016 176,901 826,695 215,576 (a)219,837	Manu-factured Value of salt sold(x) Manu-factured Sold Tons Tons Tons Tons 39,315 32,940 417,013 32,515 31,820 31,089 35,830 161,672 49,170 44,154 13,194 14,106 105,185 11,450 11,367 115 115 420 715 763 16,694 15,301 63,796 21,092 20,076 78,609 78,609 100,634 100,634 179,016 176,901 826,695 215,576 208,814 (a) 219,837

(x) Not including containers.(a) Partly estimated in 1936.

Table 6 - IMPORTS INTO CANADA AND EXPORTS OF SALT, 1935 and 1936.

	1 9	3 5	1 9	3 6
	Tons	Value	Tons	Value
	Separate Strangenster and Separateur	\$		\$
IMPORTS -				
Salt, for use of the sea or gulf fisheries	50,942	147,611	31,967	99,214
Salt, in bulk, n.o.p.		183,447	43,129	148,404
Salt, n.o.p., in bags, barrels, etc.	30,628	193,520	33,785	212,423
Salt, table, made by an admixture of other ingredients, when containing not less than		7 10 10	7 Piely	
90 per cent of pure salt	67	2,162	42	957
TOTAL	128,247			
EXPORTS - TOTAL	9,045	51,239	5,549	46,601

	Table 7	- TOTAL	CANADIAN	IMPORTS	AND	EXPORTS	OF	SALT.	1926	- 1936.
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	EXPO	RTS	IMF	ORTS
ears	Quantity	Value	Quantity	Value
	Tons	\$	Tons	\$
926	1,164	1.9,423	188,401	1,036,594
927	1,212	22,795	176,761	1,082,080
928	2,930	36,399	189,025	1,122,968
929	9,359	70,762	176,566	936,820
930	8,758	74,397	128,385	660,903
931	6,126	55,110	130,890	751,938
932	5,627	36,248	102,033	595,954
933	5,335	43,461	135,620	651,237
934	6,597	48,097	138,794	586,033
935	9,045	51,239	128,247	526,740
936	5,549	46,601	108,923	460,998

World production of salt in 1935, the last year for which data are available, was computed at 31,000,000 long tons by the Imperial Institute, London. Of this quantity, the British Empire accounted for 5,200,000 long tons or 16.8 per cent. In the order of output the United Kingdom, India and Canada were the largest Empire producers of the mineral. The leading producers among the foreign countries were the United States, Russia, China, Germany, France, Italy, Poland, Roumania, and Spain; the total figure for world output included rock salt, brine (wells) salt, and sea salt.

Table 8 - AVAILABLE STATISTICS ON CONSUMPTION OF SALT, IN SPECIFIED CANADIAN

	1935 and 193		1	9 3 6
ndustries	Quanti ty			Cost at
ndug tries				
	used	works	used	works
	Pounds	- 8	Pounds	\$
ish canning and curing (factories				
only) assessessessessessessesses	42,786,700	212,554	53,532,600	256,65]
laughtering and meat packing	59,027,400	364,331	70,680,249	398,028
cids, alkalies and salts - Brine				
(salt content) and dry salt	342,782,000	286,358	386,228,680	318,824
Daps ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5,695,451	25,588	5,480,103	36,474
reing, cleaning and laundry work	4,177,216	31,791	(a)	(a)
reing and finishing of textiles	2,327,718	10,322	1,331,421	8,69
	1,963,710	8,541	(a)	(a)
rtificial ice	514,000	2,212	674,000	2,67
terworks	1,100,000	000	1,100,000(k)	
ather tanneries	8,813,300	45,946	11,356,421	42,46
lp and paper mills	19,510,000	77,952	11,100,000	57,65
ollen textiles	000	6,499	22,200,000	6,93
ock and poultry foods	2,384,000	18,831	(a)	(a)
ead and other bakery products	12,406,240	130,370	a)	(a)
uit and vegetable preparations	6,461,954	48,121	(a)	(a)
scuits, confectionery, etc.	1,246,840	13,924	1,526,840	14.03
ods, breakfast	1,384,929	10,176	(a)	(a)
usage and sausage casings	1,734,325	11,545	1,606,404	9,75
e cream industry	٥٥٥	12,133	000	11,27
eweries	321,805	2,599	278,393	2,19
It and malt products	274,766	1,765	249,975	1,53
ffee, tea and spices	161,286	1,842	(a)	(a)
caroni, vermicelli, etc.	53,471	547	49,671	504
e cream cones	614,004	28	,2,079	() 1
		8,174	a)	(a)
obacco, cigars and cigarettes (X)	Estama ted.	0 0 0	(4)	(4)

Table 9 -	POTASH	SALTS	USED	IN	THE	MANUFACTURE	OF	CANADIAN	MIXED	FERTILIZERS	1934
						and 1035					

Tons	aı	nd 1935.			
Tons		the state of the s	9 3 4	1 9	3 5
### Adding the and potash manure salts 5,822 105,781 5,322 28,689 ### Muriate of potash			Cost at	Co	st at
Sainite and potash manure salts 5,822 103,781 3,322 28,689		Tons	the state of the s	Tons v	vorks
Muriate of potash					
Sulphate of potash	Kainite and potash manure salts	5,822			
Pable 10 - SALES OF POTASH SALTS FOR FERTILIZER PURPOSES, OTHER THAN FOR THE MARKED FACTURE OF MIXED FERTILIZERS, Years ended June 30, 1936 and 1937. 1 9 3 6 1 9 3 7 Muriate of potash					0
Table 10 - SALES OF POTASH SALTS FOR FERTILIZER PURPOSES, OTHER THAN FOR THE MAY FACTURE OF MIXED FERTILIZERS, Years ended June 30, 1936 and 1937. 1 9 3 6 1 9 3 7 Muriate of potash	Sulphate of potash	1,979	76,474	1,829 63	3,163
PACTURE OF MIXED FERTILIZERS, Years ended June 30, 1936 and 1937. 1 9 3 6	NOTE - Data for 1936 not yet complete.			t van general van de verkende jaar gebruik van de vande van de vande van de verkende van de verkende van de ve	to comment to the last the comment of
Muriate of potash					
Muriate of potash	FACTURE OF MIXED FERTILIZERS	o, lears en			
Table 11 - IMPORTS INTO CANADA OF SPECIFIED POTASSIUM COMPOUNDS, 1935 and 1936. 1 9 3 5			1936	1 9	3 7
Table 11 - IMPORTS INTO CANADA OF SPECIFIED POTASSIUM COMPOUNDS, 1935 and 1936. 1 9 3 5	Muriate of potash	0 0	7,619	8.	562
1 9 3 5 1 9 3 6 Pounds P					
1 9 3 5 1 9 3 6 Pounds P	M 13 33 TEMPONIES TANDO CALLANA OF CONTO	ETTED DOMES	OTHER GOLFDON	31DG 3005	3050
Cream of tartar (crystals)	Table 11 - IMPORTS INTO CANADA OF SPECI				
Potash and pearl ash		Pounds	\$	Pounds	\$
Potash and pearl ash	Cream of tartar (crystals)	936,085	134.794	617,258	85,660
Potash, caustic					7,65
Cotash, chlorate of		917,359	65,677	710,467	54,544
Saltpetre or nitrate of potash 1,390,495 65,049 1,471,213 60, furiate of potash (fertilizer) 60,829,500 485,086 59,425,200 583, furiate of potash (fertilizer) 4,871,378 144,259 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,684,574 128,500 4,684,574 128,500 4,684,574 128,500 4,687,222 107,101 97,905 2,500 4,684,574 128,500 4,684,574 128,500 4,684,574 128,500 4,684,574 128,500 4,684,574 128,50		1,451,646	78,146	1,057,569	62,370
Auriate of potash (fertilizer) 60,829,500 485,086 59,425,200 583, Table 12 - IMPORTS INTO CANADA OF CAUSTIC SODA, 1935 and 1936. 1 9 3 5 1 9 3 6 Pounds Pounds Soda, caustic 4,871,378 144,259 4,684,574 128, Soda, caustic, in solution 4,687,222 107,101 97,905 2, Table 13 - IMPORTS INTO CANADA OF CHLORINE, BROMINE AND IODINE, 1935 and 1936. 1 9 3 5 1 9 3 6 Pounds Pounds Chlorine, liquid or gas 10,436,566 221,134 6,296,562 133,		1,390,495	65,049	1,471,213	60,814
1 9 3 5 1 9 3 6		30,829,500	485,086	59,425,200	583,158
1 9 3 5 1 9 3 6	Para 10 TAMPORMS TAMPO CAMADA OF CATIST	TC SODA 3	035 and 103	G	
Soda, caustic	table 12 - IMPORTS INTO CANADA OF CAUST				3 6
Soda, caustic, in solution		Pounds	\$	Pounds	\$
Soda, caustic, in solution	Soda. caustic	4.871.378	144.259	4,684,574	128,319
Pounds \$ Pou	,				2,061
1 9 3 5 1 9 3 6 Pounds \$ Pounds \$ Pounds \$ 221,134 6,296,562 133,					
Pounds \$ Pou	Cable 13 - IMPORTS INTO CANADA OF CHLOP				
Chlorine, liquid or gas	1940			the state of the s	
		rounds	- 5	Pounds	*
	Chlorine, liquid or gas	10,436,566	221,134	6,296,562	133,570
					623
		57.462	65,366	65,318	61,357

	1935	1936	
Number of Girms	10	8	
Number of firms \$	3,776,333	3,856,187	
Number of employees - On salary	101	122	
On wages	372	384	
Total	473	506	
Salaries and wages - Salaries \$	193,135	225,170	
Wages \$	404,650	415,474	
Total\$	597,785	640,644	
Selling value of products	2,373,028	2,300,791	
Cost of purchased process materials \$	38,700	31,195	
Cost of fuel and electricity	175,240	181,502	
Value of containers \$	492,050	527,647	
Net value of sales \$	1,667,038	1,560,447	

Table 15 - WAGE-EARNERS, BY MONTHS, 1933 - 1936. (on 15th or nearest representative date)

1611	1933	1934	1935	1 9	3 6
Months	1 3 0 0	1304	1300	Male	Female
January	285	357	336	307	33
February	295	360	311	268	33
March	314	365	356	334	28
April	317	379	324	346	33
lay	324	408	400	347	33
une	355	3 98	396	358	38
uly	379	389	396	369	44
lugust	400	412	385	368	45
September	370	447	391	375	43
october	354	414	357	380	43
lovember	357	433	392	383	44
December	326	417	383	325	31
AVERAGE	337	398	372	347	37

Table 16 - NUMBER OF WAGE-EARNERS IN MONTH OF HIGHEST EMPLOYMENT DURING 1936 WITH REGULAR HOURS WORKED PER WEEK

Hours per week	Number	Hours per week	Number	
40 or less	16	51 - 53	4	
41 - 43	3	54	30	
44	8	55	7	
45 - 47	0 0 0	56 - 59	43	
48	210	60 30000000000000	45	
49 - 50	10	60 plus	83	

Table 17 - FUEL AN	ID ELECTRICITY	USED I	N THE	CANAI	DIAN	SALT	INDUSTRY.	1935	and	1936.
]	9	3	5	1-	9	3	6

		1 9 3	5	1 9	3 6
Kind	Unit of		Cost at		Cost at
	measure	Quantity	works	Quantity	works
			\$		\$
Anthracite coal	short ton	3,483	16,824	3,670	16,253
Bituminous coal - Canadian	short ton	2,573	9,997	2,600	13,000
Imported	short ton	23,252	111,964	24,709	113,117
Lignite coal	short ton	2,305	9,136	4,885	16,545
Gasoline (not for vehicles)		300	96	3,560	596
Kerosene	Imp. gal.	222	62	476	102
Fuel oil	Imp. gal.	134,906	12,338	147,704	13,874
Wood	cord	2,352	6,991	50	150
Electricity purchased	K.W.H.	661,944	7,832	593,030	7,865
TOTAL	\$	000	175,240	000	181,502
Electricity generated for					
own use	K.W.H.	3,871,365	9 9 9	3,970,673	000

Table 18 - POWER INSTALLATION, 1936.

	Ordinari	ly in use	In réserve or idle		
Description	Number of units	Total horse power(x)	Number of units	Total horse power(x)	
1. Steam engines and steam turbines	33	2,378	1	25	
 Diesel engines		555	2	45	
other than diesel engines 4. Hydraulic turbines or water	1	10	3	19	
wheels	903	* * >	* * *	369	
(a) Operated by purchased power	39	404	1	40	
Total 1, 2, 3, 4 and 5(a)		3,347	7	129	
(b) Operated by power generated by the establishment		1,682	5	100	
Boilers	8	3,362	6	650	

NOTES ON SALT PRODUCTION IN OTHER PARTS OF THE BRITISH EMPIRE AND IN BRITISH MANDATED TERRITORIES,

(Source - Imperial Institute, London)

Salt occurs in the United Kingdom as beds of rock-salt in rocks of Triassic age. The principal production is from brine obtained by sinking wells (brine wells) to the various beds of rock salt, the amount obtained by mining the solid rock being very small. In 1935, about five-sixths of the output came from Cheshire, other counties contributing being Lancashire, Staffordshire, Durham, Worcestershire, and Yorkshire. The Isle of Man and Northern Ireland were also producers. There are ample reserves to supply the demand for an indefinite period.

In the Union of South Africa salt is produced by solar evaporation chiefly near Kimberley, Cape Town, Port Elizabeth and Bloemfontein. The

production is between 80,000 and 90,000 tons per annum. The mineral occurs as brine in inland pans or shallow depressions without outlet, and the source of the salt is controversial.

The salt industry of India is of considerable economic and political importance, as salt is a government monopoly. Salt produced in the country is subject to an excise duty, while foreign salt pays an import duty. The output (which includes that of Aden) is obtained chiefly by the evaporation of sea water in Bombay, Sind and Madras, other sources of supply being the brines of Rajputana salt lakes and rock salt from the Punjab and the North-West Frontier province. The production in 1935 amounted to nearly 2 million tons, while imports, chiefly from countries adjacent to the Red Sea, were 394,000 tons.

Salt occurs in South-West Africa in stratified beds of rock salt about 1,000 feet above sea level, and as rock salt and brine associated with coastal pans. Quantities are available from the latter type of deposit in the neighbourhood of Swakopmund and at Cape Cross, some 80, miles distant.

There are small native salt industries in Nigeria at Uburu in Ogaja province, at Awe in Benue province, and in the Geidam and Chad districts of Bornu province. The total output is estimated at 400 tons a year, an insignificant quantity in comparison with imports of European salt.

The main supply of salt produced for the market in Tanganyika
Territory by European enterprise comes from the springs of Uvinza, from the
evaporation of sea water on the coast, and from the Lake Rukwa spring. Other
inland basins which contain considerable quantities, often of mixed alkali and
common salt, provide local supplies for native trade. The Uvinza salt springs
produce about 6,000 tons annually of marketable salt, and smaller quantities
of less pure salt which are disposed of to the Waha for their cattle.

Salt is obtained in Uganda principally from Lake Katwe and, to a lesser extent, from Lake Kasenyi, both of which are situated in explosion craters on the north side of the Kazinga Channel. The production of salt at Kilbero has declined in the face of competition from Aden. In each instance the trade is entirely in native hands.

Salt has been produced in Somaliland Protectorate for many years by solar evaporation of sea water in brine pans or pools in the heighbourhood of Zeila. The industry is controlled by natives, who employ crude methods of extraction, some of the "pans" being mere holes in the ground. During the period 1929 to 1935 inclusive, exports of salt from the Zeila district amounted to nearly 15,000 tons, equivalent to an average annual export of 2,100 tons; most of the salt is consigned to Abyssinia.

In the Anglo-Egyptian Sudan, salt is produced in fair quantities, principally by the solar evaporation of sea water at Ras Rawaya on the Coast, and from small native workings in the desert gravels, the latter product being generally only of poor quality.

Salt in Cyprus is a government monopoly and is collected from salt lakes near Larnaca on the south coast.

The salt production of Palestine comes chiefly from salt pans at Athlit on the Mediterranean coast, but sea salt is also obtained from a lagoon on the southern end of the Dead sea.

The principal occurrence of rock salt is at Jebel Usdum, a mountain situated at the south-west corner of the Dead Sea; much of this salt is 99.99 per cent pure and it is mined for domestic and industrial purposes.

The consumption of salt in Ceylon is about 33,000 tons per year, the bulk of which is produced locally by the solar evaporation of sea water. Government supervision is necessary to ensure the purity of the product; the annual production fluctuates considerably, as it is very dependent upon the weather and rainfall.

In Australia salt is obtained from salt lakes in the western and north-western districts of Victoria and from salterns in the neighbourhood of Geelong. Large quantities are obtained from the shallow salt lakes of South Australia, chiefly on Yorke Peninsula. Lake Hart, about 60 square miles in area, situated about 120 miles north-west from Port Augusta, contains immense supplies of salt of good quality and supplies have also been obtained from Lake Bumbunga; a fair amount has also been produced by evaporation of sea water at the heads of Spencer's and St. Vincent's Gulfs. Australian salt production in 1934 totalled 109,827 long tons.

LIST OF FIRMS IN CANADIAN SALT INDUSTRY, 1936.

LIST OF FIRMS IN CANADIAN SALI INDUSTRI, 1930.							
Name of Firm	Head Office	Location of Plant					
NOVA SCOTIA - Malagash Salt Co. Ltd.	204 Provost St., New Glasgow	Malagash					
The Walker Salt Corp. Ltd.(b)	R. R. 5, Watford	Sarnia Goderich Port Franks Lambton Co.					
MANITOBA - Neepawa Salt Ltd.	P. O. Box 1260, Montreal, P.Q.	Neepawa					
SASKATCHEWAN - Simpson Oil Co. Ltd. (x)	Simpson	Simpson					
ALBERTA - Industrial Minerals Ltd.(a)	Bank of Hamilton Bldg., Edmonton.	Waterways.					

- (b) Not in operation in 1937.
- (x) Idle in 1936.
- (a) Active but not producing.



