

PROVINCE OF QUEBEC, CANADA
DEPARTMENT OF MINES

LEONARD ROCHETTE, Minister

L.-A. RICHARD, Deputy-Minister

BUREAU OF MINES
A.-O. DUFRESNE, Director

PRELIMINARY STATEMENT
ON THE
MINERAL PRODUCTION
OF THE
PROVINCE OF QUEBEC
IN THE CALENDAR YEAR
1939



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Honourable Edgar Rochette, K.C.,
Minister of Mines
Quebec.

SIR,

The purpose of this advance report is to present to the interested public the figures of production at as an early date as possible after the close of the year, as statistics gain much in usefulness by an early publication. The figures are given 'subject to revision', as our returns are not quite complete; the difference with the final figures however is not great, being usually below one per cent. The statistics as finally established will be given, as in past years, in the annual report of the Quebec Bureau of Mines entitled "Mining Industry and Statistics during the Year 1939", which will follow later on, and in which will also be found detailed notes on the mines, lists of geological field-parties, inspection of mines and mining accidents.

The ton used throughout is that of 2,000 pounds, except when otherwise mentioned. Values are given in Canadian funds.

I have the honour to be, Sir,

Your obedient servant,

A. O. DUFRESNE,

Director.

QUEBEC BUREAU OF MINES,
Quebec, Feb. 29th, 1940.

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PRELIMINARY STATEMENT

ON THE

MINERAL PRODUCTION

OF THE

PROVINCE OF QUEBEC

FOR THE CALENDAR YEAR

1939

In 1939 the mineral production of the Province of Quebec attained a value of \$77,125,985, which constitutes a new all time record. In comparison with the preceding year 1938, it is an increase of 12 per cent, when the previous highest production was recorded with a total value of \$68,877,345.

Since 1932, the annual value of the products of the mines and quarries of the Province shows an unbroken ascending curve, each year recording an increase over the preceding one. For the last four years, successive high records have been established; the total value for the year 1939 is three times that for 1932.

During the first eight months of the year under review the economic conditions in Europe, which had been becoming more and more unsettled throughout 1938 owing to growing aggressiveness of Germany towards its small neighbours became increasingly aggravated and climaxed in the invasion of Poland by Germany on September 1st, 1939. In conformity with agreements between Great Britain, France and Poland a state of war was declared to exist between Great Britain and Germany on September 3rd, on which date a similar action was taken by France; Canada followed on September 8th.

TABLE I
ANNUAL VALUE OF THE MINERAL PRODUCTION OF THE PROVINCE OF QUEBEC,
1928 TO 1939

YEAR	VALUE	YEAR	VALUE
1928	\$37,325,237	1934	\$31,310,752
1929	46,454,820	1935	39,141,734
1930	41,158,740	1936	49,755,985
1931	36,051,366	1937	65,202,976
1932	25,683,066	1938	68,877,345
1933	28,164,540	1939	77,125,985

The European war, however, does not seem to have been the cause of the increase in our mineral production of 1939, for it has been distributed rather evenly among the four quarters of the year, as shown by the monthly reports of the principal products of our mines.

Gold and asbestos are the two main contributors to our mineral production of 1939; they figure in the list for \$34,370,127 and \$15,858,492 respectively. This is an increase of \$3,534,737 and \$2,968,297 respectively as compared with 1938.

The value of the production of the metallic group in 1939 shows an increase of 10.7 per cent as compared with the preceding year. Gold has recorded the greatest advance, followed by zinc, copper, titanium and molybdenum, in order of importance. The other metals in our list have suffered decreases, silver, selenium and tellurium.

In the non-metallic group the total value increased 22.9 per cent, the greater part of which is due to the higher production of asbestos. The other items which recorded increases are pyrites, industrial lime and limestone, mica. The figures of all the other non-metallic substances suffered decreases.

In the building materials group there was a small advance of 1 per cent as compared with the preceding year from a total value of \$10,745,901 in 1938 it passed to \$10,955,370.

MINE SCHOOL

The Provincial Mine-School the property of the Quebec Department of Mines, established in 1938 near Val d'Or, in Abitibi, for the purpose of training young men as mine workmen, has given excellent results. After their six months course, the trainees, with the good-will of the mine operators, have no difficulty in finding work at the current wages. By the end of the year under review 88 of these young men had found permanent employment. These results are very satisfactory. The undertaking is part of the Provincial-Federal agreement for the training of the youth, and is very successful.

GOVERNMENT SAMPLING PLANT

On the ground occupied by the Mine School a government ore-sampling plant has been established where bulk-sampling can be done. This will be a great convenience to the small mines in the region, for it will

TABLE II

TABLE OF THE MINERAL PRODUCTION OF THE PROVINCE OF QUEBEC DURING 1939

SUBSTANCES	PRODUCTION IN 1939		Value in 1938
	Quantities	Value	
METALLICS:			
Copper, lb.	117,238,897	\$11,881,749	\$11,233,039
Gold (in Canadian funds), ounces.	951,001	\$4,370,127	\$0,835,300
Molybdenite, lb.	2,240	600
Selenium, lb.	127,125	224,884	378,147
Silver, ounces.	1,167,461	472,582	516,902
Zinc, lb.	5,905	9,578	71,512
Platinum, lb.	8,694	21,267	1,440
Titaniferous iron ore, tons.	28,758,759	882,606	163,356
Lead, lb.		\$47,818,468	\$43,190,795
Sub-totals.			
NON-METALLIC MINERALS:			
Asbestos, tons.	364,454	\$15,858,492	\$12,890,195
Feldspar, tons.	5,402	61,028	62,878
Industrial lime, tons.	141,550	805,884	711,310
Industrial limestone, tons.	112,158	146,721	161,620
Magnesian dolomite.		521,608	465,035
Marl, tons.	80,770	32,308	14,433
Mica, lb.	684,882	119,834	72,982
Mineral paints (iron oxide, ochre), tons.	5,272	81,546	67,209
Mineral water, gals.	103,769	17,460	19,033
Peat, tons.	822	23,914	16,518
Phosphate, tons.	157	1,712	1,886
Pyrite, tons.	125,054	275,951	98,261
Quartz and industrial sand, tons.	104,807	369,193	315,251
Talc and soapstone.		41,471	35,938
Sub-totals.		\$18,357,122	\$14,931,649
BUILDING MATERIALS:			
Building lime, tons.	18,915	\$ 174,185	\$ 130,483
Building limestone, tons.	1,685,357	1,524,423	1,502,039
Cement, barrels.	3,027,559	4,035,294	3,693,188
Clay products (Brick, M.)	59,572	939,037	766,379
(Other.)		334,917	255,266
Granite, tons.	372,866	962,251	749,430
Marble, tons.	6,488	164,221	40,747
Sand and gravel, tons.	10,114,941	2,628,397	3,532,873
Sand-lime brick, M.	2,889	34,669	23,389
Sandstone, tons.	102,388	156,472	51,010
Slate and shale, tons.	1,123	1,504	1,007
Sub-totals.		\$10,955,370	\$10,745,901
TOTALS.		\$77,125,985	\$68,877,345

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enable them to send ore lots in the course of their development work and derive some revenue from them. In February 1940, the plant was completed and the machinery was being tuned to rate 20 tons per working shift.

METALS

The average prices of base metals in 1939 did not show much improvement as compared with 1938: copper increased slightly from 9.972 cents a pound in 1938 to 10.092 cents; lead fell off from 3.334 cents to 3.169; and zinc also lost from 3.073 cents to 3.069. On the other hand, the price of gold advanced from \$35.175 to \$36.141 per ounce fine, owing to

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TABLE III
SUBDIVISION OF QUEBEC'S MINERAL PRODUCTION FOR THE YEARS 1935-1939

Year	METALS	Per Cent	NON-METALS	Per Cent	BUILDING MATERIALS	Per Cent
1935	\$23,804,792	61	\$ 8,824,178	22	\$ 6,512,761	17
1936	30,643,787	62	12,598,178	25	6,724,020	13
1937	38,615,175	59	17,232,860	27	9,355,941	14
1938	43,199,795	63	14,981,649	22	10,745,901	15
1939	47,813,493	62	18,357,122	24	10,955,870	14

adverse conditions of exchange, brought about by "a state of war" existing between Canada and Germany. The price of silver sagged from 43.477 cents an ounce to 40.478 cents.

The total value of the 1939 production of metals in Quebec was \$47,813,493, by far the highest yet recorded, being 10.7 per cent greater than in 1938 which was the previous high. For the last nine years the curve of gold production shows an unbroken ascending trend. In 1939, the metals produced by the Quebec mines were as follows, in the order of their importance as regards value: gold, copper, zinc, silver, selenium, titaniferous iron, tellurium, molybdenite. Their aggregate value represents 62 per cent of the total value of the mineral production of the Province for the year. The Western Quebec mines, of Temiscamingue and Abitibi counties are responsible for over 99.9 per cent of our production of metals.

Gold. — Returns of production were received from 29 mines of which four started to produce in 1939. These were *Amm Gold*, *Central Cadillac*, *Wood-Cadillac* and *Mooshla*; the three first mines which are in Cadillac township produced bullion and the fourth in Bousquet sent the ore to the Noranda smelter. In addition the *Malartic Gold Mines* started its 400-ton mill in December 1939, and reported having made the first shipment of bullion in January 1940.

The production of gold in 1939 was 951,001 ounces, valued at \$34,370,127, as compared with 876,628 ounces, valued at \$30,835,390 in 1938. The 1939 production of gold is the highest ever recorded. Since 1925 the annual figures constitute a succession of new high figures, each year having exceeded the preceding one.

Alluvial Gold. — There was no production of placer gold in 1939. No underground work was done on the claims held by *Embergold Mines, Ltd.*, in Ditton township, but a new compressed air-hoist was set up at the shaft to bring to the surface the mine cars used in the exploration galleries which were driven in 1936 and 1937. The *Moe River Gold Mines, Ltd.*, was incorporated in 1939 to explore for gold in Compton township. The work done consisted in an aggregate of 1,000 feet of trenching on the east side of Salmon river.

Copper. — The production of copper metal in 1939 was 117,238,897 pounds, valued at \$11,831,749. In quantity it is a new record, the previous

TABLE IV

GOLD PRODUCTION OF MINES OF THE PROVINCE OF QUEBEC DURING 1939

PROPERTY	ORE RAISED Tons	ORE TREATED Tons	GOLD SHIPPED Fine Ounces	SEE Foot-Note
Aldermac (3)	352,674	358,570	1,709	(c)
Amm Gold	40,616	40,616	4,932	(a) (b)
Arntfield	121,818	121,730	10,739	(b)
Beattie	613,800	613,800	67,261	(b)
Belleterre	77,008	74,023	19,261	(b)
Canadian Malartic	244,720	244,720	29,823	(b)
Cournoy	86,800	71,832	13,487	(b)
East Malartic	353,615	353,615	68,594	(b)
Francœur	56,927	56,927	9,789	(b)
Lake Rose	1,800	1,569	1,222	(a) (b)
Lamaque	437,892	437,892	182,684	(b)
Lape Cadillac	91,696	(1) 88,810	9,912	(a) (b)
McWatters	35,400	(2) 33,534	11,615	(a) (b)
Moshiba	3,241	2,610	2,829	(c)
Noranda (3)	1,926,962	1,926,734	264,465	(c)
Normetal (3)	131,037	131,037	2,562	(c)
O'Brien	61,938	61,127	35,046	(a) (b)
Perron	206,037	132,976	40,436	(b)
Powell-Rouyn	260,802	265,020	36,203	(c)
Sigma	256,227	256,227	56,710	(b)
Siscoe	218,577	189,556	53,982	(a) (b)
Sladen Malartic	181,416	183,429	17,855	(b)
Stadacona	131,653	131,653	19,678	(b)
Sullivan	146,685	123,214	32,358	(a) (b)
Thompson Cadillac	42,381	42,381	4,211	(a) (b)
Waite Amulet (3)	176,186	176,737	4,158	(c)
Other mines	1,220	
Total			961,001	

(a) Amalgamations; (b) cyanidation; (c) Smelter.

(1) Treated 760 tons of tailings in addition.

(2) Treated 2006 tons of tailings in addition.

(3) These mines are on complex ore deposits and produce also base metals.

high was 112,645,797 pounds in 1938. Owing to the comparatively low average yearly price of the metal, however, the total value of copper in 1939 production was lower than in 1937, when it reached \$12,378,737.

Five mines contributed to the copper production in 1939: the Horne mine operated by *Noranda Mines, Ltd.*, *Aldermac*, *Normetal*, *Waite Amulet* mines, all of which are in Western Quebec, and the *Eustis* mine, the property of Consolidated Copper and Sulphur, Ltd., which is in the Eastern Townships near Sherbrooke. The latter, after operating for nearly three-quarters of a century, closed down permanently in July 1939, and most of the machinery was dismantled and disposed of.

The following notes on some of the gold and copper mines of Western Quebec were abstracted, for the most part, from the periodical reports made by the Inspectors of Mines for the district.

The producing mines of the Rouyn-Harricana region may be broadly divided into two classes: those operating on complex sulphide ore bodies copper-gold-silver-zinc, and those working on gold-quartz deposits.

Of the former, the Horne mine operated by *Noranda Mines, Limited*, is the largest gold producer of the Province, and third largest in Canada; it is the second largest copper producer in the Dominion and is

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responsible for more than three quarters of Quebec's annual production of that metal. The ore from the Horne mine also contains the metals selenium and tellurium, which are recovered in the refining of the copper. *Waite-Amulet Mines, Limited*, completed its new mill, built on the Amulet mine property and at the end of the year was treating 1,000 tons a day. Most of the ore came from the Waite mine. It is transported from the mine to the mill by aerial tramway. At the Amulet mine most of the work done was for development. *Aldermac Copper Corporation, Limited* operated its mine and mill continuously at the rate of 1,000 tons a day. The copper concentrate is shipped to a United States smelter and considerable shipments of pyrite were made to chemical works. *Normetal Mining Corporation, Limited*, operated mine and mill continuously throughout the year, the mill treating 500 tons a day and producing a copper concentrate and a zinc concentrate, which contain also gold and silver. The above four mines operate on complex sulphide ores.

The gold-quartz mines, which operate on "straight-gold ores", producing only gold and silver, also had a very good year. Out of 18 of the principal ones, 15 reported an increase of production of gold bullion, and the decreases of the three others were very slight. Of these mines the *Lamaque*, in Bourlamaque township, is the largest producer; its mill has a capacity of 1,200 tons a day. The *East Malartic*, in Fournière township, had its mill running at 1,000 tons most of the year, while an addition to it was being put to increase the capacity to 1,500 tons. In December this addition was completed. *Malartic Gold Fields, Ltd.*, in Fournière and Dubuisson townships, started shaft sinking in February 1939, began construction of a 300-ton mill on lot 3, range VIII of Dubuisson in October, began milling on December 16th, and reported having shipped bullion in January 1940. In Dubuisson township, the *Sigma* mill treated an average of 700 tons a day, which is an increase of 100 tons a day as compared with 1938. The *Sullivan* mill nearly doubled the tonnage treated as compared with the previous year resulting in a considerable increase in the production of bullion. The *Perron mine*, in Pascalis township, completed its No. 3 shaft, which is the main one, 1,150 ft. deep, in the spring, and both mine and mill of 350 tons a day have been operated continuously. The *Cournoy Mining Corporation* nearly doubled their gold production in 1939 as compared with 1938. The *Beattie mill*, in Duparquet, treated an average of 1,700 tons a day. The *Powell mine*, in Rouyn township produced at the rate of slightly over 700 tons of ore a day, which was all trucked to the Noranda smelter. In the Cadillac section of the belt, the *Amm mine* completed its 135-ton mill, and started production early in the spring; it is reported to be very efficient, treating 140 tons a day with a high recovery. The *Wood-Cadillac* completed the 200-ton mill which was started late in the year. The *Central Cadillac*, by agreement with the trustees of Thompson Cadillac, is utilizing the latter's mill; the ore is trucked from the mine to the mill. The *O'Brien mine*, mill and roasting plant were in continuous operation. The *Mooshla mine*, in Bousquet township was reopened and started production in July. The ore was shipped to the Noranda smelter. The *Francoeur* mill was increased and a cyanidation unit was added to it. The *Studacona-Rouyn Mines, Limited* encountered financial difficulties

in the fall of 1939; and a liquidator was appointed. Nevertheless the mine and mill were operated continuously all year, at 450 tons a day during the first half, and at 350 for the last months. The *Lake Rose mine* in the Currie township area was closed down on March 18th 1939 owing to depletion. The *Flordin Mines, Limited*, formerly the Florence River Gold Mines did a great deal of exploration work on their property in the Currie township area. The *Belleterre mine*, Guillet township, is milling 200 tons a day from their No. 3 shaft. The supply of electric power from the Company's plant on Winneway river is quite adequate. *Mic-Mac Explorations*, a subsidiary of U.S. Smelting, Refining and Mining Company, carried on exploration work on several properties on which they have secured options, the Cassels-Duval in Bousquet township being one of them.

Silver. — The production of silver derived from the treatment of complex ores and of gold-quartz ores amounted to 1,167,461 ounces, valued at \$472,682. It is a slight decrease, as compared with the preceding year, both in quantity and in value.

Selenium and Tellurium. — The quantities of these metals marketed in 1939 were respectively 127,125 pounds and 5,905 pounds. In 1938 the shipments were 217,952 pounds and 41,577 pounds. The substantial decreases are probably due to lack of demand.

Zinc. — The shipments of zinc concentrate effected from Quebec mines in 1939 contained a total of 28,758,759 pounds of the metal which at the average price of zinc for the year gives a value of \$882,606. Two mines contributed to this production, the *Waite-Amulet*, and the *Normetal*, both in Western Quebec. This is the highest quantity of zinc ore shipped in any one year from Quebec mines. Most of these shipments were made from stocks which had accumulated from previous years' operations owing to the low price of zinc. The *Calumet Mines, Limited* continued its exploration campaign on the zinc and lead deposits of Calumet Island. The total length of diamond drill holes put down in the last two years is of the order of 80,000 feet.

Other metals. —

Chrome. — There was no production of chromite reported in 1939, but some exploration was done in Coleraine township in the last three months of the year.

Molybdenite. — There was a small production of molybdenite reported by *Molybdenite Corporation of Canada*, from their property in Abitibi county. Some exploration work was carried out on the properties of the *Quyón Molybdenite Company* at Quyón, and of the *Kindale Mines, Limited*, in Masham township.

Titaniferous Iron Ore. — Some shipments of titaniferous iron ore were reported from the St-Urbain mines in Charlevoix County.

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TABLE V

PRODUCTION OF ASBESTOS IN THE PROVINCE OF QUEBEC IN 1938 AND 1939

GRADE	1938 SHIPMENTS AND SALES			1939 SHIPMENTS AND SALES		
	TONS (2,000 lb.)	VALUE		TONS (2,000 lb.)	VALUE	
		Total	Average Per Ton		Total	Average Per Ton
Crudes	2,011	\$ 955,423	\$328.21	3,122	\$ 938,717	\$300
Fibres	153,097	9,710,899	63.44	193,973	12,048,821	62.17
Shorts	123,785	2,223,873	17.97	167,359	2,870,954	17.15
Totals	280,793	\$ 12,890,195	\$ 44.48	364,454	\$ 15,858,492	\$ 43.51
Sand, gravel and stone (waste rock only)	3,270	\$ 2,464	\$ 0.75	3,807	\$ 2,930	\$ 0.77
TOTAL, asbestos and waste rock	284,063	\$ 12,892,659		368,261	\$ 15,861,422	
Rock mined	5,816,368			6,650,416		
Rock milled	4,874,548			5,548,765		

NON-METALLIC MINERALS

The production of non-metallics in 1939 shows a substantial increase as compared with 1938. Their total value amounted to \$18,357,122 against \$14,931,649. in the preceding year. This is mainly due to a better demand for asbestos, for mica and larger shipments of pyrite as a source of sulphur.

The total figures of value of non-metallic minerals establish a new record, the previous peak having been \$17,232,860 in 1937.

Asbestos. — Asbestos is one of the major mineral products of the Province. In terms of value it ranks second in our list of mineral production, coming immediately after gold. In 1939, the shipments of asbestos-fibre amounted to 364,454 tons valued at \$15,858,492. In point of value it is a new record, exceeding the value of the 1920 production which was \$14,749,048, the previous high level of all time, when the asbestos prices were abnormally high.

Asbestos Corporation, Limited, operated its four principal mines, the King, the Beaver, both in the Thetford area, the British Canadian mine in Black Lake and the Vimy Ridge in Coleraine. The other properties of this Company remained inactive all year.

Johnson's Company, worked actively its two mines. The main producing mine of this Company is at Thetford Mines, near the King and the Bell mines. The second is at Black Lake, where operations were carried on day and night during the whole year.

Bell Asbestos Mine. At present the main supply of asbestos rock is still obtained from the open pit workings but the development work for changing to underground operations is far advanced and some of the

rock comes from the underground workings. A new hoisting shaft has been sunk to a depth of 500 feet. Started in April 1939, it was completed early in January 1940. The shaft head-frame, of steel, is 135 feet high, and the outside dimensions of the shaft are 12½ by 12½ feet.

Canadian Johns-Manville Company, Limited, operated its mine and mill continuously throughout the year, although the mill slowed down somewhat during the first months, the week's work varying from 4 to 6 days. The Cottrell plant which was set up to abate the dust was started in February and the conditions are greatly improved thereby.

Quebec Asbestos Corporation, at East Broughton operated all year, with the exception of one month in the Spring, when the storage sheds were filled to capacity.

Apart from the above producing companies, a certain amount of exploration work was done on asbestos prospects in the townships of Tingwick, Cranbourne, Thetford, Talon and Broughton.

Pyrite.

There was a considerable increase in the shipments of pyrite (as a source of sulphur) in 1939 as compared with the previous years, 125,054 tons against 33,179. Returns of production were received from three operators, *Aldermac Mines*, *Noranda Mines* and *Consolidated Copper and Sulphur Co.* (Eustis mine); the latter closed down permanently in July 1939. The bulk of the pyrite from these three mills was shipped to the United States, mostly to chemical works.

Feldspar.

The production of feldspar was estimated at 5,402 tons valued at \$61,028 against 5,874 tons valued at \$62,878 in 1938. The slight decrease recorded in shipments of crude and also of pulverized feldspar is attributed to a slackening in the ceramic industry but the demand improved materially at the close of the year. The entire output came from the Buckingham district.

Industrial lime and limestone.

The output consisted of 141,550 tons of lime valued at \$805,884, of 112,158 tons of limestone valued at \$146,721 and of 80,770 tons of marl valued at \$32,308. The quantity of industrial lime produced in 1939, is the highest as yet recorded. The output was used mainly in pulp and paper manufactures and in metallurgical and chemical works. A decline was registered in the production of industrial limestone owing to a slackening in the demand for pulverized products used for agricultural purposes. The tonnage of limestone consumed in the pulp and paper and in the chemical industries was higher than in 1938. The total production of marl was used in agriculture as a soil amendment.

Magnesitic-dolomite.

Crude and also calcined magnesitic-dolomite used or sold by producers were valued at \$521,608 as compared with \$465,035 in 1938. The output was derived almost entirely from two mines located in Grenville and Harrington townships respectively. The remainder was made up of a relatively small tonnage of brucite extracted near Farm Point in Wakefield township.

Mica.

Shipments of mica were valued at \$119,834 as compared with \$72,982 in the preceding year thereby showing an increase of 64 per cent. This improvement in the mica trade is to be attributed to a notable increase in the production of mica splittings and of ground products. Sales of mica sheets were slightly lower than in 1938. The output came mainly from the Hull area. Minor quantities were also shipped from small mines operated along the North shore of the lower St-Lawrence.

Ochre and Iron Oxide.

Sales of ochre and iron oxide increased from \$67,209 in 1938 to \$81,546 in 1939. Returns received from operators show that the tonnage of crude ochre sold to producers of illuminating gas was lower than for the preceding year but on the other hand, that the quantity and value of calcined oxide for use as mineral pigment increased materially. During the year, additions were made in the plant of the Sherwin-Williams Co. of Canada, Ltd, at Red Mill, thereby increasing its capacity by 20 per cent.

Silica.

Shipments in 1939 amounted to 104,807 tons valued at \$369,193 against 85,153 tons valued at \$315,251 in 1938. The production of silica comes for the most part from the region to the north of the Ottawa river, between Montreal and Hull and also from Melocheville, Beauharnois County. It is used largely in the ceramic and abrasive industries, and for the production of carborundum and of ferro-silicon. In 1939, making use of silica and dolomite as raw materials, a rock wool manufacturing plant was put in operation by the Ottawa Silica and Sandstone Co. of Templeton.

Soapstone and Talc.

Four soapstone quarry operators sent in returns of production. The quarries are located in the townships of Broughton, Thetford and Leeds. The soapstone is disposed of by the operators in various forms: sawn blocks for furnace lining, in rough pieces shipped to pulverizing mills, and one operator has a grinding plant to utilize the waste rock from the sawing of blocks. The soapstone industry is not a large one as the value of the products marketed was \$41,471 in 1939.

Other non-metallic minerals.

Shipments of apatite and of mineral waters were a little lower than in 1938, but a substantial increase was recorded in the production of peat and peat moss. The latter is extracted from deposits at Ile Verte, Rivière-Ouelle and Waterville.

BUILDING MATERIALS

The output of mineral building materials valued at \$10,955,370 is the highest recorded since 1931. Increases were reported for all quarry products with the exception of sand and gravel. As compared with 1938, sales have increased as follows: building lime, 33 per cent; cement, 9 per cent; clay products, 25 per cent; stone products, 20 per cent.

The total value of building permits issued in the Province of Quebec was \$62,607,700 as compared with \$65,778,900 in 1938.