GENERAL REPORT

OF THE

MINISTER OF MINES

OF THE

PROVINCE OF QUEBEC

FOR THE YEAR ENDING MARCH 31st

1943

P.R. No. 182

Quebec, June 1943.

To the Honourable
Major-General Sir Eugène Fiset, Kt., C.M.G., D.S.O., M.D.,
Lieutenant-Governor of the Province of Quebec.

Sir:-

I have the honour to submit to you the report on the activities of the Bureau of Mines during the fiscal period 1942-43.

I have the honour to be, Sir,

Your obedient servant,

EDGAR ROCHETTE,
Minister of Mines.

REPORT OF THE DEPARTMENT OF MINES OF THE PROVINCE OF QUEBEC

FOR THE FISCAL YEAR 1942-43

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REPORT OF THE DEPARTMENT OF MINES OF THE PROVINCE OF QUEBEC FOR THE FISCAL YEAR APRIL 1st, 1942 TO MARCH 31st, 1943

To The Honourable Edgar Rochette, K.C.,
Minister of Mines,
Quebec, Que.

Sir:-

I have the honour to present to you a summary report on the work of the Department of Mines during the fiscal year ending March 31st, 1943, in conformity with Section 229 of the Revised Statutes of the Province of Quebec, 1941.

On May 13th, 1942, Act 6, Geo.VI, Chapter 44, was duly sanctioned and became law. This Act divided the Department of Mines and Fisheries into two distinct departments, one of which is the Department of Mines, administered by the Minister of Mines, having under his direction and control a Deputy Minister of Mines. As stated in the report for 1942, the Honourable Edgar Rochette continues to administer the Department as Minister of Mines, and Mr. A.O. Dufresne, formerly Director of the Bureau of Mines, and later Deputy Minister of Mines and Maritime Fisheries, was appointed Deputy Minister of Mines.

MINING INDUSTRY

A report on the mining industry of the Province during the calendar year is published annually as soon as possible after the close of the year concerned. For the duration of the war, publication of production figures for individual base-metals and for certain of the industrial minerals is witheld, but such general data as it is permissible to publish concerning the output of these and other minerals during the past calendar year will be found in the annual report of the Department of Mines entitled "The Mining Industry of the Province of Quebec during the year 1942". This report also gives an account of the development of the industry during the year under review.

It is of interest to note that, in the calendar year 1942, the total value of the production of Quebec mines and quarries reached a new high level, and for the first time exceeded one hundred million dollars. The actual total was $104,404,146, an increase of five per cent over the previous record of $99,700,027, in 1941.

During the first three months of 1943, which constitute the last quarter of the fiscal year 1942-43, there was an appreciable increase in the production of base-metals - copper, zinc, and chrome - and also of asbestos as compared with the preceding quarter, but a marked falling off in the production of gold. This latter is not due to any exhaustion of the gold mines; it is entirely a consequence of the fact that, under the prevailing wartime restrictions, gold mines rank after base-metal mines as regards priorities for supplies and labour. Indications are that the value of output of base-metals from Quebec mines will be higher in 1943 than in 1942, but it appears probable that this

increase may not compensate the decrease in value of gold production, and consequently that there may be a decrease in total value of metal production. Over the past four years, gold has accounted for 70 per cent of the value of the metal production of the Province.

The production of peat-moss has been increasing in recent years. From 7,265 tons in 1941, it rose to 12,982 tons in 1942, an increase of more than 75 per cent. Its production is encouraged by a bounty, provided for in a law passed by the Provincial Legislature in 1941. The material is used as an absorbent material, as a heat-insulating substance, as soil amendment, and as packing material. Much of the Quebec production of peat-moss is exported to the United States.

In the early months of 1943, the feasibility of resuming production of peat for use as fuel was given careful study, and, as a result, it is expected that several bogs will be exploited for this purpose during the summer of 1943. The Federal and the Provincial Governments are considering passing measures to encourage this production, which would alleviate the expected shortage of cord-wood fuel, due to the scarcity of labour to cut the required quantity.

MINING TITLES

The unfortunate conditions to which the world is now subjected require full employment of the manpower and resources of the country for the pursuit of war. Hence prospecting and the staking of mining claims in Canada are suffering from a dearth of prospectors, and also of capital, for ventures which are not immediately essential to the war effort. As a consequence, sales of miners' certificates and the number of mining claims staked during the fiscal year 1942-43 were much below those of normal years, with 1,710 certificates issued and 4,420 claims staked, as compared with an average of 3,300 and 11,500, respectively, for the ten-year period which preceded the beginning of hostilities of World War II.

Tables I and II give particulars relating to the mining titles issued by the Department of Mines during the fiscal years 1941-42 and 1942-43.

Table III shows the number of days' work performed, and the amount of diamond-drilling carried out, during each of the past ten calendar years, on mining claims and on ground held under development licenses. The figures for the first six months of 1943 are also given. It should be explained that the great falling off in 1942, and again in the first half of 1943, is due almost entirely to the fact that, under the provisions of an Act assented to on May 29th, 1942, holders of mining ground under claims or under development licenses are relieved from the obligation to perform statutory development work until one year after the termination of the war.

J.X. Mercier is the Chief of the Division of Administration.

TABLE I

Various Titles Issued by the Department of Mines
Fiscal Years 1941-42 and 1942-43

Designation of Title	1941-42	1942-43
Claims recorded, Amos	2,801	2,350
" " Noranda	1,529	1,056
" " Quebec	661	1,014
Total	4,991	4,420
Miners' certificates issued	1,589	1,710
Development licenses issued	322	313
Development licenses renewed	1,614	1,794
Mining concessions	10	4
Transfer of titles	447	463
Reports of work: days reported ...	299,592	*145,518
Reports of work: diamond drilling, feet	193,142	* 98,036

* By an Act assented to May 29th, 1942, holders of claims and licenses are exempted, for the duration of the war and one year after, from doing assessment work.

TABLE II

Titles Issued Since 1923-24
(Fiscal Years)

Fiscal Year	Number of Miners' Certif.	Number of Claims Recorded	Number of Development Licenses(1)	Mining Concessions		Transfer of Mining Rights
				Number	Acres	
1923-24	1,928	1,750	635	9	1,517	430
1924-25	2,239	5,143	1,045	17	3,698	729
1925-26	3,315	9,407	1,074	8	1,733	1,152
1926-27	3,799	12,686	1,467	33	7,249	1,155
1927-28	4,090	13,707	2,290	20	6,640	1,227
1928-29	3,086	9,544	2,177	16	5,803	830
1929-30	2,500	8,245	1,607	2	1,049	640
1930-31	1,981	6,034	1,341	3	967	855
1931-32	2,324	8,108	906	4	1,940	425
1932-33	3,178	11,211	1,065	4	2,578	908
1933-34	3,002	10,915	1,557	4	2,627	940
1934-35	3,395	11,397	1,680	9	3,541	987
1935-36	4,043	12,962	1,770	5	2,233	1,078
1936-37	7,099	23,823	2,398	2	990	2,400
1937-38	2,718	12,918	2,932	17	4,089	1,217
1938-39	3,221	10,337	2,777	7	2,123	830
1939-40	2,181	7,325	2,320	4	1,574	555
1940-41(2)	965	3,015	1,538	2	1,029	334
1941-42	1,589	4,991	1,936	10	3,765	447
1942-43	1,710	4,420	2,107	4	569	463

(1) Prior to June, 1937, these licenses were designated "Mining Licenses".
(2) Interim fiscal period of nine months, owing to change in date of the commencement of the fiscal year, from June 30th to March 31st.

TABLE III

Comparative Statement of Exploration Work Performed on Claims and Licenses During the Calendar Years 1931-42

Calendar Year	Number of Days' Work	Footage of Diamond-Drill Holes
1931	124,050	23,486 feet
1932	184,815	44,873 "
1933	263,900	49,889 "
1934	500,502	123,257 "
1935	543,094	146,425 "
1936	730,295	202,623 "
1937	910,088	434,903 "
1938	774,709	217,587 "
1939	549,580	299,619 "
1940	335,499	240,370 "
1941	255,352	169,110 "
1942	175,338	115,056 "
1943 (6 months)	19,343	11,481 "

INCORPORATION OF MINING COMPANIES

The search for workable deposits of certain 'strategic' minerals was stimulated by the war demand and by the high prices offered for some of them. Several companies were organized during the year to undertake the reopening of old mines from which such minerals or ores had been produced in past years, or for the purpose of exploring for new deposits or developing new discoveries.

Twenty mining companies were incorporated under Quebec charters in 1942. In addition, six with Dominion charters, and seven with Ontario charters, acquired mining rights in the Province of Quebec. This total of thirty-three new companies in 1942 compares with twenty-six in 1941. These figures are very low compared with incorporations in the years which preceded the opening of hostilities.

Mining Companies Incorporated in the Province of Quebec in 1942

(Calendar Year)

Name of Company	Head Office	Date of Incorporation	Number of Shares	Par Value
Canadian Quarries Company, Limited (La Compagnie des Carrières Canadiennes, Ltée)	Ville St-Michel	July 28	4,000	$ 5
Continental Petroleums, Limited	Montreal	Sept.17	900,000	1
Donalda Copper Mines,Ltd.	Montreal	May 12	3,000,000	1

East Amphi Gold Mines, Limited	Malartic	Oct. 17	3,000,000	$ 1
El Sol Mines, Limited	Montreal	July 15	20,000	1
Hollinger North Shore Exploration Company, Ltd.	Montreal	July 17	3,000,000	1
Industrial Metals, Ltd.	Montreal	Oct. 5	300,000	1
Industrial Mica Company, Ltd.	Montreal	Oct. 5	49,000	1
Industrial Sands and Minerals Corporation	Montreal	March 31	400	50
Linmac Mica, Limited	Montreal	Dec. 17	99,000	1
Mica Laurentien, Limitée.	Montreal	Dec. 18	1,000	10
Molyca Mines, Limited	Montreal	Aug. 26	190	100
New Calumet Mines, Ltd.	Montreal	May 8	3,500,000	1
North Siscoe Mines, Ltd.	Montreal	Sept. 19	708,753	1
Orford Mining Company, Limited	Sherbrooke	July 17	149,900	1
Paquin Gold Mines, Ltd.	Quebec	May 6	490	100
Shawinigan Iron Mines Company, Limited	Shawinigan Falls	Aug. 1	3,000,000	1
Siscoe Metals, Limited	Montreal	June 16	4,000	None
Titan Steel Corporation	Quebec	April 30	1,990	100
Weedon Copper & Pyrite Mines, Limited	Montreal	Sept. 14	1,000,000	1

Mining Companies with Dominion or Ontario Charter that acquired mining rights in Quebec during 1942

(Calendar Year)

Name of Company	Head Office	Date of Incorporation	Number of Shares	Par Value
DOMINION:				
James Norrie, Limited	Amos	March 20	100,000	None
National Molybdenum Mining Syndicate, Ltd.	Montreal	July 2	50,000	$ 1
Norbec Copper Mines, Ltd	Noranda	Nov. 17	2,500,000	None
Obaska Lake Mines, Ltd.	Toronto	Dec. 16	3,000,000	None
Rainville Copper Mines, Limited	Toronto	July 6	3,000,000	None
Wartime Metals Corporation	Montreal	May 17	None	None
ONTARIO:				
Canadian Phosphate Mining Company, Limited	Ottawa	Oct. 27	100,000	$ 1
Columbière Mines, Ltd.	Toronto	April 22	3,000,000	1
Gulf Lead Mines, Ltd.	Toronto	July 4	3,000,000	1
New Barber-Larder Mines, Limited	Toronto	April 7	1,500,000	1
Norman Malartic Mines, Limited	Toronto	Dec. 16	3,000,000	1
Vic-Ore Molybdenite Mines, Limited	Toronto	Dec. 23	1,500,000	1
A.W. White Mica, Limited	Toronto	Sept. 2	(10,000*	10
			(10,000	None

* Preferred shares.

LEGISLATION

During the session of the Quebec Legislature which opened on February 23rd and closed on June 23rd, 1943, the following measures concerned with the mining industry were passed:

By Act 7, Geo.VI, Chap.25, 1943 (assented to on April 15th), the Lieutenant-Governor in Council is authorized to "permit prospecting for, and mining of, certain minerals, upon such conditions he may fix" in Gaspé Natural Park, which had previously been territory withdrawn from prospecting.

By Act 7, Geo.VI, Chap.33, 1943 (assented to on June 28th), the Peat Premium Act was amended to authorize the Lieutenant-Governor in Council to expend, during the fiscal year 1943-44, a sum not to exceed twenty thousand dollars, to encourage the manufacture of peat fuel in the Province of Quebec, highly desirable at the present time to alleviate the shortage of wood fuel.

As a further measure of assistance to this industry, the Lieutenant-Governor is authorized "to pay annually, during a period of four years to be computed from April 1st, 1943, a premium on the marketable product of any enterprise for preparing peat and placing it on sale, which shall have commenced operations between the 31st of March 1942 and the 1st of April 1944".

COLLECTION OF DUES ON MINES

In the course of the fiscal year ending March 31st, 1942, fifty-one mining companies sent in returns of their operations, as required by the Quebec Mining Law. The data submitted included a statement of profits for the period, upon which a tax is payable to the Quebec Government. From this source, the sum of $1,859,520.82 was collected.

The acreage tax of ten cents an acre on mining concessions which remained idle during the fiscal year yielded $2,206.72 from eighty-six concessions. Sworn statements were received from seventy-six other holders of concessions, to the effect that at least two hundred dollars was expended in mining work on each concession during the year, this being the statutory condition set forth in Section 42 of the Mining Law, exempting such mining properties from the acreage-tax liability.

S. Drouin was in charge of the collection of dues on mines.

DIVISION OF GEOLOGICAL SURVEYS

The following statement was supplied by I.W. Jones, Chief of this Division.

The main function of this Division is to conduct geological investigations - that is, to examine and report on the nature, distribution, and structural relations of the rock formations in various sections of the Province. Particular attention is given to the mineral possibilities of the regions studied, so that the reports and geological maps presenting the results of these investigations may serve as a guide to prospectors in the search for new mineral deposits and also assist in the development of known mineral resources, if such there be, in any of the particular regions investigated. It sometimes happens that this work opens up entirely new fields for prospecting and mining,

Comparative Statement of Revenue Collected by the Department of Mines, 1940-41 to 1942-43

(Prepared by Robert Samson, Chief Accountant)

(Fiscal Years)

	1940-41 (nine months)	1941-42	1942-43
Miners' certificates ...	$ 8,560.00	$ 16,270.00	$ 17,405.00
Development licenses ...	86,228.88	112,075.09	105,180.83
Penalties	110.00	1,160.00	
Mining concessions	9,429.00	12,939.80	2,817.35
Transfer of titles	3,243.00	4,235.59	4,393.41
Dues on mining concessions	1,250.97	2,780.67	2,206.72
Dues on village lots ...	2,511.32	4,682.02	15,576.12
Dues on profits of mines	215,594.21	1,488,917.95	1,859,520.82
Unwrought metal licenses	84.00	46.80	52.00
Sale of maps, blueprints, etc.	370.35	514.90	665.85
Mineral collections	230.55	325.00	293.50
Assay fees	225.75	126.30	137.50
Sampling plant of Mine Schooi:			
Sale of recovered gold		1,797.56	19,815.27
Rent and sale of material		19,573.53	17,785.60
Miscellaneous	17.31	234.72	81.60
Casual revenue	235.00	451.40	1,014.10
Totals	$328,090.34	$1,666,131.33	$2,046,945.67

as was recently the case when geologists of this Division made discoveries of iron and copper mineralization in the region bordering Romaine river, north of the lower part of the Saint-Lawrence.

In the field, the geological mapping is usually done on the scale of half a mile to one inch and this is reduced to one mile to one inch in the published maps which accompany the reports describing the results of the investigations made. The compilation of these maps and the preparation of the reports entail considerable office study and research by the geologists through the winter months that succeed the summer and autumn seasons during which they made their field investigations.

It may be noted that, in addition to their direct value to the mining industry, these geological reports and maps are a great aid in the development of other natural resources. They frequently give information concerning the physical and other features of regions previously little known or unexplored.

During the fiscal year covered by this report, the Chief of this Division, I.W. Jones, had under his supervision six geological parties conducting investigations in widely separated parts of the Province. Two of them, one making a detail-

ed study of certain deposits of zinc and lead and the other searching for possible deposits of tin, would normally have been under control of the Division of Mineral Deposits, but, for reasons of administration during this period, when assistance in the war effort was the main objective of most of the investigations, they were assigned to the Division of Geological Surveys. The war needs took up much of the time of the Chief of the Division who, in addition to his routine administrative duties and visits to various geological parties during the course of the field-work, had frequent occasion to supply information to the authorities concerned on mineral deposits of strategic or war importance. He and other members of the staff also dealt with many requests for information concerning the geology of the Province and related subjects.

The six geologists in charge of the investigations referred to above, and the objects and results of their work, were as follows:

P.E. Auger - A detailed study of the many veins containing zinc and lead sulphides which have been found by prospecting and development operations in the township of Lemieux, Gaspé peninsula. This work is being continued in 1943, but the information already obtained was placed at the disposal of the Metals Controller, Ottawa, and of the owners of the mining properties, immediately after completion of the 1942 investigation.

T.H. Clark - Investigation of the petroleum and natural gas possibilities of the Saint-Lawrence lowlands between Montreal and Quebec. During 1942, geological examination was made of a territory of more than 900 square miles lying south of the Saint-Lawrence and east of the island of Montreal. This work will continue northeastward. It is expected to supply much information that has been lacking and which will considerably aid any efforts to find oil or gas in this region.

C. Faessler - A search for tin in the region north and south of the Saint-Lawrence from Quebec eastward to beyond Saguenay river. There has been urgent need for this metal since Japan's capture of the southwestern Pacific region and its rich tin deposits. Unfortunately, no occurrence of tin-bearing minerals was found during this investigation. The negative results are of value, however, in that they will save expenditure and time on the part of prospectors who might plan on searching in the same localities as were examined by Mr. Faessler. During the course of this search, occasion arose to study tungsten-bearing deposits in Risborough and Marlow townships, Frontenac county.

W.W. Longley - Geological study of a region bordering Romaine river, Saguenay county. This was the continuation of the investigation of a more exploratory nature made by one of this Division's geological parties in 1941, when important discoveries of titaniferous iron ore were made, and copper mineralization was found, at several localities. In 1942, a 200-square mile area lying east of Romaine river and about fifty miles north of the St-Lawrence shore was mapped. Further discoveries of copper mineralization were made, which, with those of the previous year, have attracted the attention of mining companies and prospectors to the possibilities of this hitherto little known North Shore region.

H.W. McGerrigle - An investigation of the petroleum possibilities in Gaspé peninsula. The geological examination of the eastern part of Gaspé, which has been carried on by field

parties of this Division for a number of years, has been followed by drilling operations by various companies in a search for oil in that section of the peninsula. The investigations by Dr. McGerrigle in 1942 were extended to the west and southwest to cover in a general way a large territory lying, for the most part, in Bonaventure county. It is planned to continue these investigations, to determine whether and where geological conditions are as favourable for the existence of oil as those in eastern Gaspé.

S.H. Ross - Geological investigation along Péribonca river. While possibly not contributing directly to the war-effort, this investigation may be said to have been necessitated by developments that have been hastened by the war. The construction of the large Passe Dangereuse dam on Péribonca river, in connection with hydro-electric power developments in the Lake Saint-Jean region, was to result in the raising of the water level along an 80-mile stretch of the river above this dam. The purpose of the geological investigation here mentioned was to examine the rock outcrops along this stretch before they were covered by the rising waters.

At the close of the 1942 season, brief preliminary geological reports were published, describing the main results of some of the above mentioned investigations. They were accompanied by preliminary geological maps. As a result, there was no delay in presenting to the public the features of importance, and prospectors were able, during the winter months, to study these reports and make use of them during the following summer.

DIVISION OF MINERAL DEPOSITS

Bertrand T. Denis, Chief of this Division, reports as follows on the work carried out during the past fiscal year.

Under this Division are carried out geological investigations of mining properties or districts with a view to furthering the development of the mining industry within the Province. Most of such investigations are of a detailed nature. Technical advice is given to prospectors and to companies engaged in exploration and development.

During the year 1942, the efforts of the Division were directed toward the search for minerals immediately or potentially useful to the conduct of the war. The group of 'strategic' minerals was given special attention. Five parties were in the field throughout the summer and early autumn.

P.E. Bourret, Industrial Minerals Technologist, visited seventy-six properties in the southern part of the Province, in the Lake St-Jean district, and along the north shore of the St-Lawrence. These properties were in various stages of development, from prospecting work on or near a mineral discovery to operating mines. The minerals or substances involved were: apatite (5), brucite (1), calcite (1), china clay (1), common clay (4), chromite (1), feldspar (4), fluorite (2), granite (2), graphite (1), ilmenite (3), iron (4), limestone (7), magnesite (1), marble (1), mica (27), mineral water (2), molybdenite (3), ochre (2), samarskite (1), sandstone (1), and silica (2).

Bulk samples for use in metallurgical investigation were obtained from the St-Charles titaniferous magnetite deposit, on lots 44 and 45, range I, Bourget township.

The surface and underground workings of the Maisonneuve mine, in Maisonneuve township, were examined and sampled, principally in view of the occurrence here of samarskite, a rare tantalum-columbium mineral.

F.W. Hughes searched for tin deposits in the Grenville sub-province and in parts of the Appalachian region. For the first month of the season, this party was in charge of W.J. Lynott, who left the field to respond to a call from the R.C.A.F.

W.N. Ingham made detailed geological maps of, and sampled, eleven molybdenite deposits in the Grenville sub-province area and in the Eastern Townships.

W.W. Moorhouse made a detailed geological investigation of part of the apatite belt in Portland West township.

G.W. Waddington made close dip-needle surveys of four deposits of magnetite or ilmenite. A magnetometer survey was made of another deposit by L. Massé, working in collaboration with Mr. Waddington. Four deposits of bog manganese ore were also examined and sampled, and visits were made to four localities where iron ore deposits had been reported.

Henri Girard closely followed developments in the peat industry throughout the Province. In order to hasten and to encourage the production of peat-fuel, the Department has designed and made available to the operators a machine for macerating and extruding peat for small-scale operation. The first of these machines was operated with satisfaction in the fall of 1942 for experimental purposes.

Jean Morency, mining engineer, is in charge of a subdivision whose function is to classify technical information gathered by the Department, so that it be readily available. Scarcely a day passes but these records are consulted by one or other of the officers of the Department. The available data on fifteen specific problems connected with the mining industry were compiled and studied, and the results placed before the Deputy Minister. In addition, one hundred and ninety-one requests from the public for information on mining companies, mines, mineral occurrences, and other matters connected with the mineral industry, were answered by letter. At the request of the Registrar of the Quebec Securities Act, technical reports on eighteen properties were studied.

DIVISION OF INSPECTION OF MINES

The officers of the Division of Mine Inspection are responsible for carrying out the inspection of mines, quarries, and sand and gravel pits in accordance with Section 198 of the Quebec Mining Act, to ensure the observance of the Regulations for the Protection of Workmen in Mines and Quarries. In fulfilling these duties, the officers of this Division note the general developments, and report on the progress of the mineral industry.

R.H. Taschereau is Chief Inspector of Mines. During the fiscal year under review, the staff of this Division was reduced.

The six mine-inspection districts of the Province comprises:

1.- The Western Quebec District, comprising the counties of Abitibi and Témiscamingue, and Abitibi territory.

2.- The Eastern Townships, from Richelieu river eastward to Lévis and Dorchester counties, inclusive.

3.- The counties of Gatineau, Labelle, Papineau, and Argenteuil, and the area south of the forty-sixth parallel of latitude in Pontiac county.

4.- The area comprising the counties east of Joliette, to the north of the St-Lawrence river.

5.- The area east of Lévis and Dorchester counties, to the south of the St-Lawrence river, including the peninsula of Gaspé.

6.- The city of Montreal and the immediately surrounding area.

In the Western Quebec District, the inspection work was supervised by M.O. Lafontaine. Early in the fiscal year his predecessor, J.N. Herring, was granted leave of absence from the Department, and subsequently resigned. Lucien Lavigne was in charge of inspection work in the Eastern Townships and the Ottawa Valley areas until September, 1941, when he obtained leave of absence from the Department; he has joined the armed forces and is now on active service overseas. Jean de Péron carried out the inspection of quarries and pits in the Montreal area. Henri Girard, who was previously in charge of inspection work in the St-Lawrence Valley area and in Gaspé peninsula, has been assigned to other duties in the Department.

Three mine constables are employed by the Department to assist the inspectors in various phases of their work, and to carry out other duties assigned to them by the Minister. They are stationed in Thetford Mines, Rouyn, and Amos.

Jules Leblanc was retained as consulting electrical engineer to the Department. Mr. Leblanc inspected all new electrical installations at mines in the Province and advised the Department on more advanced electrical problems and on accepted practice.

Meetings of the Inspectors were held in Quebec city in May and November, 1942, at which problems relating to their work were discussed.

Fatal accidents in mines and quarries were slightly fewer in the calendar year 1942 than in the previous year. On the other hand, non-fatal accidents continued to increase. Close study of these accidents reveals that the employment of unskilled labour, and the unsettled labour conditions due to the war, are responsible for a large proportion of them.

A number of mining companies have supplied their employees with copies of safety rules designed for their particular operations. In several cases, this Division has assisted in the preparation of French translations of company rules for the benefit of French-speaking employees.

Reports of all compensable accidents are sent to the district inspectors by the mine operators. These reports are class-

ified and then forwarded to the Quebec office. In the case of fatalities or other accidents of a very serious nature, the Inspector visits the scene of the accident, immediately if possible, and makes a detailed investigation and report. These reports, in both languages, are multigraphed, and copies are sent to mine and quarry operators, and to other parties interested in mine safety work.

Courses in "First Aid to the Injured" have been continued at several mines. Recognizing the importance of this humane work in the prevention of accidents, the Department of Mines awards certificates of competency to candidates who have successfully passed their examinations. In the year ended March 31st, 1943, 145 certificates were distributed to workers in mines as follows:

Noranda Mines, Limited	121
Canadian Johns-Manville Company, Limited.	20
Waite Amulet Mines, Limited	4

In addition to the above, ten employees of Noranda Mines, Limited, were trained in mine rescue work, and were awarded special certificates in "First Aid and Mine Rescue" by the Department.

Ore Mill Permits

Section 13, paragraph 2, of the Quebec Mining Act (Revised Statutes 1941), provides that "the place and situation of every smelter, mill or refinery, built in the Province of Quebec, shall be chosen, determined or approved by the Lieutenant-Governor in Council". During the fiscal year under review, Orders in Council were enacted approving the sites of the following mills: West Malartic Mines, Limited; Golden Manitou Mines, Limited; Chromeraine Project, Wartime Metals Corporation; and New Calumet Mines, Limited.

In conformity with the same section of the Mining Act, permission was granted to Golden Manitou Mines, Limited, and Normetal Mining Corporation, Limited, by Order in Council, to ship concentrates outside of the Province for further treatment.

Section 123 of the Quebec Mining Act (Revised Statutes 1941) requires that the place where tailing from mining operations is deposited must be approved by the Minister of Mines. In conformity with this Section, three mining companies submitted requests for approval of tailing sites, and transmitted topographical plans of the proposed areas. Following an examination of the sites, and on recommendation of the plans by the Inspectors of Mines, the approval of the Minister was granted for the deposition of tailing on the following properties: West Malartic mine, Malartic township; Malartic Gold Fields mine, Fournière township; and Wartime Metals Corporation (Chromeraine Project), Coleraine township.

Unwrought Metal Sales

Under the provisions of this Act, twenty-eight licenses for carrying on the commerce of unwrought precious metals were issued during the fiscal year.

This law was passed by the Legislature in 1940, for the purpose of putting a stop to illegal traffic in precious metals and, in particular, to the practice of "high-grading" in gold mines.

DIVISION OF DRAUGHTING AND CARTOGRAPHY

This Division, of which Marc Boyer is in charge, had a staff of seven draughtsmen during the fiscal year 1942-43.

Base-maps were prepared for the use of the several geological field parties which carried on investigations in various parts of the Province during the field-work season of 1942, and a number of manuscript and sketches maps of previous geological field-work were compiled, redrawn, and made ready for printing and publication.

This Division also prepares plans and sketches for the needs of all the other Divisions of the Department of Mines.

Two important series of tracings on linen, which are official records, are kept constantly up to date: on one series are plotted all mining claims as soon as they are staked out and recorded; on the other, the outline and the ownership identification of all mining properties or groups of claims. In both series, each tracing embraces the area of one township. There were, at the end of the year, 333 separate tracings in the "mining claim" series and on these the boundaries of the 4,420 new claims staked during the year were plotted. The other series consists of 45 tracings. In the course of the year, 2,024 blue-prints were made from these tracings.

The Division prepared a number of geological maps, in colours, and supervised their printing. Of these, the following were completed and became available for distribution during the fiscal year:

Map No.505.-Index Map of the geological maps published to date by the Quebec Department of Mines.
Map No.513.-Siscoe Mine Area, Abitibi County.
Map No.536.-Quebec Manitou-Fleming Mines Area, Louvicourt Sheet, Abitibi County.
Map No.537.-Quebec Manitou-Fleming Mines Area, Bourlamaque Sheet, Abitibi County.

On March 31st, 1943, the following geologically coloured maps were still in process of being lithographed:

Map No.549.-Calumet Island Area, Pontiac County.
Map No.550.-Calumet Mines, Limited, Pontiac County.
Map No.580.-Geological Reconnaissance from Lake Forgues to Johan Beetz (North and South Sheets), North Shore of Saint-Lawrence.

In addition, four preliminary geological maps were prepared and printed in black and white to accompany preliminary reports on geological work done during the 1942 field season.

The draughtsmen of this Division also prepared forty-three other plans and figures, and made tracings of them for reproduction. Of these, twenty-three were to illustrate Volume II of "Geology of Quebec" (now in press). The remainder were used in special reports on prospecting for "strategic minerals". About one hundred copies of these maps were coloured by hand for the use of interested parties.

Distribution of Publications

This section of the Division has charge of the storage and of the distribution of the various publications of the Department of Mines, such as reports, maps, and other printed matter.

Mailing lists are kept up to date for the regular distribution of the Department's publications. The Section also attends to all requests for specific reports or maps, and to enquiries relating to them and, generally, to the geology and mines of the Province.

During the fiscal year under review, 10,304 copies of various Departmental reports and pamphlets on the mining industry and the geology of the Province were distributed, besides numerous copies of maps and of monthly and quarterly statistical bulletins on the mineral production of Quebec.

DIVISION OF MINERAL STATISTICS

The Division of Mineral Statistics, in charge of C.O. Beaudet, collects and compiles annual, and also monthly, statistics of the mining industry of the Province, and deals with all correspondence and enquiries regarding them.

Data collected yearly include those relating to production of metals and minerals, number of workmen and other personnel employed, fuel and other supplies consumed, and amount of power used. Only a part of these statistics, and in particular the figures of mineral production and those concerned with labour, are published in the Department's Annual Report entitled "The Mineral Industry of the Province of Quebec". The remainder, which are of interest to only a very restricted public, are kept on file for the use of the Department and for reference in replying to enquiries relating to them.

The monthly statistics collected are limited to figures of production for certain of the more important metals and minerals, and for the most part they are exclusively for the use of the Quebec Department of Mines, the Federal Bureau of Statistics, and the Metals Controller. However, those relating to gold, silver, clay products, lime, and cement are published in a monthly bulletin, of which some 300 copies are distributed regularly to newspapers and journals, and to certain companies and individuals who have expressed a wish to receive them. Every three months, a supplement is mailed with the regular monthly bulletin. It treats especially of the gold industry and gives, for each producing mine, the tonnage of ore mined and milled, and the quantity of gold shipped as metal or in the ore, for the three-month period and for the year to date. The bulletins mailed to newspapers and journals are usually accompanied by comments on the figures presented.

The mineral production data for the calendar year 1942 were compiled from 1,360 returns sent in by operators of mines, quarries, and clay pits. Of these, 1,250 operators gave figures of production or of shipments of mineral substances, and 110 reported that their operations were restricted to exploration or development work, without actual production. In addition, the owners of 992 properties reported that they had been inactive during part or the whole of the year. In all, 2,524 requests for returns were mailed by the Division, but to 172 of these no reply

was received. Those who neglected to reply did not include any operators of importance, and it was ascertained later that many of them had completely ceased to be interested in mining and mineral deposits and that most of the remainder had been entirely inactive.

Special requests were sent to fifty-seven mine operators for reports on the amount of construction lumber and mine timber used by them during the year, and to one hundred and five road-building contractors for reports on the quantities of crushed stone, sand, and gravel used in their operations. To these requests, one hundred and thirty-nine replies were received.

To meet the wishes of the Metals Controller, who desires to be kept informed regarding the production of 'strategic' minerals and metals, we have extended our requests for monthly returns to a greater number of operations than heretofore. Our list, which averaged fifty operations in 1941, included more than sixty in 1942, and the number has been increased appreciably in the first half of 1943.

DIVISION OF MINERALOGY AND CHEMISTRY

This Division, of which Maurice Archambault is Chief, comprises (I) the sampling and ore dressing plant of the Mine School, near Val d'Or, Abitibi county; (II) the laboratories of the Department of Mines; (III) exhibition displays; (IV) the Museum of the Department; (V) courses of lectures for prospectors.

I.-Government Sampling and Ore Dressing Plant

Flotation and Gravity Concentration Annex.-In the course of the fiscal year 1941-42, the Department of Mines made a survey and investigation of occurrences of scheelite (tungsten ore) in certain gold ores of the Province with a view to estimating the total amount, and the grade, of scheelite concentrate that might be recovered from these ores.

Although this work revealed that these sources would furnish only a relatively small quantity of tungsten ore, it was felt that, in view of the urgent need for tungsten for the manufacture of special steels and alloys, essential for the production of war matériel, any contribution, however small, that the Quebec mines might make to the supply was highly desirable. Accordingly, it was decided to erect a concentrating plant in the district, to which material from the various mines might be sent for treatment.

The plant was erected and equipped during the summer of 1942, the Federal and Provincial Governments each bearing half the cost. It forms an annex to the sampling and ore dressing plant of the Mine School, near Val d'Or, Abitibi county, and has been in operation since November 11th. A brief description of the plant is given in the Department's report on "The Mining Industry of the Province of Quebec in 1942", under the heading of "Tungsten".

Cyanidation Plant.-The cyaniding plant has a capacity of ten tons per twenty-four hours, which could easily be increased to forty tons if the present system of treating each ore lot separately were changed to a continuous operation.

In the course of the year under review, some 725 tons

tons of ore was cyanided, with recovery of 455 ounces of gold. For the most part, this ore came from the mine operated by the Mine-School.

Sampling Plant.-The sampling plant has a capacity of three tons per hour. Ores of all sorts can be accurately sampled including difficult ores of the type containing coarse gold, irregularly distributed.

In addition to seventeen lots of tungsten ore received from various mines, ore lots as follows were sampled at the plant during the year:

Shipper	No. of Lots	Type of Ore	Weight (pounds)
Provincial Mine School ..	Part of production	Gold	1,381,120
L. Dupuis (Val d'Or)	2	Gold	19,685
La Pause Mining Co. (J.A. Turgeon)	3	Molybdenum	4,365
Siscoe Gold Mines	2	Molybdenum	6,135
Siscoe Gold Mines	2	Scheelite	20,160
Arthur Guinard (Arntfield)	1	Scheelite	10
Moneta Porcupine Gold Mines	2	Tantalum	3,460

The charge for the sampling and treatment of ores in the Plant is very low as an aid to the industry and particularly to the small operator. Details regarding terms, and other information, may be obtained from G.S. Grant, manager, Sampling and Ore Dressing Plant, Government Mine School, Val d'Or, Que.

II.-Laboratories

The main laboratories of the Department are at headquarters in the city of Quebec, in Annex E of the Parliament Buildings. They are equipped with all facilities for making quantitative analyses of minerals and rocks and microscopic examinations of rocks in thin section.

The oldest of the Department's laboratories is in the Ecole Polytechnique Building, 1430 Saint-Denis Street, Montreal. It serves mainly the public of that part of the Province.

The Thetford Mines Laboratory is mostly concerned with the classification of asbestos fibre. The equipment includes a grading machine which is used to standardize the similar machines employed by the asbestos producers of the Province in their mills.

The staffs of these laboratories examined 4,456 mineral, ore, and rock samples during the year under review. Their work necessitated 10,101 determinations, assays, and quantitative analyses, which were distributed as follows:

Laboratory	Samples Received	Quantitative Assays and Analyses			Determinations (free)	Total
		Assay Coupons	Department Analyses	Paid Analyses		
Quebec ...	3,547	1,885	2,526	209	3,281	7,901
Montreal .	606	799	---	220	260	1,279
Thetford Mines ...	303	---	921	---	---	921
Totals .	4,456	2,684	3,447	429	3,541	10,101

In addition to the work tabulated above, the staff of the Quebec laboratories made several complete chemical analyses, including one of a sample of water from Saint-François-de-Sales, Laval county, and six of samples of titaniferous iron ore. Also, one hundred special determinations of minerals and rocks were made by optical methods, which involved the microscope examination of numerous thin sections.

At the end of 1942, Professor Louis Bourgoin, in charge of the metallurgy department of l'Ecole Polytechnique, University of Montreal, completed the research work he had commenced the previous year, under the auspices of the Department of Mines, on the utilization of titaniferous magnetite ores. A summary of the results of this investigation was given in Preliminary Report No.179.

III.-Exhibition Displays

In the fall of 1942, the Department prepared a collection of 'strategic' minerals essential to the war industries. It is displayed in the Provincial Museum, on the Plains of Abraham, Quebec.

IV.-The Museum

Accessions to the Departmental Museum during the year included the following:

A briquette of molybdenum oxide, from the Quyon Molybdenum Company.

A specimen of chromite from Mount Albert, Gaspé county.

Two specimens of tantalite, from the townships of Preissac and Figuery, respectively, Abitibi county.

A specimen of erythrite (cobalt bloom) from the Federal mine, Lemieux township, Gaspé county.

V.-Courses of Lectures for Prospectors

In the past year, the Department again organized series of free lectures for prospectors. The aim of these courses is to give prospectors sufficient instruction in mineralogy and geology to enable them to recognize the more important ore and rock-forming minerals and the rocks in which they occur. In last years's courses, special emphasis was laid on the so-called strategic or war minerals.

The lecturers, Alphonse Bleau and J.W. Laverdière, delivered a total of forty-seven lectures in the centres listed below:

Charlevoix-Saguenay County	Gatineau County	Labelle County	Papineau County
Sacré-Coeur Saint-Siméon Grandes-Bergeronnes	Gracefield Maniwaki	Mont Laurier	Buckingham Fassett Notre-Dame-de-la-Salette Notre-Dame-du-Laus Saint-André-Avellin

More than 400 persons attended these lecture courses. The programme originally planned had to be somewhat curtailed owing to the fact that, before it was completed, one of the lecturers volunteered for active service.

To supplement these courses, the Department distributed during the year, and at the lectures, more than 1,000 copies of the pamphlet "Notions Elémentaires de Minéralogie", and also numerous copies of the "Prospector's Manual" by Goodwin, and "The Prospector's Guide" published by the Department of Mines and Resources, Ottawa. The latter deals chiefly with various "strategic" minerals that are now in great demand.

As a further means of aiding the prospector in becoming familiar with minerals and rocks, the Department has for sale, at a nominal price, small but representative collections of minerals and rocks.

DIVISION OF PUBLICATIONS

The Division of Publications, of which Albert Côté is Chief, is responsible for the editing and printing of geological reports. It also makes up, and supervises the printing of, all forms, letterheads, etc., used by the several Divisions of the Department.

During the year, this Division edited, translated, and supervised the printing of, the following reports:

The Mining Industry of the Province of Quebec in 1941

Geological Report No.12: Kitchigama Lake Area, Abitibi territory, by W.W. Longley.

Geological Report No.13: Flavrian Lake Area, Beauchastel and Duprat townships, Témiscamingue and Abitibi counties, by W.G. Robinson.

Geological Report No.14: Barry Lake Area, Abitibi County and Abitibi Territory, by R.L. Milner.

The above reports were printed in book form and each was issued as a separate volume. They have a total of 192 pages in the English edition and 210 pages in the French edition.

The following preliminary or special reports, in the form of photo-litho or mimeograph pamphlets, were also issued by this Division:

P.R. 175.- Forget Lake Area, Saguenay County, by W.W. Longley

P.R. 176.- General Report of the Minister of Mines for the Year Ending March 31st, 1942.

P.R. 177.- The St-Jean and Beloeil Map-Areas, by T.H. Clark

P.R. 178.- The Apatite Belt of West Portland Township, by W.W. Longley

P.R. 179.- Utilization of the Titaniferous Magnetites of St-Charles, Bourget township, by Louis Bourgoin

P.R. 180.- The Area from Forgues Lake to Johan Beetz, North Shore of the St-Lawrence, by Jacques Claveau

These preliminary reports had a total of 102 pages in the English edition and 112 pages in the French edition.

All the geological reports were issued both in English and in French.

Mr. Côté has as collaborators: R.P.D. Graham, who edits the English version of the reports; Raymond Lesage, R. Brown, and L. Brossard, translators; and André Champagne, proof-reader.

THE LIBRARY

The librarian, Charles Dufault, reports that 237 volumes, including books, reports, and pamphlets, were received during the fiscal year 1942-43. This brings the total number of volumes in the library to 7,307. The new accessions were acquired by purchase and through exchange. Nearly all relate to the mining industry, mineralogy, geology, or chemistry.

The library subscribed last year to eighty technical periodicals and mining journals, or six more than in the previous year.

The catalogue, with its liberal cross-indexing of titles and topics, is proving indispensable to members of the staff and also to the interested public, who are permitted to consult the volumes on the shelves of the library.

The library committee held meetings on the third Monday of each month throughout the year to consider recommendations for the purchase of books and for subscription to reviews and technical papers, as well as to discuss other matters relating to the library.

MINE SCHOOL

The Mine School was established at Val d'Or, Abitibi county, in 1938, to train young men as efficient miners, and for that purpose it operates a mine for the practical work of the course. It is a part of the Federal-Provincial Plan for the Training of Youth. In the Province of Quebec, this Plan is administered by a branch of the Department of the Provincial Secretary, which shares with the Department of Mines the direction

and administration of the Mine School. G.S. Grant, manager of the School, reports as follows on the work done during the fiscal year 1942-43:

At April 1st, 1942, only fourteen apprentices remained in training at the School, and, due to a Federal Government ruling affecting youths above the age of eighteen, no new apprentices could be admitted. As a consequence, it was decided to close the school and this was done on April 14th. Thirteen of the apprentices obtained employment in mines in the district.

Since the opening of the School in March, 1938, a total of 568 apprentices have been admitted. Of these, 363 completed the course and secured employment, chiefly in mines in Western Quebec; the others, for various reasons, did not complete their apprenticeship.

At the time of the closing of the School, some broken ore of good grade remained in one of the mine stopes and two new veins on the 4th level had recently been discovered. On this account, it was decided to carry on a limited amount of work in the mine, employing the few mining instructors who were then at the school. This work was suspended at the end of June, when the pumps were withdrawn from the mine and it was allowed to flood.

Between April 1st and June 30th, the following work was done:

Drifting	151 feet
Cross-cutting	5 "
Diamond-drilling	197 "
Stoping	198 tons
Ore hoisted	632 "
Waste hoisted	261 "

Ore hoisted was treated in the Government Sampling and Treatment Plant. The grade of ore as determined in the Sampling Plant was as follows:

From stopes	291 tons	0.750 oz. gold per ton
From development ..... (405B and 409W drifts)	341 "	0.265 " " " "
Total	632 tons	0.488 oz. gold per ton

From this ore and from high-grade material picked directly in the stopes, 394.26 ounces of gold were recovered.

The high gold content of the stoped ore was due to a small but high-grade shoot found in No.3 vein between the 2nd and 3rd levels. This shoot was completely mined out. The grade of the development ore was improved by picking out waste while it was being mucked.

Development work consisted in extending drifts 405B and 409W, which followed two veins discovered in 1942 on the 4th level and referred to in last year's report. The length, width, and grade of ore developed in these drifts is as follows:

	Length	Width	Grade
405B Drift	135 ft.	3.1 ft.	0.284 oz. per ton
409W "	115 "	3.1 "	0.157 " " "

When work was suspended, the vein in the West face of 409W drift assayed 0.154 oz. gold per ton over a width of 36 inches. That in 405B drift petered out in cross-fracturing, possibly along a fault. A diamond-drill hole, driven to intersect these veins at the 3rd level horizon, cut vein material at about where their upward extension might be expected. Gold assays at these intersections were as follows: 405B vein, 0.07 oz. per ton over 1.0 ft.; 409W vein, 0.07 oz. per ton over 1.1 ft.

These veins occur in quite strong fractures in andesite. They strike approximately east and west and dip 45 degrees north. Further work in this area, particularly at a lower horizon, would be well worth while.

Since the opening of the Mine School, the following underground work has been done in the mine:

Drifting	7,190	feet
Cross-cutting	6,605	"
Raising	551	"
Slashing (drift equiv.)	223	"
Sumps	73	"
Shaft sinking	260	"
Stoping	8,316	tons
Ore hoisted	2,114	"
Waste hoisted	67,740	"
Diamond drilling (surface and underground)	10,906	feet
Station cutting	97	"

From the 2,114 tons of ore hoisted, 566.2 ounces of gold were recovered in the Sampling and Treatment Plant.

'Indicated' ore reserves in the mine are as follows:

	Length (feet)	Width (feet)	Amount (tons)	Gold Tenor (oz. per ton)	Gold Content (oz.)
216 Drift	30	5.0	1,260	0.17	215
305 " (between 2 & 4 levels)	150	2.0	4,680	0.10	468
405B Drift	135	3.1	3,530	0.28	988
409W "	115	3.1	3,010	0.16	482
Total			12,480	0.17	2,153

This ore might be mined and milled at a slight profit should the Mine School be re-opened and the mining work be carried on by apprentices.

Following the closing of the Mine School, windows of all buildings not required by the Sampling and Treatment Plant were boarded up, and steam and water lines to these buildings were disconnected. Surplus stores of drill steel, dynamite, pipe, rail, etc., to the value of $13,852 were sold to mine operators in the district.

SCHOLARSHIPS

The Department of Mines in continuance of its policy of encouraging university students in engineering to pursue their studies in mining, in metallurgy, and in applied geology, offered in 1942 a number of scholarships to promising

students specializing in these sciences. The awards of these scholarships are made by a Committee which, for the academic year 1942-43, consisted of the following members: A.O. Dufresne, Deputy Minister of Mines, chairman; Adrien Pouliot, Dean of the Science Faculty of Laval University; Armand Circé, Principal of Ecole Polytechnique, University of Montreal; W.G. McBride, Professor of Mining Engineering, McGill University; J.W. Laverdière, Secretary of the Science Faculty, Laval University; T.C. Denis, of the Quebec Department of Mines; and Jacques Bernier, Secretary of the Committee. Each award is based on the record of the applicant, but in making the awards the Committee gives priority to students who are already holders of a university degree in engineering and who wish to proceed to a higher (Master's or Doctor's) degree, taking one or other of the above mentioned branches of engineering or science as major subject. Next, applicants who are entering their final undergraduate year are considered, and lastly those in the junior years.

For the academic year 1942-43, the Committee granted bursaries to seventeen applicants, as follows:

Graduates proceeding to higher degrees 6
Undergraduates entering their final year 9
Undergraduates entering other years ...2

With the approval of the Committee of Awards, these students were distributed in the following universities of their own choice:

Graduates.- One at each of the following universities: Queen's, Toronto, Leland-Stanford, McGill, Laval, Massachusetts Institute of Technology.

Undergraduates.- One at McGill, one at Laval.

All of the nine undergraduate bursary holders who entered their final year in September, 1942, successfully completed their university course and obtained their engineering degree in the spring of 1943.

DIVISION OF MINE ROADS

L.A. Saint-Pierre, Chief of this Division, reports as follows:

In the course of the fiscal year which ended March 31st, 1943, new mine roads totalling 23.3 miles in length were constructed in the Province, bringing to 1,006.44 miles the total length of such roads.

The cost of these new roads was $124,626.41, which brings to $5,409,844.04 the aggregate cost of the mine roads of the Province.

In addition, the Department expended $3,200 for the maintenance of summer roads, and $9,999.49 to assist and facilitate transportation in the mining regions during the winter months.

The cost of all mine-road construction and maintenance was defrayed from Item 175 of the appropriations.

New Mine-Roads Constructed

Township and County	Road	Miles
Bowman Tp., Papineau Co. ...	Road to Brazeau mine	2.25
Escoumains Tp., Saguenay Co.	Range II road to granite quarry	1.23
St-Urbain, Charlevoix Co. ..	Baie St-Paul St-Urbain highway to Furnace mine	0.67
Lacoste Tp., Charlevoix Co..	Ste-Agnès parish to titaniferous iron mine	3.0
Coleraine Tp., Mégantic Co..	Highway No.1 to concentrating mill	1.2
Coleraine Tp., Mégantic Co,.	Range X road to Labbé Ward & Pharo mine	0.75
Grand Calumet Id., Pontiac Co.	Bryson Bridge to Calumet mine	3.7
La Pause and Bousquet Tps., Abitibi Co.	Mic-Mac mine road to La Pause mine	4.5
Preissac Tp., Abitibi Co....	Preissac village to St-Maurice mine	6.0

Mine Roads Improved and Extended

Township and County	Road	Miles
Cleveland Tp., Richmond Co..	Sterrett mine road	1.7
Montmorency Co.	Petit Pré to St-Lawrence mica mine	0.34
Rimouski Co.	Pointe-au-Père peat-bog road .	0.34
Guillet Tp., Témiscamingue Co.	Belleterre village to Belleterre mine and Latulippe-Guillet Lake highway	3.57
Guillet & Blondeau Tps., Témiscamingue Co.	Guillet mine road	2.65
Bonaventure, Matapédia, Matane, and Gaspé North Cos.	Road along Grand Cascapedia river	38.14
Papineau Co.	Cameron mine road	6.0
Bergeronnes & Escoumains Tps., Saguenay Co.	Simard mine road	2.5
Courville Tp., Abitibi Co. .	Mariette mine road	2.18
Coleraine Tp., Mégantic Co..	Montreal Pit mine road	4.81
Bourlamaque Tp., Abitibi Co.	Golden Manitou mine road	1.1

Drainage of Peat Bogs

During the year, the Department of Mines undertook the drainage of certain peat bogs to assist in their development and exploitation. This work was carried out by the Division of Mine Roads, who drained the followings bogs at a total expenditure of $8,056.45:

Location of Bog	Operator	Length of Trenching
Ile Verte	Paul Côté	2,500 feet
Ile Verte	Alex. Michaud .	5,000 "
Pointe-au-Père	.....	8,000 "
Isle-aux-Coudres	.....	4,600 "
Pointe-aux-Outardes ..	.....	6,200 "

The depth of the trenches varies between three and eight feet, and the width between three and six feet.

DIVISION OF MINING VILLAGES

The Chief of this Division, Burroughs Pelletier, reports as follows:

The statements made last year regarding the effects of the war upon the gold mines of Western Quebec, and consequently upon the communities which have grown up around them, still apply in their entirety for the fiscal year 1942-43.

The town of Bourlamaque maintained its normal activities without, however, undertaking any new developments.

In the early part of the fiscal year, the Bill for extension of its boundaries which the town of Malartic had presented at the 1942 session of the Legislature was assented to, and has become Act 6, Geo.VI, Chap.87, 1942. This Act greatly extends the territory of the municipality by the addition of several mining properties, among them that of Malartic Goldfields, Limited, with its producing gold mine, situated immediately east of original boundary of the municipality.

Of all the mining communities, Cadillac and Pascalis have probably been most affected by the war. Many of the improvement projects (waterworks, sewer system, road paving, and others) have had to be temporarily postponed. Such municipal activities will be resumed as soon as favourable circumstances permit.

The town of Rouyn, of which Rouyn South is now a part, is continuing its programme of road and sidewalk building, as well as other improvements. The cost of these public works is defrayed from funds derived from the sale of building lots. All such revenue is now collected by the municipal authorities.

The Bill presented by Belleterre Quebec Mines at the 1942 session of the Legislature petitioning for the conversion of Belleterre village into a municipality, was passed and sanctioned (Act 6, Geo.VI, Chap.89, 1942). The Company has prepared plans for the laying out of the municipality, and throughout the year it proceeded actively with the construction of streets and roads and with the installation of waterworks, sewers, and facilities for electric lighting. As the site of the village was virgin 'bush', all this has involved a considerable amount of work. At the end of the year, some thirty houses had been built, and the Company intends to erect many others. The Company offers attractive terms to 'squatters' living in the vicinity to come and settle within the official townsite of the new community. Several of them have already taken advantage of these offers and it is reported that numerous others intend to follow their example.

The municipality of the mining village of Bousquet was established by Order in Council on January 13th, 1943, in virtue of the law respecting Mining Villages (Chap.246, Q.R.S. 1941). On the townsite of this village, Mic-Mac Mines, Limited, has constructed waterworks and a sewer system, and has installed a distribution system for electric lighting. The Company has also erected several dwellings of a higher class than usual in similar centres of population. This village, although at present small in area, promises to become a prosperous community.

I have the honour to be, Sir,

Your obedient servant,

A.O. Dufresne
Deputy Minister of Mines.

Quebec, June 1943.